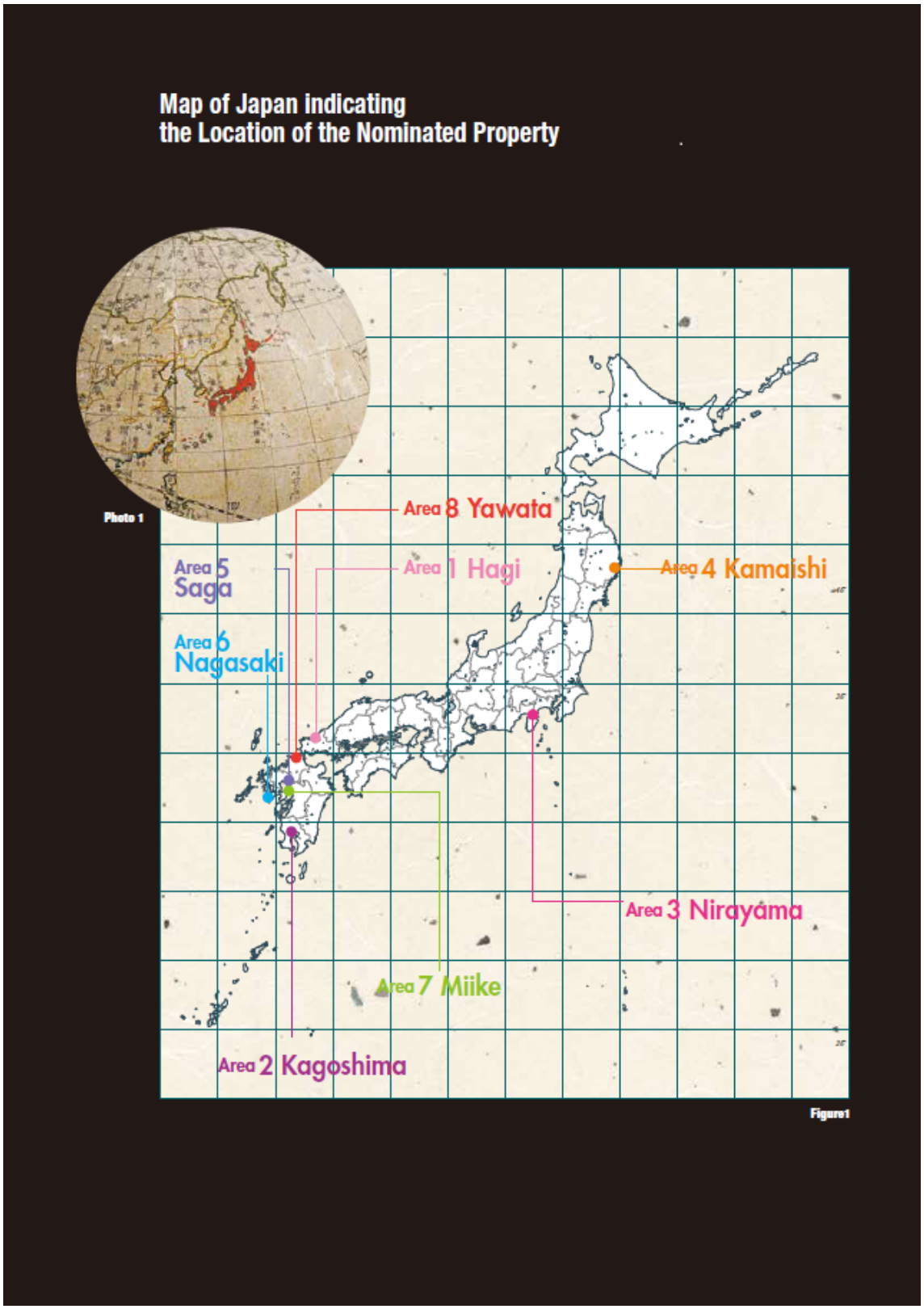
Areal Hagi

Appendix 1-1

# AREA-SPECIFIC INTERPRETATION PLAN

Hagi Conservation Council

【Area List】


Map of Japan indicating
the Location of the Nominated Property
Photo 1
Area 8 Yawata
Area 5 Saga
Area 1 Hagi
Area 4 Kamaishi
Area 6 Nagasaki
Area 3 Nirayama
Area 7 Miike
Area 2 Kagoshima
Figure1

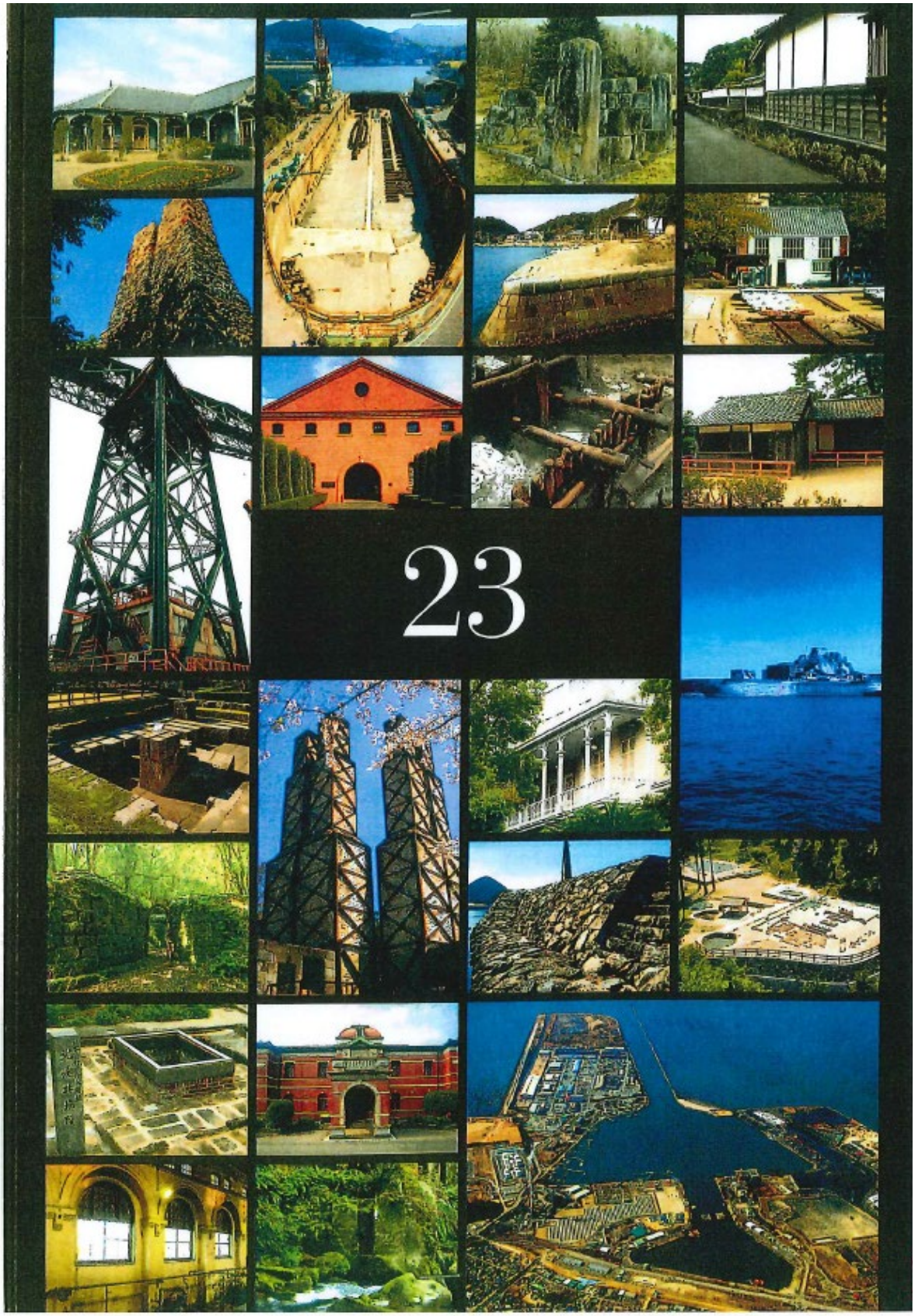
【Component Name】

## List of the Component Parts

| Area | Site | ID | Component Part |
|---|---|---|---|
| A1 Hagi | 1 Hagi Proto-industrial Heritage | 1-1 | Hagi Reverberatory Furnace |
| | | 1-2 | Ebisugahana Shipyard |
| | | 1-3 | Ohitayama Tatara Iron Works |
| | | 1-4 | Hagi Castle Town |
| | | 1-5 | Shokasonjuku Academy |
| A2 Kagoshima | 2 Shuseikan | 2-1 | Shuseikan |
| | | 2-2 | Terayama Charcoal Kiln |
| | | 2-3 | Sekiyoshi Sluice Gate of Yoshino Leat |
| A3 Nirayama | 3 Nirayama Reverberatory Furnaces | 3-1 | Nirayama Reverberatory Furnaces |
| A4 Kamaishi | 4 Hashino Iron Mining and Smelting Site | 4-1 | Hashino Iron Mining and Smelting Site |
| A5 Saga | 5 Mietsu Naval Dock | 5-1 | Mietsu Naval Dock |
| A6 Nagasaki | 6 Nagasaki Shipyard | 6-1 | Kosuge Slip Dock |
| | | 6-2 | Mitsubishi No.3 Dry Dock |
| | | 6-3 | Mitsubishi Giant Cantilever Crane |
| | | 6-4 | Mitsubishi Former Pattern Shop |
| | | 6-5 | Mitsubishi Senshokaku Guest House |
| | 7 Takashima Coal Mine | 6-6 | Takashima Coal Mine |
| | | 6-7 | Hashima Coal Mine |
| | 8 Glover House and Office | 6-8 | Glover House and Office |
| A7 Miike | 9 Miike Coal Mine and Miike Port | 7-1 | Miike Coal Mine and Miike Port |
| | 10 Misumi West Port | 7-2 | Misumi West Port |
| A8 Yawata | 11 The Imperial Steel Works, Japan | 8-1 | The Imperial Steel Works, Japan |
| | | 8-2 | Onga River Pumping Station |

Table1

3


23

SITES OF
JAPAN'S
MEIJI INDUSTRIAL
REVOLUTION
IRON & STEEL, SHIPBUILDING
AND COAL MINING

# Executive Summary

## Brief Synthesis

"Sites of Japan's Meiji Industrial Revolution: : Iron and Steel, Shipbuilding and Coal Mining" comprise a singular ensemble of industrial heritage sites that represent the first successful transfer of industrialization from the West to a non-Western nation.

From the middle of the 19th century to the early 20th century, Japan achieved rapid industrialization that was founded on the key industrial sectors of shipbuilding, iron and steel, and coal mining. The initial phase was one of trial and error experimentation in iron making and shipbuilding, based mostly on Western textbooks, and by copying examples of Western ships. This was followed by the more successful importation of Western technology and the expertise to operate it and, by the late Meiji period, full-blown industrialization through newly acquired domestic expertise and the active adaptation of Western technology to best suit Japanese needs and social traditions. This successful industrialization was achieved in just a little over 50 years without colonization, and on Japan's own terms. The property is testimony to this unique phase in world history.

# Justification for Criteria

**Criterion (ii)**

The property is a series of heritage sites that, together, uniquely illustrate the process by which feudal Japan sought technology transfer from Western Europe and America from the middle of the 19th century. This technology was adopted and progressively adapted to satisfy specific domestic needs and social traditions, thus enabling Japan to become a world-ranking industrial nation by the early 20th century.

**Criterion (iv)**

The technological ensemble of key industrial sites of shipbuilding, iron and steel, and coal mining is testimony to Japan's unique achievement in world history as the first non-Western country to successfully industrialize. Viewed as an Asian cultural response to Western industrial values, the ensemble had no counterpart elsewhere in the world.

# Statement of Integrity

The 23 component parts are the best, and often the only, surviving examples of the key attributes that represent shipbuilding, the iron and steel, and coal mining industries and that are necessary to express Outstanding Universal Value. In each case, the boundary of the component part has been drawn to include the essential features that, overall, contribute to Outstanding Universal Value.

Component parts are in good condition and have mechanisms in place to control deterioration and keep sites free from the adverse effects of development. They have been variously affected by continued use, re-use or lengthy periods of abandonment, and their physical integrity varies between well preserved and fragmentary, the latter being sufficiently intact to be able to represent the former whole. In some cases, where the evidence is primarily archaeological, sufficient investigation has been carried out to verify that a substantial archaeological site survives in good condition for further study and presentation. In other cases, in particular those that remain in operational industrial use, ongoing use and maintenance have resulted in an extraordinarily high level of integrity of working industrial elements.

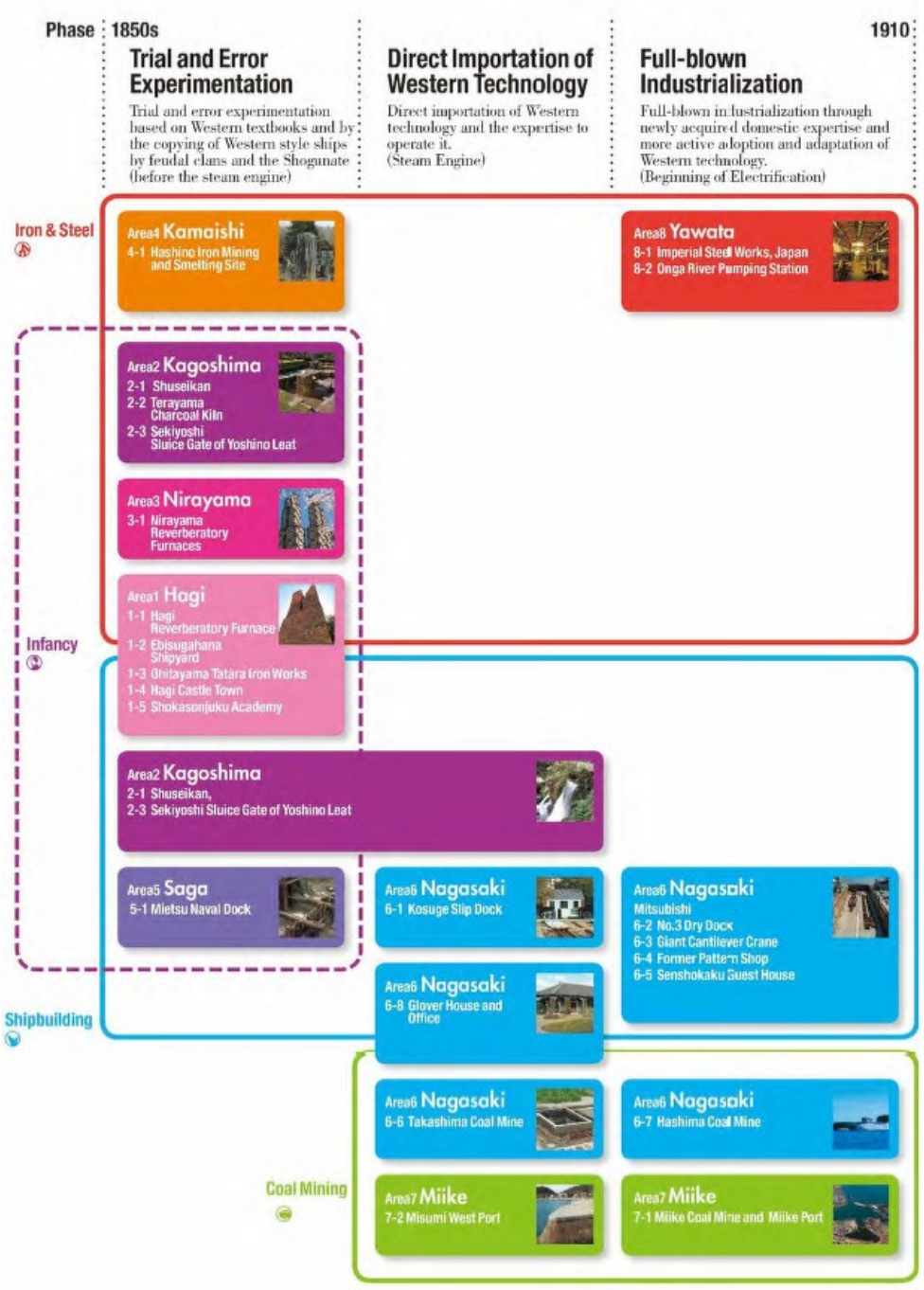
# Statement of Authenticity

The property as a whole as well as at the level of each component part meets the conditions of authenticity in relation to Outstanding Universal Value. It has a high degree of authenticity as the best surviving group of industrial remains that represent, and demonstrate, the first, and rapid, transfer of industrialization from the West to a non-Western nation.

With regard to 'form and design' and 'materials and substance', the component parts constitute the original forms and materials of the range of industrial components necessary to represent the transfer of heavy industry from the West to Japan. Some contain sites that range from fragmentary or archaeological, that are nonetheless authentic relics of important industrial components of the series, to those that comprise substantially intact authentic physical remains that have been managed for many years as historic sites which display these characteristics. Others possess an extremely complete survival not only of form, design and materials but also of continuing use and function.

Industrial History Related to the Hagi Area

The Hagi Area encompasses component parts that retain records related to iron & steel and shipbuilding in the first phase, Trial and Error Experimentation, of the World Cultural Heritage “Sites of Japan’s Meiji Industrial Revolution: Iron and Steel, Shipbuilding and Coal Mining.”



The Interpretation Strategy which the Cabinet Secretariat submitted to UNESCO on November 30, 2017, as an appendix to the State of Conservation Report noted the following:

**11. Interpretation Plan (extract)**

**(1) Consistent OUV rollout across all component parts**

Based on the Interpretation Strategy, the consistent interpretation of OUV should be presented across all component parts. This will be agreed by all stakeholders, and coordinated and implemented commonly in a branded World Heritage style.

**(2) and (3) Progress in dealing with the "full history" of each site, including information gathering related to workers**

Advice from international experts who are members of the Expert Committee on the Industrial Heritage including Operational Properties (Cabinet Secretariat of Japan), from the international heritage expert who was the ICOMOS technical evaluation field assessor of the World Heritage nomination of the "Sites of Japan's Meiji Industrial Revolution", and from the President of the ICOMOS International Scientific Committee on Interpretation and Presentation, comprises the following four key policies:

1) Focus on the interpretation of Outstanding Universal Value; in conformity with the primary purpose of the World Heritage, OUV of the inscribed property should be presented clearly at each site, not confusing with other, albeit related, issues. Based on this, Recommendation g)* should be implemented.

2) The scope of the "full history" of each site, except for the OUV period (from 1850s to 1910) as described on page 78, falls into two parts: prior to 1850s, and from 1910 to the present. The target of the full history should be narrowed down, considering the local values that supplement the understanding of the background of each component part. Where relevant, with regard to the interpretation of the full history on the location of each component part, high quality research such as collecting primary historical documents and recording oral testimonies should be carried out, and the result of this research should, at some stage, be made publicly available through appropriate media.

* Recommendation g)

> *"Preparing an interpretive strategy for the presentation of the nominated property, which gives particular emphasis to the way each of the sites contributes to OUV and reflects one or more of the phases of industrialisation; and also allows an understanding of the full history of each site."*

Based on the Interpretation Strategy, we have had multiple audits of the current status of interpretation at the component parts and visitor centres, etc., in the various areas undertaken by international experts familiar with industrial assets and the interpretation thereof in countries around the world.
As a result, auditor Barry Gamble identified the following issues in relation to the Hagi area.

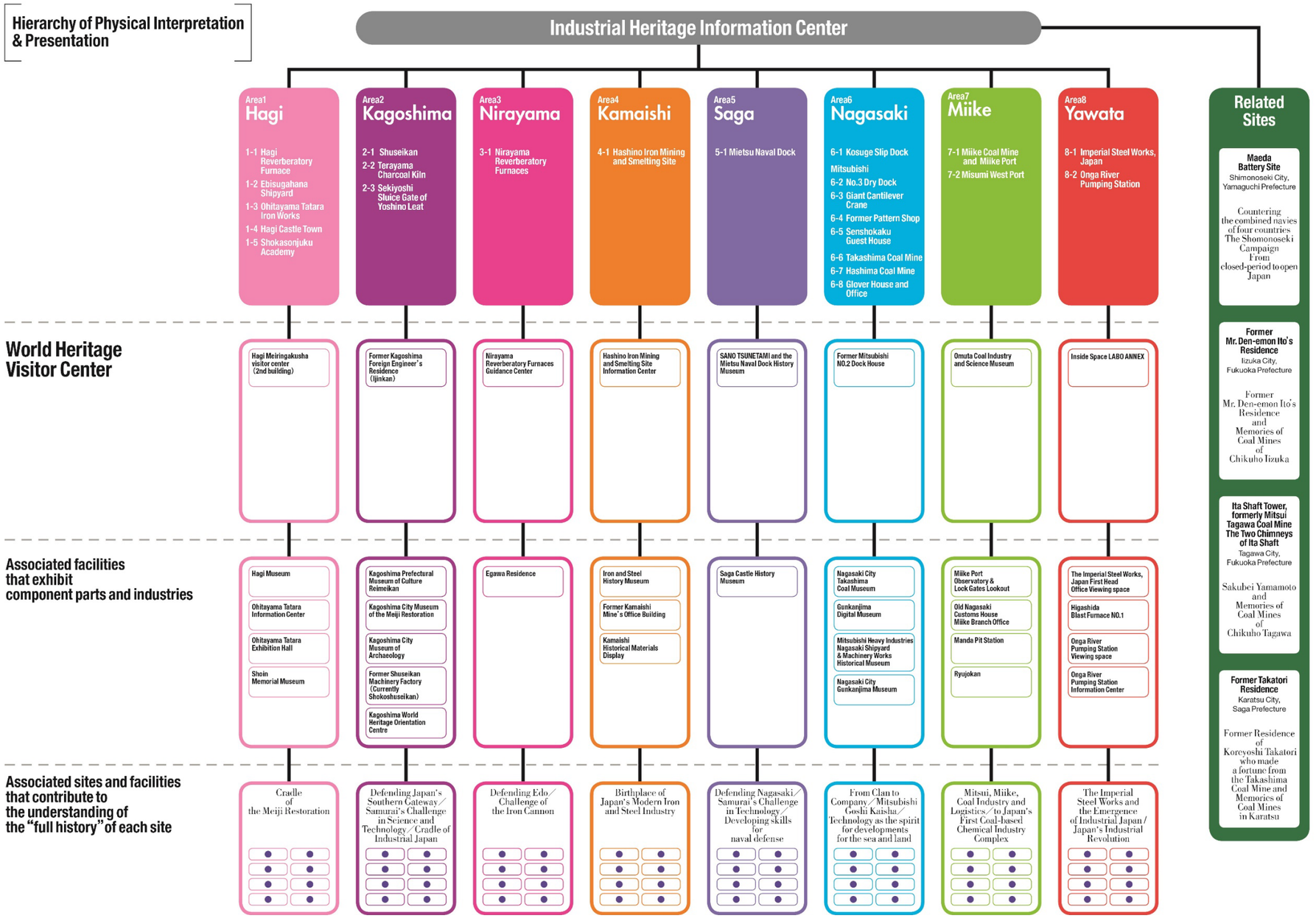
- Provides an exemplar on the interpretation of the overall OUV at the visitor centre (300,000 visitors in 2018), then more specific information at the associated facilities. The presentation of the overall OUV provides a model for other Areas to adopt and modify (although in terms of visitor experience, OUV should be presented first, before the Component Part's specific contribution, and national and/or local stories).
- Current detailed design development for the new exhibition in the Hagi Museum provides the opportunity to incorporate an object-rich display (in contrast to the interpretation-only visitor centre) that is relevant to each of Hagi's Component Parts and elements. This can be backed by succinct WHS interpretive context and labels; the exhibit fitting seamlessly into the rest of the museum and its current exhibition style.
- Ohitayama Tatara Exhibition Hall provides sufficient interpretation for an introduction to the adjacent site. The archaeological site is supplemented with interpretation boards and a virtual reality facility.

Discussions have been held regarding this interpretation plan for the Hagi Area thus far by the Local Conservation Council.
Going forward, in consideration of the above points, the focus will be placed on steadily installing exhibits that better reflect the World Heritage values in harmony with the historical and cultural values of the region through the installation of the common exhibition in cooperation with the Industrial Heritage Information Centre. The local conservation council will then review the implementation progress of this plan and consider ways to make improvements as appropriate.

Local Conservation Council meeting

Hierarchy of Physical Interpretation and Presentation

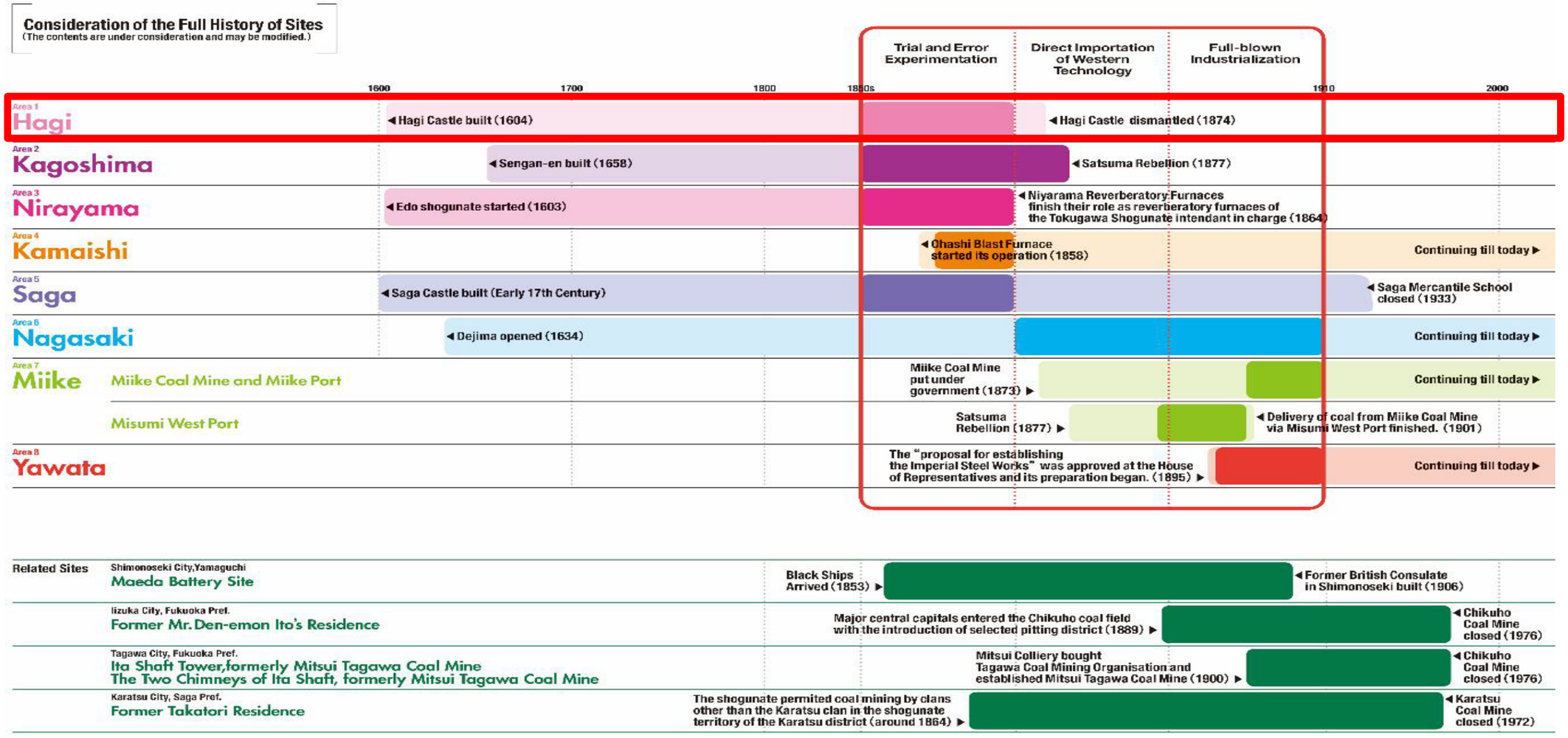
The Industrial Heritage Information Centre and the various local visitor centres will work together to build a system enabling the effective communication of the OUV of the Sites of Japan's Meiji Industrial Revolution.




Related sites: Sites that were component part candidates in the provisional UNESCO World Heritage listing on the January 5, 2009, and that comprise industrial heritage (valuable assets that provide insight into the historical background and social situation of the time) that will be utilized in an integrated manner with the World Heritage Listed "Sites of Japan's Meiji Industrial Revolution."

Consideration of the Full History of Sites

The Interpretation Strategy which the Cabinet Secretariat submitted to UNESCO in 2017, addressed consideration of the full history of sites as shown in the figure below.



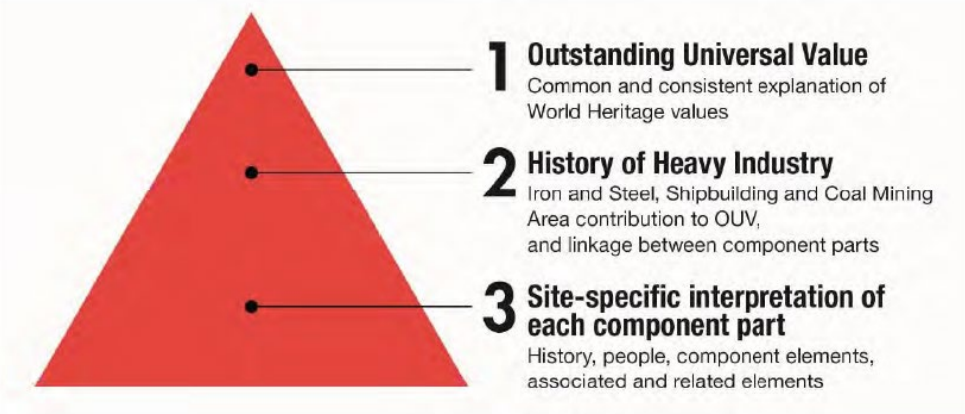
Interpretation in the Hagi Area

Approach of the Interpretation Strategy

The Interpretation Strategy provides the following schematic in relation to concepts for interpretation and presentation.

Interpretation for the Hagi area too will be approached in line with this in order to resolve the issues identified in interpretation audits.

**Interpretation and presentation of the Sites of Japan's Meiji Industrial Revolution: Hierarchy of value and themes**




OUV stands at the top of the interpretation pyramid at the Industrial Heritage Information Centre and the various regions' visitor centres and is therefore the top-priority theme over the interpretation and presentation of individual regions and industries, such as history specific to an area or component part. Addressing interpretation in the order of (1) OUV, (2) the history of heavy industry, and (3) site-specific interpretation of each component part, as shown above, will ensure consistent presentation across the property

**Interpretation flow at each local visitor centre**

Hierarchy of Interpretation

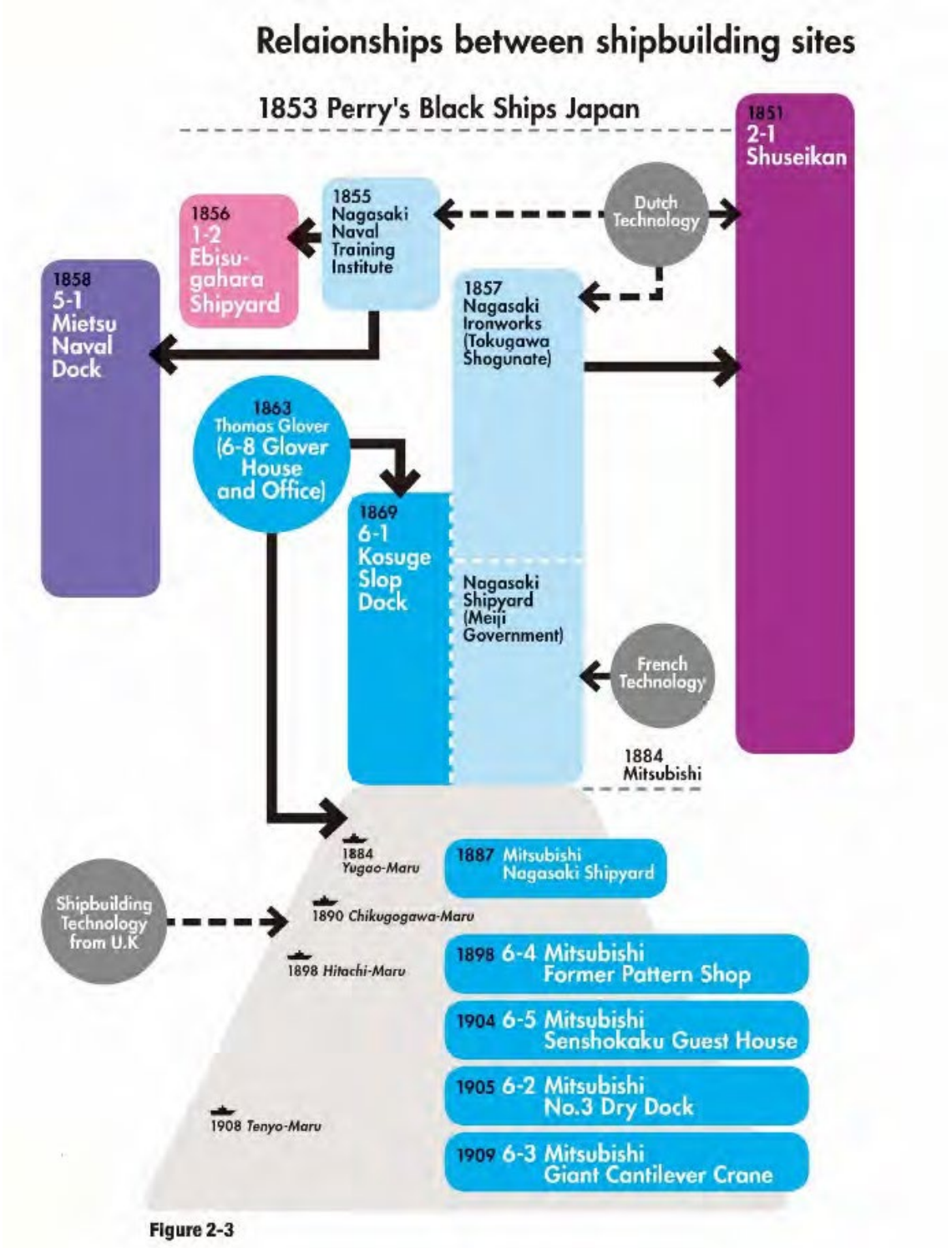

Relaionships between shipbuilding sites
1853 Perry's Black Ships Japan
1851
2-1
Shuseikan
1855
Nagasaki
Naval
Training
Institute
Dutch
Technology
1856
1-2
Ebisu-
gahara
Shipyard
1858
5-1
Mietsu
Naval
Dock
1857
Nagasaki
Ironworks
(Tokugawa
Shogunate)
1863
Thomas Glover
(6-8 Glover
House
and Office)
1869
6-1
Kosuge
Slop
Dock
Nagasaki
Shipyard
(Meiji
Government)
French
Technology
1884
Mitsubishi
1884
Yugao-Maru
1887 Mitsubishi
Nagasaki Shipyard
Shipbuilding
Technology
from U.K
1890 Chikugogawa-Maru
1898 Hitachi-Maru
1898 6-4 Mitsubishi
Former Pattern Shop
1904 6-5 Mitsubishi
Senshokaku Guest House
1905 6-2 Mitsubishi
No.3 Dry Dock
1908 Tenyo-Maru
1909 6-3 Mitsubishi
Giant Cantilever Crane

Figure 2-3

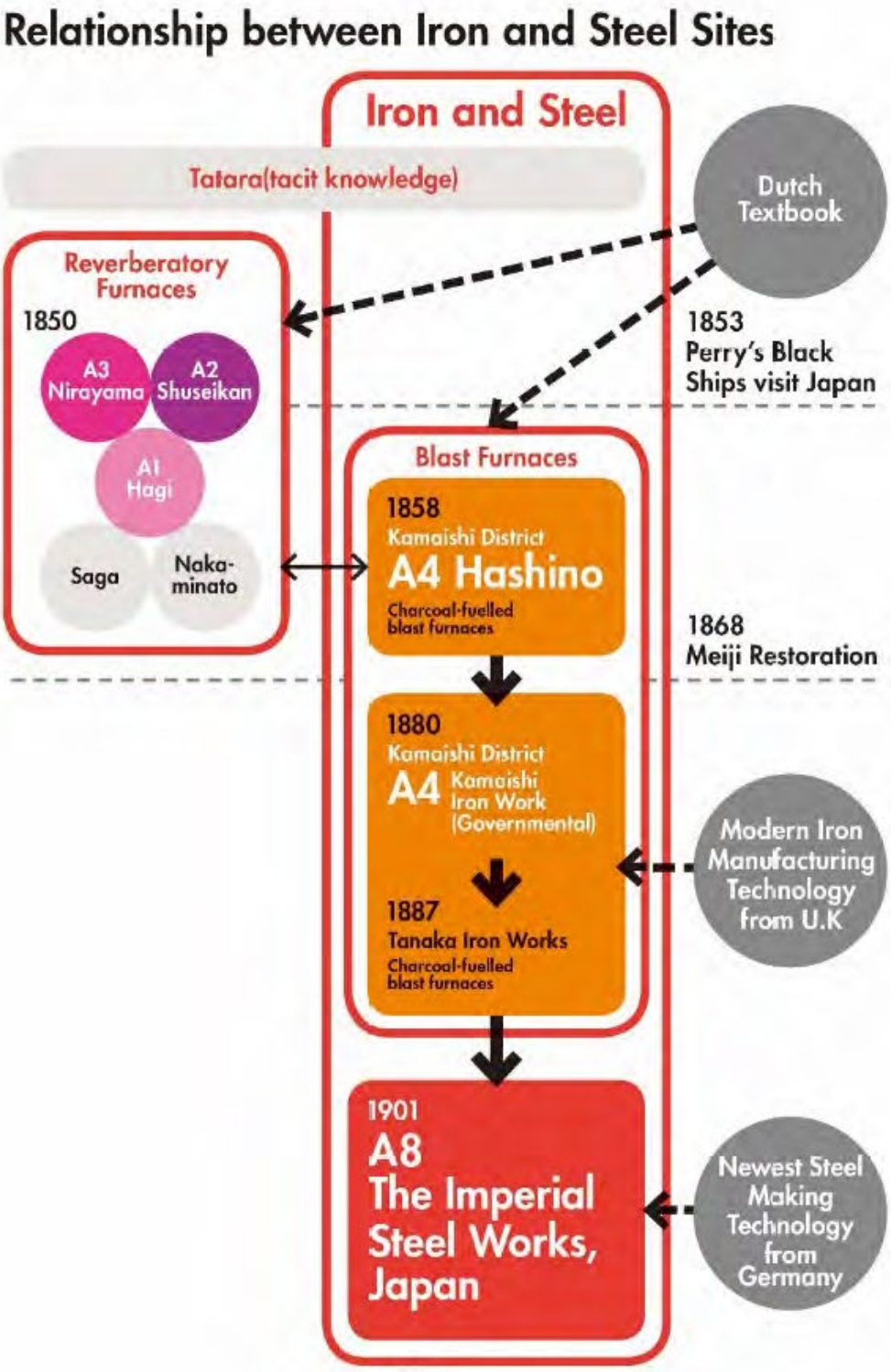

Relationship between Iron and Steel Sites
Iron and Steel
Tatara(tacit knowledge)
Dutch Textbook
1853
Perry's Black Ships visit Japan
Reverberatory Furnaces
1850
A3 Nirayama
A2 Shuseikan
A1 Hagi
Saga
Naka-minato
Blast Furnaces
1858
Kamaishi District
A4 Hashino
Charcoal-fuelled blast furnaces
1868
Meiji Restoration
1880
Kamaishi District
A4 Kamaishi Iron Work (Governmental)
1887
Tanaka Iron Works
Charcoal-fuelled blast furnaces
Modern Iron Manufacturing Technology from U.K
1901
A8
The Imperial Steel Works, Japan
Newest Steel Making Technology from Germany

Figure 3-2

Presentation Using “Liquid Galaxy,” Etc.

The Industrial Heritage Information Centre, which was established in March 2020 pursuant to the Interpretation Strategy, uses an immersive video multi-display that draws on the World Heritage OUV period (1850s-1910), as well as the Consideration of the Full History of Sites schematic. It explains through images the history and transformation of component parts in the various areas, as well as the way that people lived, etc., presenting these in a way that enables visitors to experience in a very real way the evolution of the property, the contribution to OUV, and the full history.
This area will also establish a digital archive of documents gathered by the Industrial Heritage Information Centre and the visitor centres in the area, which will be gradually reflected in the interpretation tools.

Hagi Area Component Parts

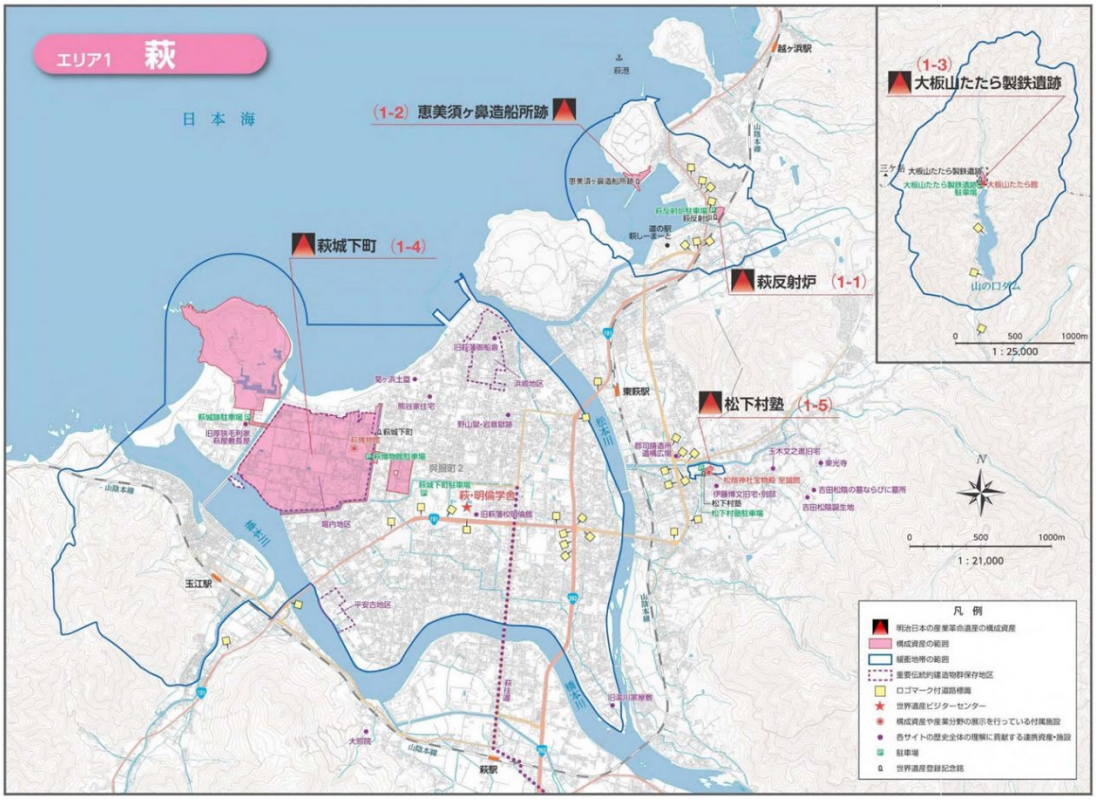
| | |
|---|---|
| Relevant industries: Iron and steel<br>Name of component part: Hagi Reverberatory Furnace<br>(Overview of component part)<br>One of three reverberatory furnaces still remaining today out of eleven that were made for constructing cannons to address the sense of crisis looming regarding coastal defense at the end of the Edo era. The Hagi (Choshu) domain, which commanded the coastal defense area,attempted to reproduce the reverberatory furnace of the Saga domain in 1856 on its own. The remains symbolize he trial and error experimentation of Western science that took place. |  |
| Relevant industries: Shipbuilding<br>Name of component part: Ebisugahana Shipyard<br>(Overview of component part)<br>Constructed by the Hagi (Choshu) domain for the purpose of Western-style shipbuilding. At the end of the Edo era, ships were built with Japanese techniques based on Kimizawagata schooners that were built as replacement ships for disabled Russian schooners. Although only two ships were constructed, it is significant as trial and error experimentation in the challenge to build Western ships with Japanese techniques. |  |
| Relevant industries:Iron and steel<br>Name of component part: Ohitayama Tatara Iron Works<br>(Overview of component part)<br>An archaeological ironworks site for manufacturing fittings such as nails to supply for Kimizawagata schooners that were being built at Ebisugahana Shipyard. It is the remains showing the Tatara process, a traditional technique in Japan before Western iron manufacturing was introduced. |  |

| | |
|---|---|
| Relevant industries: Iron and steel, shipbuilding<br>Name of component part: Hagi Castle Town<br>(Overview of component part)<br><br>The ruins of Hagi Castle and the layout of the castle town display the social structure within feudal society that symbolizes the historical context at the end of the Edo era in the challenge for Western science by the Choshu (Hagi) domain and amurai, who trained leaders in the Industrial Revolution. |  <br>  <br>  |
| Relevant industries: Iron and steel, shipbuilding<br>Name of component part: Shokasonjuku Academy<br>(Overview of component part)<br><br>The private academy of Yoshida Shoin who contributed to the training of revolutionaries that would become leaders of the Industrial Revolution. He taught the importance of coastal defense and of thought which emphasized acquiring Western industrial technology. Many of Shoin's students went on to establish the Meiji government and contributed to Japan's rapid industrialization. |  |

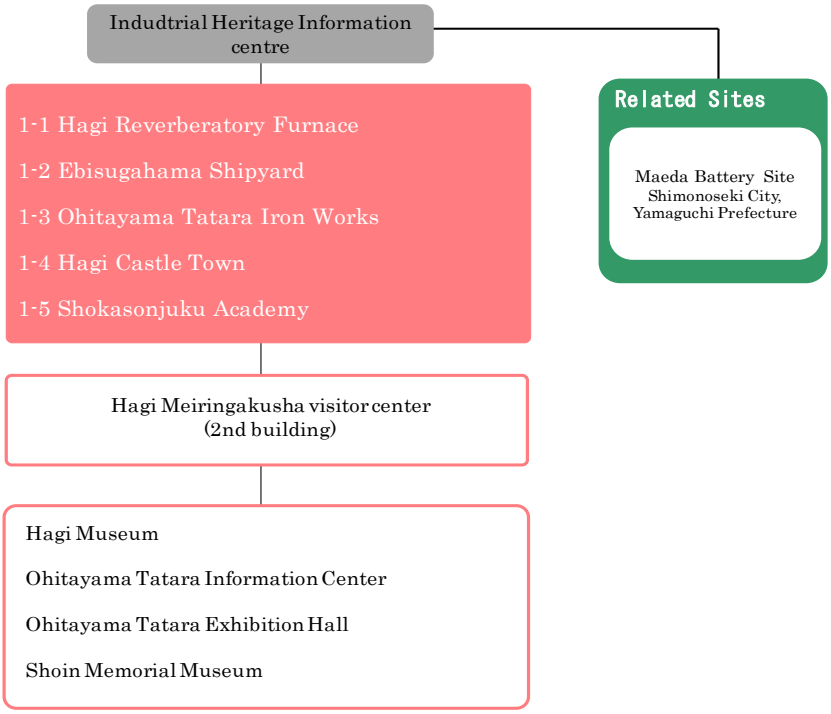
World Heritage Plaques

In line with the UNESCO Guidelines, World Heritage plaques have been installed at the various component parts to inform visitors properly about the OUV of the property.

Hagi Area: Distribution of Interpretation Facilities



Hagi Area: Hierarchy of Physical Interpretation and Presentation




Access Guide Maps

Access guide maps for the component parts in each area have been produced in both Japanese and English and are distributed free to visitors. The access maps are designed to help tourists orient themselves in relation to the component parts of the various areas and enable them to visit as many component parts as possible within each area.

By linking the maps to a smartphone app, information can be communicated about component parts not open to the public using augmented reality (AR) functions to show 3D models, videos, and 360-degree panorama views of inaccessible sites.

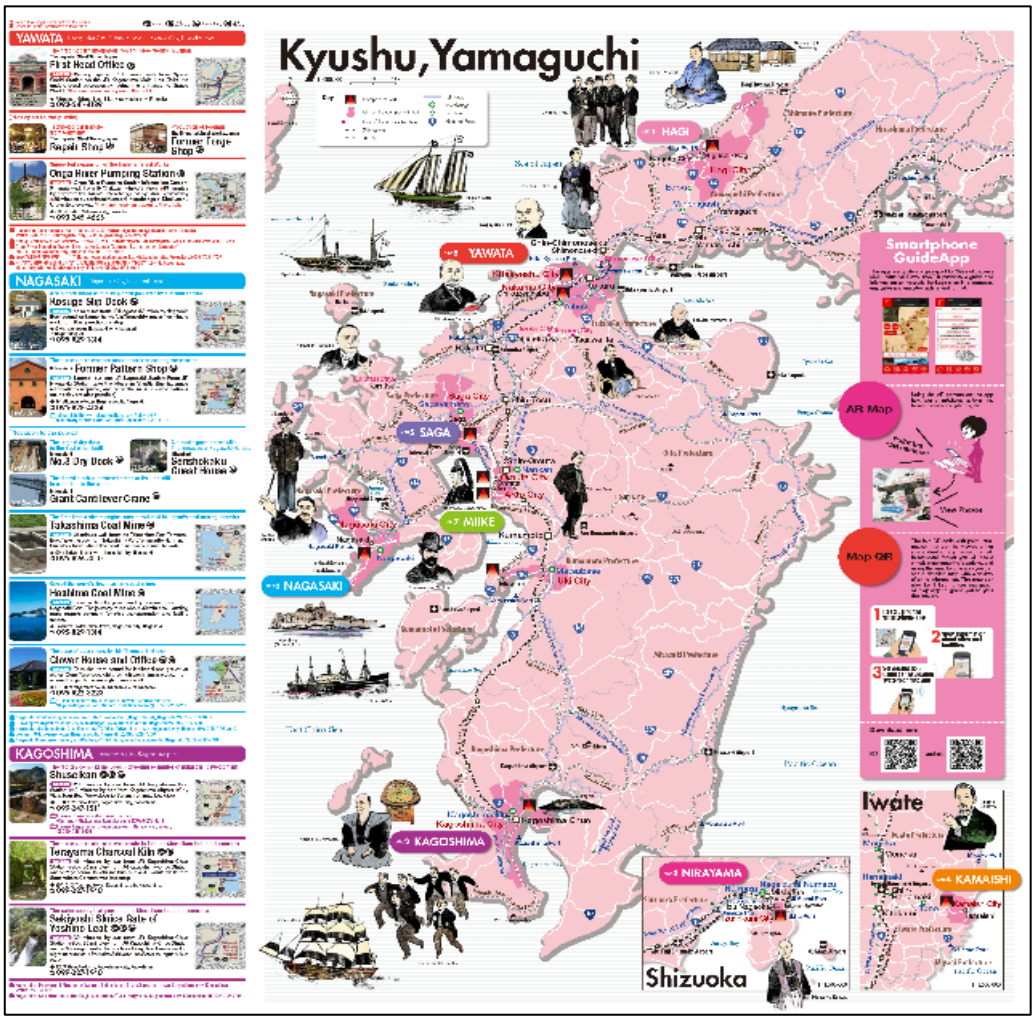
Information Counters

These are set up in administrative institutions and airports to distribute access guide maps and other information.


Hagi City Hall

World Heritage Route

In accordance with the Interpretation Strategy, and also as noted in pages 395–396 of the Nomination Document, the World Heritage Route Promotion Council was founded to provide guidance and tourism infrastructure for understanding World Heritage as a whole. The Council attracts visitors to all component parts and related sites by producing maps, apps, and GPS navigation and by installing road signs and other signage using the common logo to promote the Sites of Japan's Meiji Industrial Revolution so that visitors are able to understand the World Heritage value constituted by the 23 component parts.
Work will continue to be undertaken steadily pursuant to the Nomination Document and the Interpretation Plan.




Map on p. 396 of the Nomination Document


World Heritage Route Promotion Council meeting

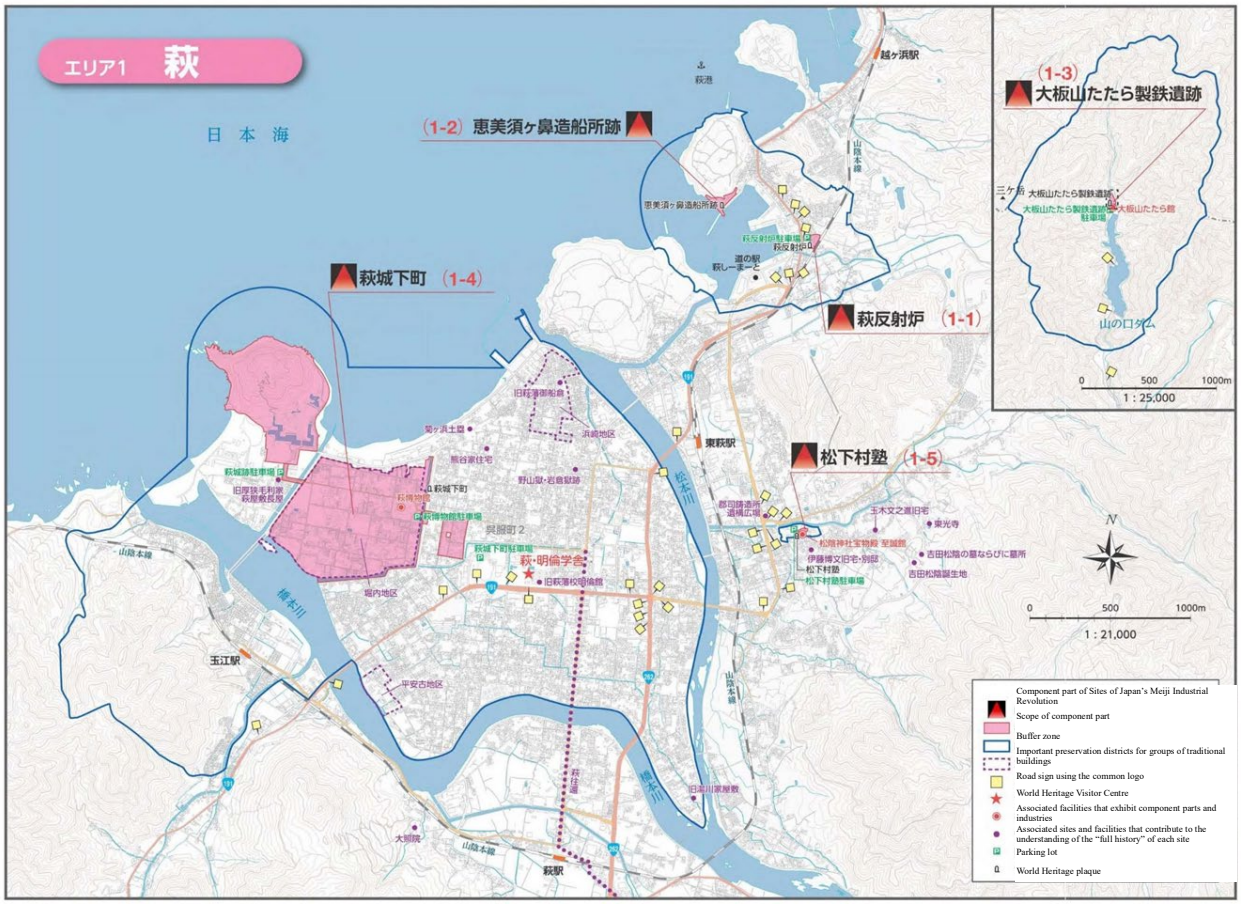
Installation of Road Signage, Etc., Using the Common Logo

Status of installation of road signage

| Place | No. of signs installed |
|---|---|
| Hagi City | 47 |

Photos of road signage


Locations of Road Signs Using the Common Logo

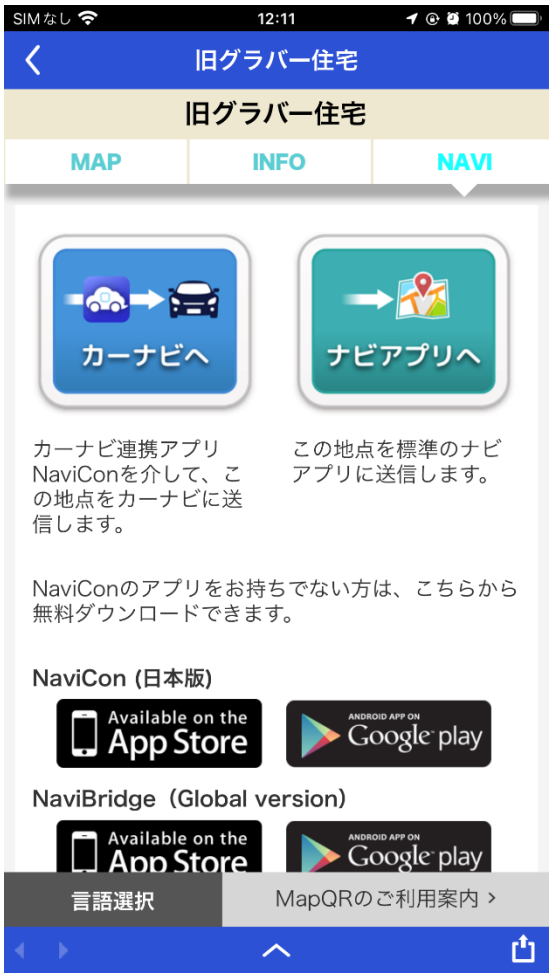


Linkage with Car Navigation (Denso Car Navigation)

Example of linkage with smartphone app so that the target destination can be sent to a car navigation system




The destination can be sent directly from a smartphone to the car navigation system.

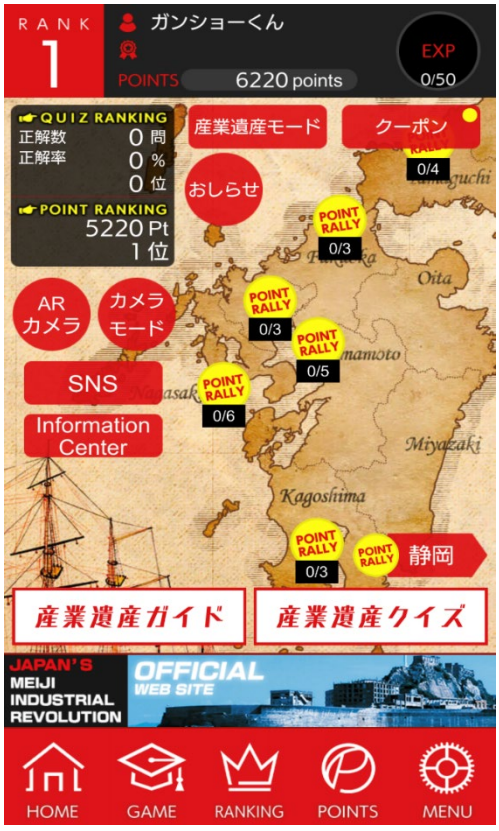




A video on how to use the application has been put up on YouTube.

App Utilization

The app introduces the Sites of Japan's Meiji Industrial Revolution, including detailed stories and explanations, as well as the historical background, using video and computer graphics, etc. Users can earn points by playing games and using the AR camera on the app and use them as coupons for souvenirs and other prizes. As such, it serves as a mechanism for both deepening understanding of World Heritage value and feeding back into World Heritage Route tours. The smartphone app is available in Japanese, English, Korean, simplified Chinese, traditional Chinese, and Vietnamese.




Use of Line App

Points acquired on the app can be exchanged for coupons.

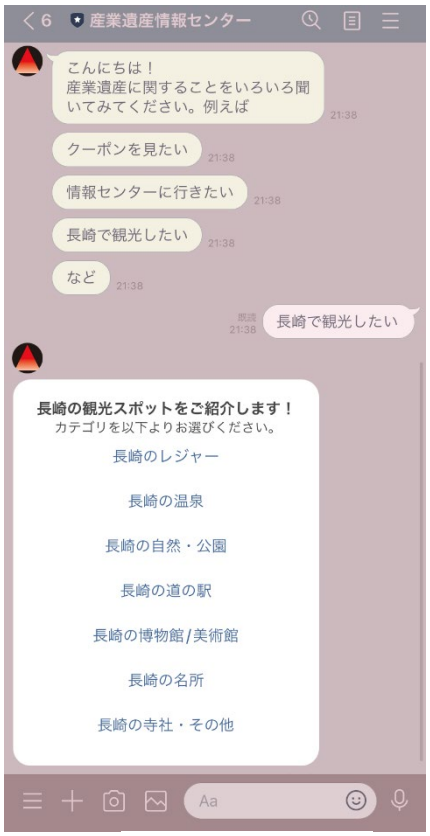


Point-of-purchase advertising has been created and placed in stations and information centres, etc., to encourage people to sign up to the LINE app.

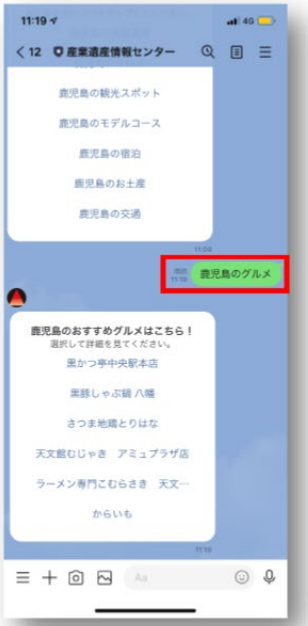
LINE is used as a runway for achieving two-way communication geared to the circumstances of the user based on locational information, such as the use of existing guide apps and communication about coupons that can be used in shops at the area visited. The service is provided in multiple languages so as to support international visitors.

LINE functions (examples)

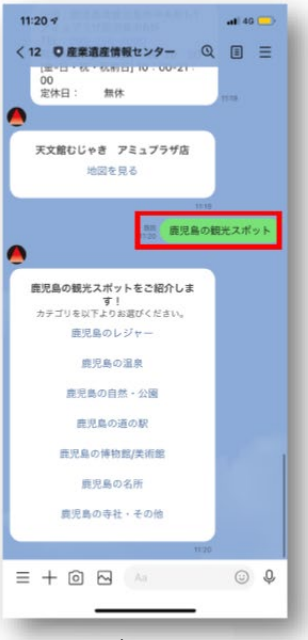

Introduction to model courses



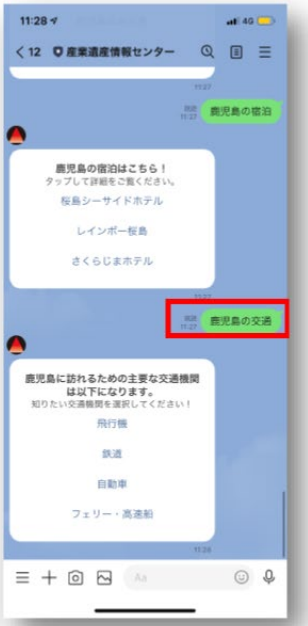

AI chatbot function



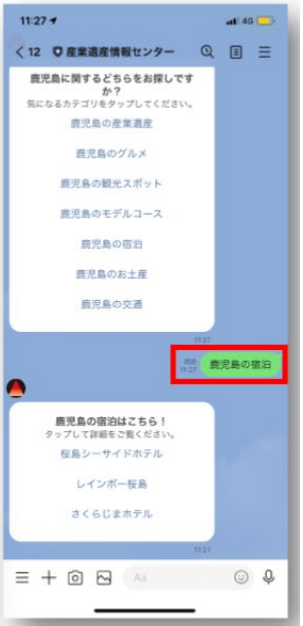

Gourmet information




Tourist spots




Traffic information




Accommodation information

Digital Signage Functions

Digital signage has been installed in the Industrial Heritage Information Centre as a mechanism for encouraging multi-destination tourism by displaying local guide maps and information on multi-destination industrial heritage routes. AI chatbots have also been installed to respond to a wide range of multi-destination routes and tourism questions in real time.


Enhancement of digital content

A smartphone application, “Hagi’s World Heritage Sites: Let’s go around with the Choshu Five!” and Hagi World Heritage Virtual Adventure (VR content), have also been developed and released for this area. A regional guide map integrated with AR functions and the provision of information on components through MapQR functions are the initiatives also being planned.

○Hagi’s World Heritage Sites: Let’s go around with the Choshu Five!
An app that introduces the component parts of Hagi in a fun style, with the Choshu Five leading the way. Users can enjoy a guidance video, virtual reality that recreates scenes from Ohitayama Tatara Iron Works as it was back in the day, and a CG video describing the inner structure of the furnace. Visitors can borrow a tablet installed with the app at the Hagi Reverberatory Furnace, Ebisugahana Shipyard, Ohitayama Tatara Iron Works, and at the ruins of Hagi Castle.


○Hagi World Heritage Virtual Adventure
VR technology enables users to experience the no-longer existing Ebisugahana Shipyard and Western vessels built there as well as the Hagi Castle Tower, through a smartphone, tablet, or PC. A video that explains Ohitayama Tatara Iron Works in an easy-to-understand manner with illustrations to describe the facility is also available.

Monitor tour


Visitor Centres

The Hagi Area is equipped with one visitor centre and four auxiliary facilities with exhibits of component parts and the industrial sector in line with the interpretation strategy. Each facility cooperates with the local community to prepare exhibits that best bring out the true World Heritage values in harmony with the historical and cultural values of the region. They aim to create exhibits that allow visitors to understand the value of the components easily.
Based on points raised in interpretation audits, local visitor centres will work with the Industrial Heritage Information Centre to digitize a huge volume of primary historic materials and use digital tools to enhance exhibits.

[Hagi Meiringakusha (2nd Building)]

Positioning of components in Hagi and the role of Yoshida Shoin as a pioneer of engineering education in Japan are introduced at this facility with films, panels and replicas on display.


[Hagi Museum]
The history and nature of Hagi are comprehensively on display at this museum facility. In addition to permanent exhibits, study and research results from the end of the Edo era are on display as special exhibits, enabling visitors to gain a deeper understanding of components in Hagi.

[Ohitayama Tatara Information Center]
Located inside Michi-no-eki Happiness Fukue, this facility provides interpretation for Tatara Iron Works through panels showing the positioning of components and exhibits using illustrations.


[Shoin Shrine Treasure House Shiseikan]
Located inside the grounds of Shoin Shrine. Visitors can learn about the positioning of the components and the life of Yoshida Shoin through panels and historical materials on display.

# Appendix 1-1


JAPAN'S
MEIJI
INDUSTRIAL
REVOLUTION

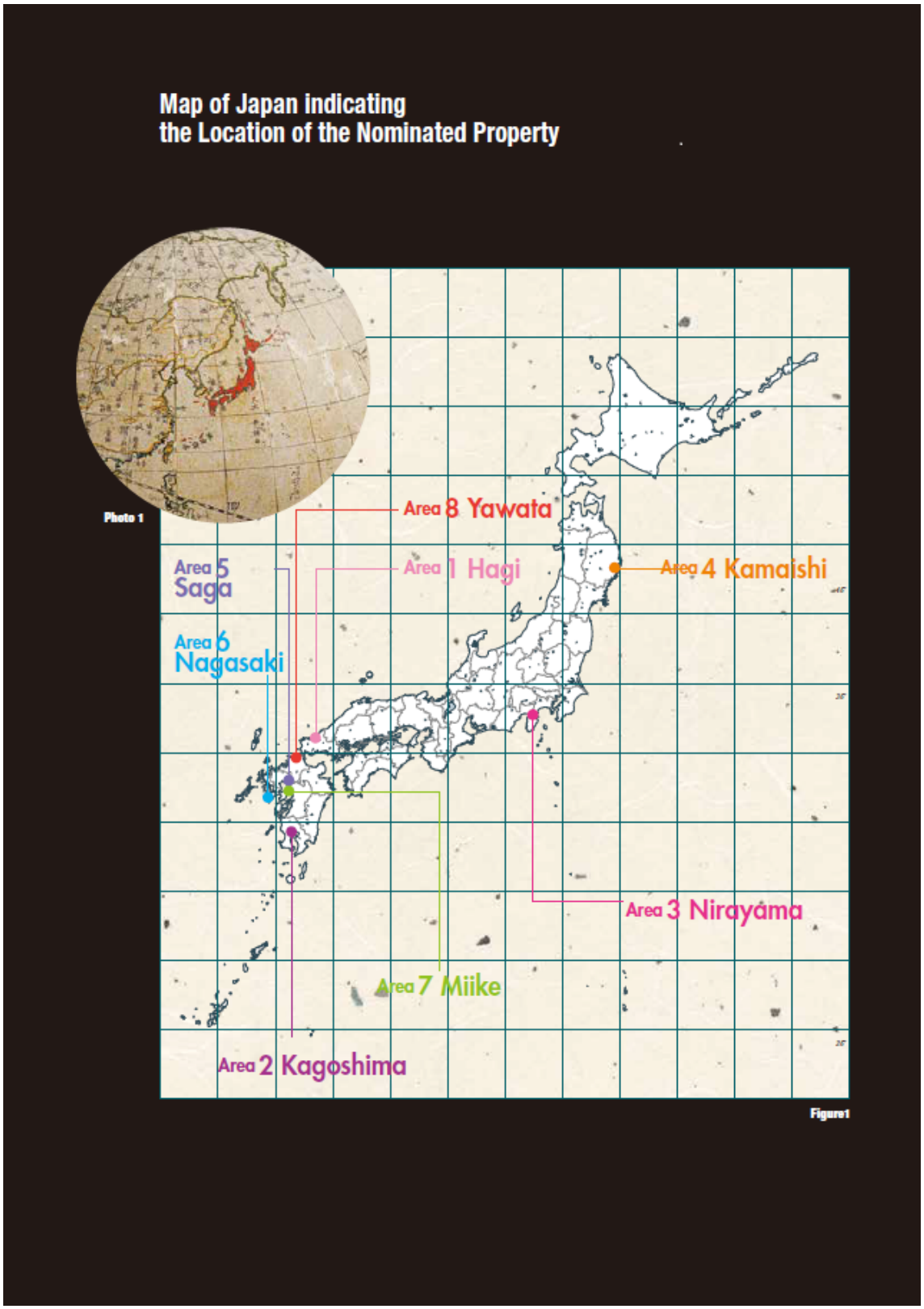
Appendix 1-2

# Area2 Kagoshima

# AREA-SPECIFIC INTERPRETATION PLAN

Shuseikan Conservation Council

【Area List】


Map of Japan indicating
the Location of the Nominated Property
Photo 1
Area 8 Yawata
Area 5 Saga
Area 1 Hagi
Area 4 Kamaishi
Area 6 Nagasaki
Area 3 Nirayama
Area 7 Miike
Area 2 Kagoshima
Figure1

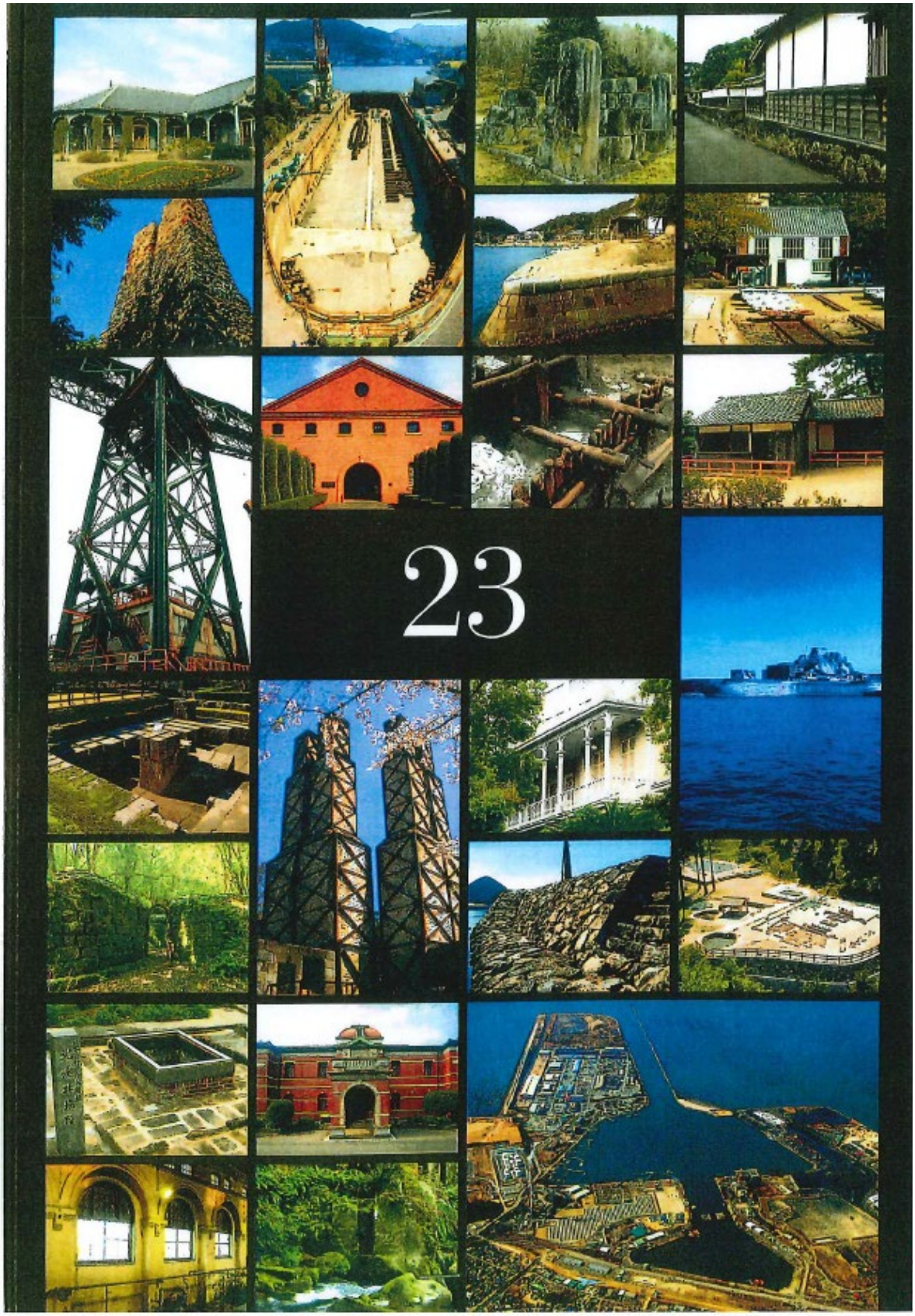
【Component Name】

## List of the Component Parts

| Area | Site | ID | Component Part |
|---|---|---|---|
| A1 Hagi | 1 Hagi Proto-industrial Heritage | 1-1 | Hagi Reverberatory Furnace |
| | | 1-2 | Ebisugahana Shipyard |
| | | 1-3 | Ohitayama Tatara Iron Works |
| | | 1-4 | Hagi Castle Town |
| | | 1-5 | Shokasonjuku Academy |
| A2 Kagoshima | 2 Shuseikan | 2-1 | Shuseikan |
| | | 2-2 | Terayama Charcoal Kiln |
| | | 2-3 | Sekiyoshi Sluice Gate of Yoshino Leat |
| A3 Nirayama | 3 Nirayama Reverberatory Furnaces | 3-1 | Nirayama Reverberatory Furnaces |
| A4 Kamaishi | 4 Hashino Iron Mining and Smelting Site | 4-1 | Hashino Iron Mining and Smelting Site |
| A5 Saga | 5 Mietsu Naval Dock | 5-1 | Mietsu Naval Dock |
| A6 Nagasaki | 6 Nagasaki Shipyard | 6-1 | Kosuge Slip Dock |
| | | 6-2 | Mitsubishi No.3 Dry Dock |
| | | 6-3 | Mitsubishi Giant Cantilever Crane |
| | | 6-4 | Mitsubishi Former Pattern Shop |
| | | 6-5 | Mitsubishi Senshokaku Guest House |
| | 7 Takashima Coal Mine | 6-6 | Takashima Coal Mine |
| | | 6-7 | Hashima Coal Mine |
| | 8 Glover House and Office | 6-8 | Glover House and Office |
| A7 Miike | 9 Miike Coal Mine and Miike Port | 7-1 | Miike Coal Mine and Miike Port |
| | 10 Misumi West Port | 7-2 | Misumi West Port |
| A8 Yawata | 11 The Imperial Steel Works, Japan | 8-1 | The Imperial Steel Works, Japan |
| | | 8-2 | Onga River Pumping Station |

Table1

3


23

SITES OF
JAPAN'S
MEIJI INDUSTRIAL
REVOLUTION
IRON & STEEL, SHIPBUILDING
AND COAL MINING

# Executive Summary

## Brief Synthesis

"Sites of Japan's Meiji Industrial Revolution: : Iron and Steel, Shipbuilding and Coal Mining" comprise a singular ensemble of industrial heritage sites that represent the first successful transfer of industrialization from the West to a non-Western nation.

From the middle of the 19th century to the early 20th century, Japan achieved rapid industrialization that was founded on the key industrial sectors of shipbuilding, iron and steel, and coal mining. The initial phase was one of trial and error experimentation in iron making and shipbuilding, based mostly on Western textbooks, and by copying examples of Western ships. This was followed by the more successful importation of Western technology and the expertise to operate it and, by the late Meiji period, full-blown industrialization through newly acquired domestic expertise and the active adaptation of Western technology to best suit Japanese needs and social traditions. This successful industrialization was achieved in just a little over 50 years without colonization, and on Japan's own terms. The property is testimony to this unique phase in world history.

# Justification for Criteria

**Criterion (ii)**

The property is a series of heritage sites that, together, uniquely illustrate the process by which feudal Japan sought technology transfer from Western Europe and America from the middle of the 19th century. This technology was adopted and progressively adapted to satisfy specific domestic needs and social traditions, thus enabling Japan to become a world-ranking industrial nation by the early 20th century.

**Criterion (iv)**

The technological ensemble of key industrial sites of shipbuilding, iron and steel, and coal mining is testimony to Japan's unique achievement in world history as the first non-Western country to successfully industrialize. Viewed as an Asian cultural response to Western industrial values, the ensemble had no counterpart elsewhere in the world.

# Statement of Integrity

The 23 component parts are the best, and often the only, surviving examples of the key attributes that represent shipbuilding, the iron and steel, and coal mining industries and that are necessary to express Outstanding Universal Value. In each case, the boundary of the component part has been drawn to include the essential features that, overall, contribute to Outstanding Universal Value.

Component parts are in good condition and have mechanisms in place to control deterioration and keep sites free from the adverse effects of development. They have been variously affected by continued use, re-use or lengthy periods of abandonment, and their physical integrity varies between well preserved and fragmentary, the latter being sufficiently intact to be able to represent the former whole. In some cases, where the evidence is primarily archaeological, sufficient investigation has been carried out to verify that a substantial archaeological site survives in good condition for further study and presentation. In other cases, in particular those that remain in operational industrial use, ongoing use and maintenance have resulted in an extraordinarily high level of integrity of working industrial elements.

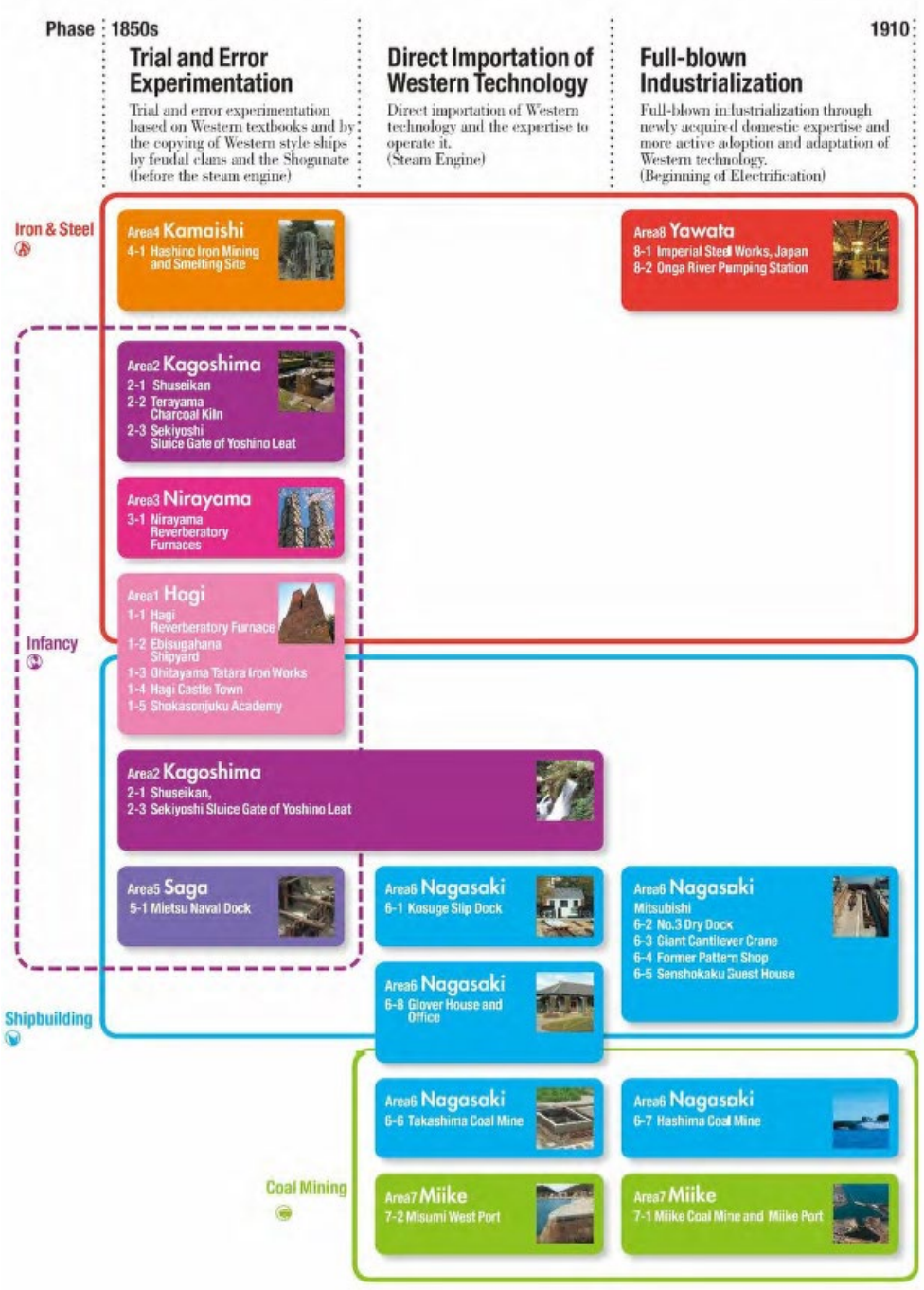
# Statement of Authenticity

The property as a whole as well as at the level of each component part meets the conditions of authenticity in relation to Outstanding Universal Value. It has a high degree of authenticity as the best surviving group of industrial remains that represent, and demonstrate, the first, and rapid, transfer of industrialization from the West to a non-Western nation.

With regard to 'form and design' and 'materials and substance', the component parts constitute the original forms and materials of the range of industrial components necessary to represent the transfer of heavy industry from the West to Japan. Some contain sites that range from fragmentary or archaeological, that are nonetheless authentic relics of important industrial components of the series, to those that comprise substantially intact authentic physical remains that have been managed for many years as historic sites which display these characteristics. Others possess an extremely complete survival not only of form, design and materials but also of continuing use and function.

Industrial History Related to the Kagoshima Area

The Kagoshima Area encompasses component parts that retain records related to iron and steel in the first phase, Trial and Error Experimentation, as well as to shipbuilding in the first phase, Trial and Error Experimentation, and the second phase, Direct Importation of Western Technology, in the World Cultural Heritage “Sites of Japan’s Meiji Industrial Revolution: Iron and Steel, Shipbuilding and Coal Mining.”



The Interpretation Strategy which the Cabinet Secretariat submitted to UNESCO on November 30, 2017, as an appendix to the State of Conservation Report noted the following:

**11. Interpretation Plan (extract)**

**(1) Consistent OUV rollout across all component parts**

Based on the Interpretation Strategy, the consistent interpretation of OUV should be presented across all component parts. This will be agreed by all stakeholders, and coordinated and implemented commonly in a branded World Heritage style.

**(2) and (3) Progress in dealing with the "full history" of each site, including information gathering related to workers**

Advice from international experts who are members of the Expert Committee on the Industrial Heritage including Operational Properties (Cabinet Secretariat of Japan), from the international heritage expert who was the ICOMOS technical evaluation field assessor of the World Heritage nomination of the "Sites of Japan's Meiji Industrial Revolution", and from the President of the ICOMOS International Scientific Committee on Interpretation and Presentation, comprises the following four key policies:

1) Focus on the interpretation of Outstanding Universal Value; in conformity with the primary purpose of the World Heritage, OUV of the inscribed property should be presented clearly at each site, not confusing with other, albeit related, issues. Based on this, Recommendation g)* should be implemented.

2) The scope of the "full history" of each site, except for the OUV period (from 1850s to 1910) as described on page 78, falls into two parts: prior to 1850s, and from 1910 to the present. The target of the full history should be narrowed down, considering the local values that supplement the understanding of the background of each component part. Where relevant, with regard to the interpretation of the full history on the location of each component part, high quality research such as collecting primary historical documents and recording oral testimonies should be carried out, and the result of this research should, at some stage, be made publicly available through appropriate media.

* Recommendation g)

> *"Preparing an interpretive strategy for the presentation of the nominated property, which gives particular emphasis to the way each of the sites contributes to OUV and reflects one or more of the phases of industrialisation; and also allows an understanding of the full history of each site."*

Based on the Interpretation Strategy, we have had multiple audits of the current status of interpretation at the component parts and visitor centres, etc., in the various areas undertaken by international experts familiar with industrial assets and the interpretation thereof in countries around the world.
As a result, auditor Barry Gamble identified the following issues in relation to the Kagoshima area.

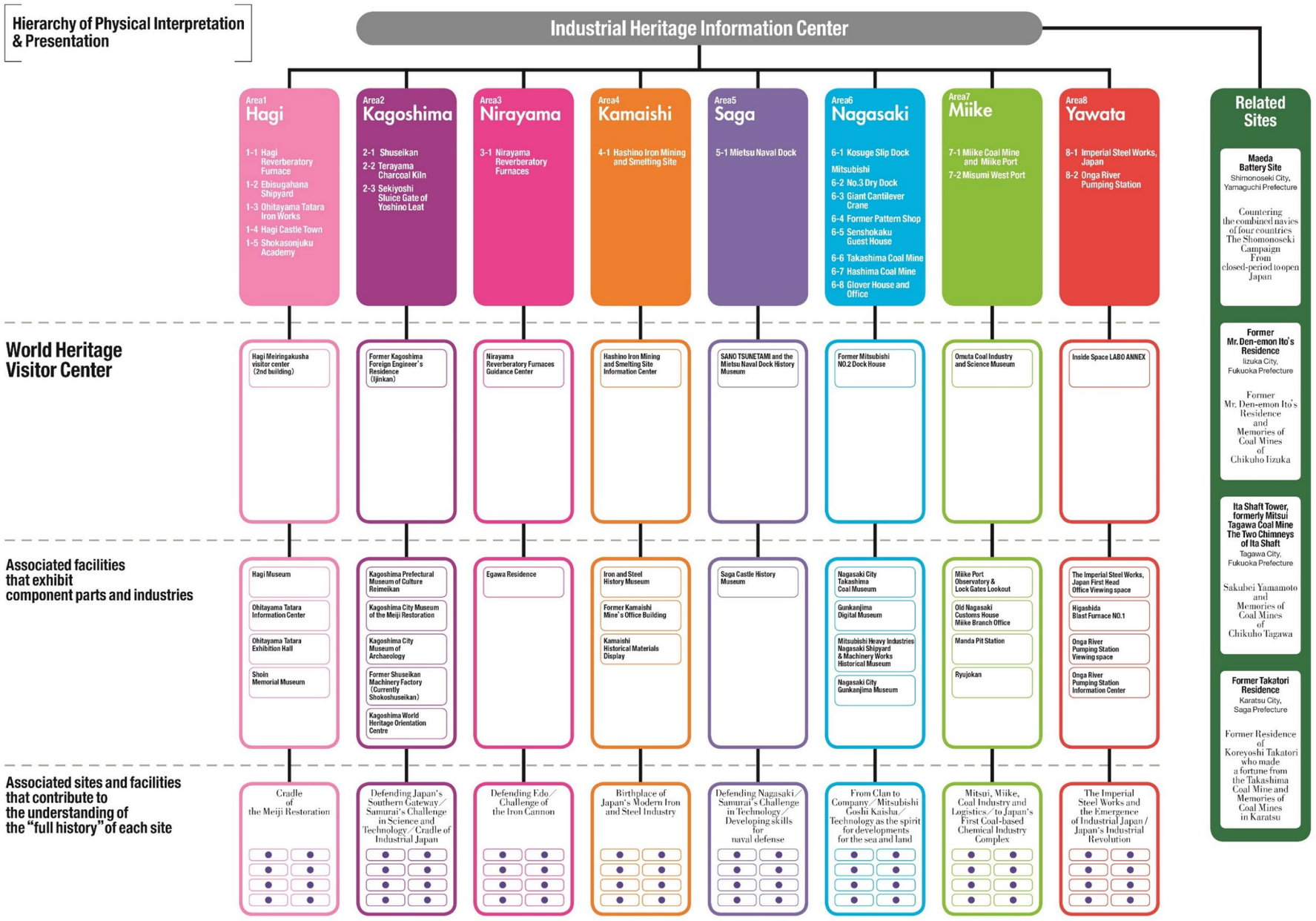
- It is important to intercept and capitalise on the 600,000 visitors to Sengan-en and the 300,000 to the Shoko-Shuseikan museum (Former Shuseikan Machinery Factory) to present and communicate the WHS OUV and how this area contributes to it. Content should draw from the widely-consulted and approved texts in the Nomination Document.
- Projected earthquake-strengthening of the structure of the Former Shuseikan Machinery Factory presents (as current exhibits will be temporarily removed) an opportunity to refresh, in particular, the introductory interpretive exhibition at the beginning of the visitor experience. This can assist with the above task.
- In developing the visitor experience in this area, it is important to understand and manage the limitations, and conservation vulnerability, of the Foreign Engineers' Residence. In terms of visitor carrying capacity, only 50 people may be accommodated in the house at any one time. The addition of a new interpretation facility in the vicinity of the site of the demolished apartment block, together with enhancements of the immediate seaward setting of the Foreign Engineers' Residence, will enable a greater capacity for visitors and their management at the site. The ongoing conservation and enhancement work at the Foreign Engineers' Residence are to be commended. It demonstrates the local government's ongoing commitment to the WHS, its obligations and opportunities.
- Based on advice provided at the site visit and subsequent meetings between Kagoshima City and Shimadzu, the new Sengan-en guidance facility is to be called the 'Kagoshima World Cultural Heritage Orientation Centre' which is to be open in October 2019. This Centre will ideally provide the first point of contact to succinctly inform the 600,000 visitors that they are in a WHS and why it is important. It should also "signpost" visitors to the Garden, the Reverberatory Furnace, Former Shuseikan Machinery Factory and the Foreign Engineers' Residence.

Discussions have been held regarding this interpretation plan for the Kagoshima Area thus far by the local conservation council.
With regard to the earthquake-strengthening of the Former Shuseikan Machinery Factory structure pointed out in the evaluation above, work is progressing according to schedule, and the interpretive enhancement will be carried out after completion. Also, for the Former Kagoshima Foreign Engineers' Residence, a new management office has been built to heighten management capabilities, and structural ruins and other remains, as well as interpretive boards, have been installed to convey the historical value in an easy-to-understand manner. The new reception facility for Sengan-en presents World Heritage values and other information in a readily understandable way as a guiding facility to the overall component parts of this area. Going forward, in consideration of the issues pointed out, we will steadily install exhibits that better reflect the World Heritage values in harmony with the historical and cultural values of the region in cooperation with the Industrial Heritage Information Centre.
The local conservation council will review the implementation progress of this plan and consider ways to make improvements as appropriate.

Local Conservation Council meeting

Hierarchy of Physical Interpretation and Presentation

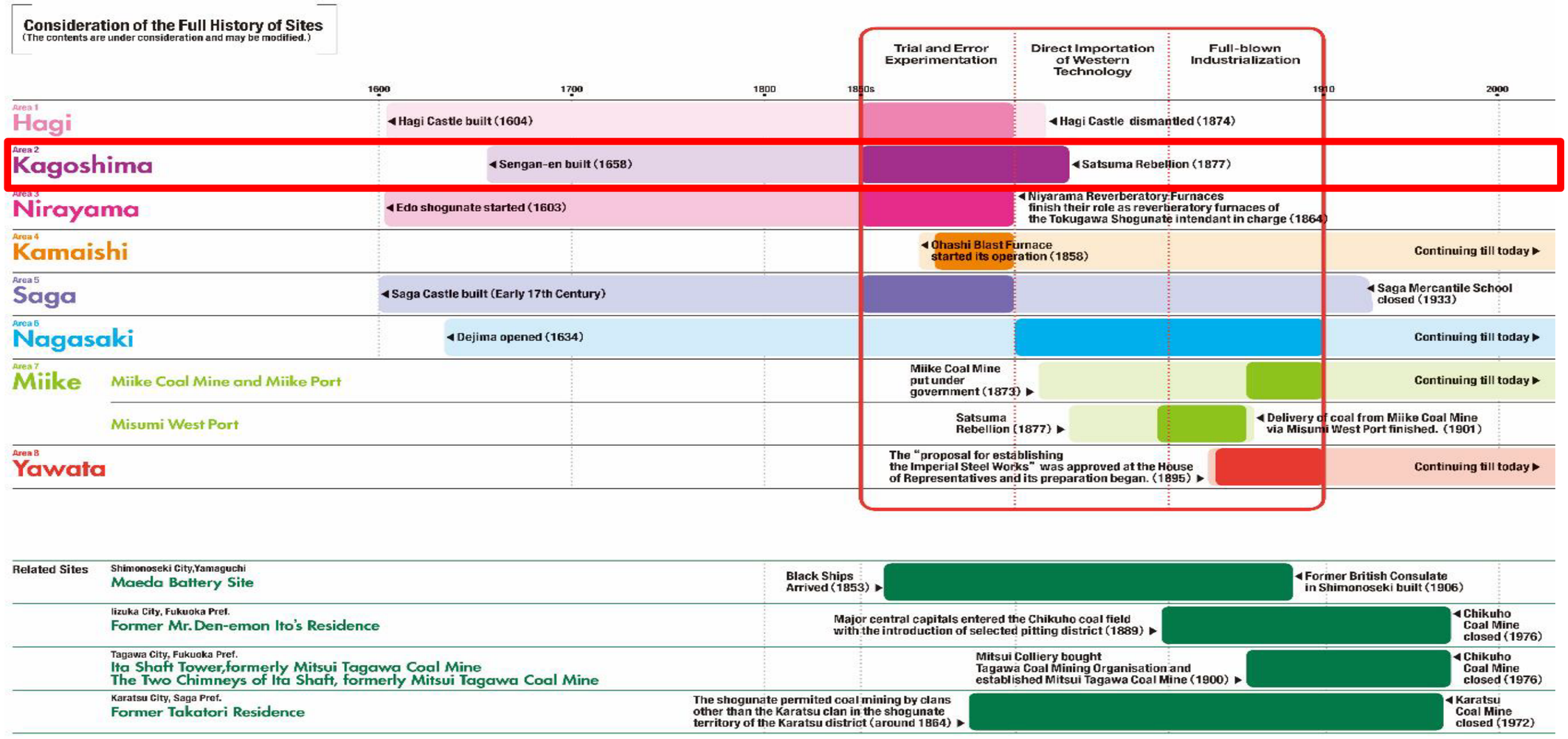
The Industrial Heritage Information Centre and the various local visitor centres will work together to build a system enabling the effective communication of the OUV of the Sites of Japan's Meiji Industrial Revolution.




Related sites: Sites that were component part candidates in the provisional UNESCO World Heritage listing on the January 5, 2009, and that comprise industrial heritage (valuable assets that provide insight into the historical background and social situation of the time) that will be utilized in an integrated manner with the World Heritage Listed "Sites of Japan's Meiji Industrial Revolution."

Consideration of the Full History of Sites

The Interpretation Strategy which the Cabinet Secretariat submitted to UNESCO in 2017, addressed consideration of the full history of sites as shown in the figure below.




Related sites: Sites that were component part candidates in the provisional UNESCO World Heritage listing on the January 5, 2009, and that comprise industrial heritage (valuable assets that provide insight into the historical background and social situation of the time) that will be utilized in an integrated manner with the World Heritage Listed "Sites of Japan's Meiji Industrial Revolution."

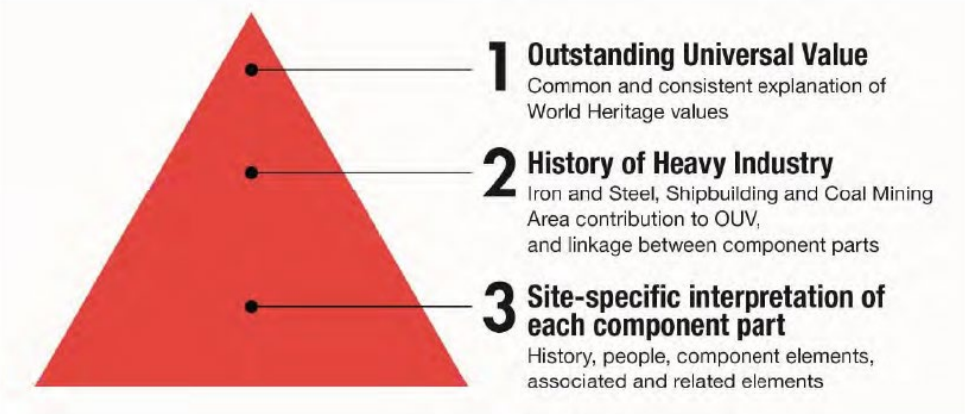
Interpretation in the Kagoshima Area

Approach of the Interpretation Strategy

The Interpretation Strategy provides the following schematic in relation to concepts for interpretation and presentation.

Interpretation for the Kagoshima area too will be approached in line with this in order to resolve the issues identified in interpretation audits.

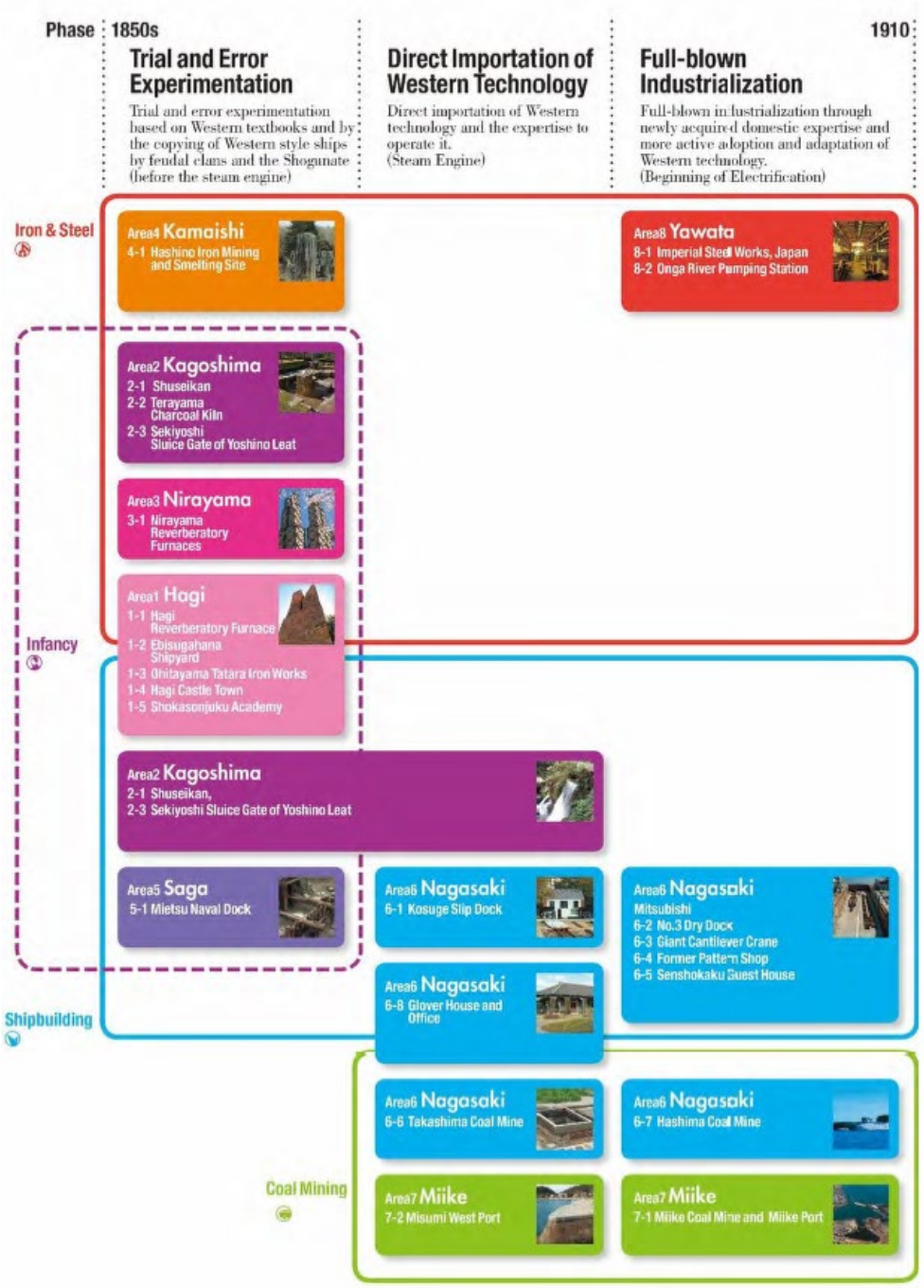
**Interpretation and presentation of the Sites of Japan's Meiji Industrial Revolution: Hierarchy of value and themes**




OUV stands at the top of the interpretation pyramid at the Industrial Heritage Information Centre and the various regions' visitor centres and is therefore the top-priority theme over the interpretation and presentation of individual regions and industries, such as history specific to an area or component part. Addressing interpretation in the order of (1) OUV, (2) the history of heavy industry, and (3) site-specific interpretation of each component part, as shown above, will ensure consistent presentation across the property

**Interpretation flow at each local visitor centre**

Hierarchy of Interpretation


Phase
1850s
1910
Trial and Error Experimentation
Trial and error experimentation based on Western textbooks and by the copying of Western style ships by feudal clans and the Shogunate (before the steam engine)
Direct Importation of Western Technology
Direct importation of Western technology and the expertise to operate it. (Steam Engine)
Full-blown Industrialization
Full-blown industrialization through newly acquired domestic expertise and more active adoption and adaptation of Western technology. (Beginning of Electrification)
Iron & Steel
Area4 Kamaishi
4-1 Hashino Iron Mining and Smelting Site
Area8 Yawata
8-1 Imperial Steel Works, Japan
8-2 Onga River Pumping Station
Area2 Kagoshima
2-1 Shuseikan
2-2 Terayama Charcoal Kiln
2-3 Sekiyoshi Sluice Gate of Yoshino Leat
Area3 Nirayama
3-1 Nirayama Reverberatory Furnaces
Area1 Hagi
1-1 Hagi Reverberatory Furnace
1-2 Ebisugahana Shipyard
1-3 Ohitayama Tatara Iron Works
1-4 Hagi Castle Town
1-5 Shokasonjuku Academy
Infancy
Area2 Kagoshima
2-1 Shuseikan,
2-3 Sekiyoshi Sluice Gate of Yoshino Leat
Area5 Saga
5-1 Mietsu Naval Dock
Area6 Nagasaki
6-1 Kosuge Slip Dock
Area6 Nagasaki
Mitsubishi
6-2 No.3 Dry Dock
6-3 Giant Cantilever Crane
6-4 Former Pattern Shop
6-5 Senshokaku Guest House
Area6 Nagasaki
6-8 Glover House and Office
Shipbuilding
Area6 Nagasaki
6-6 Takashima Coal Mine
Area6 Nagasaki
6-7 Hashima Coal Mine
Coal Mining
Area7 Miike
7-2 Misumi West Port
Area7 Miike
7-1 Miike Coal Mine and Miike Port

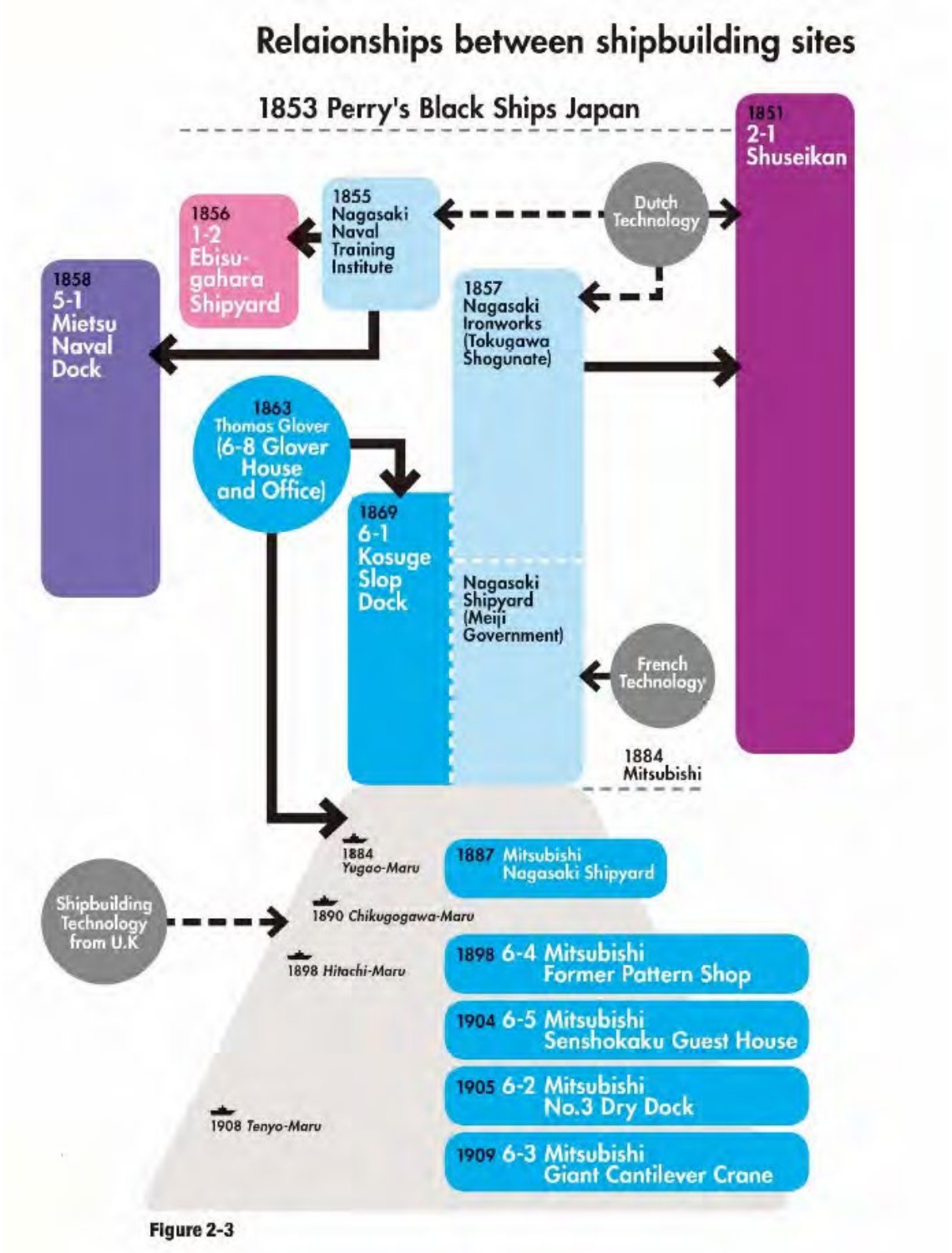

Relaionships between shipbuilding sites
1853 Perry's Black Ships Japan
1851
2-1
Shuseikan
1855
Nagasaki
Naval
Training
Institute
Dutch
Technology
1856
1-2
Ebisu-
gahara
Shipyard
1858
5-1
Mietsu
Naval
Dock
1857
Nagasaki
Ironworks
(Tokugawa
Shogunate)
1863
Thomas Glover
(6-8 Glover
House
and Office)
1869
6-1
Kosuge
Slop
Dock
Nagasaki
Shipyard
(Meiji
Government)
French
Technology
1884
Mitsubishi
1884
Yugao-Maru
1887 Mitsubishi
Nagasaki Shipyard
Shipbuilding
Technology
from U.K
1890 Chikugogawa-Maru
1898 Hitachi-Maru
1898 6-4 Mitsubishi
Former Pattern Shop
1904 6-5 Mitsubishi
Senshokaku Guest House
1905 6-2 Mitsubishi
No.3 Dry Dock
1908 Tenyo-Maru
1909 6-3 Mitsubishi
Giant Cantilever Crane

Figure 2-3

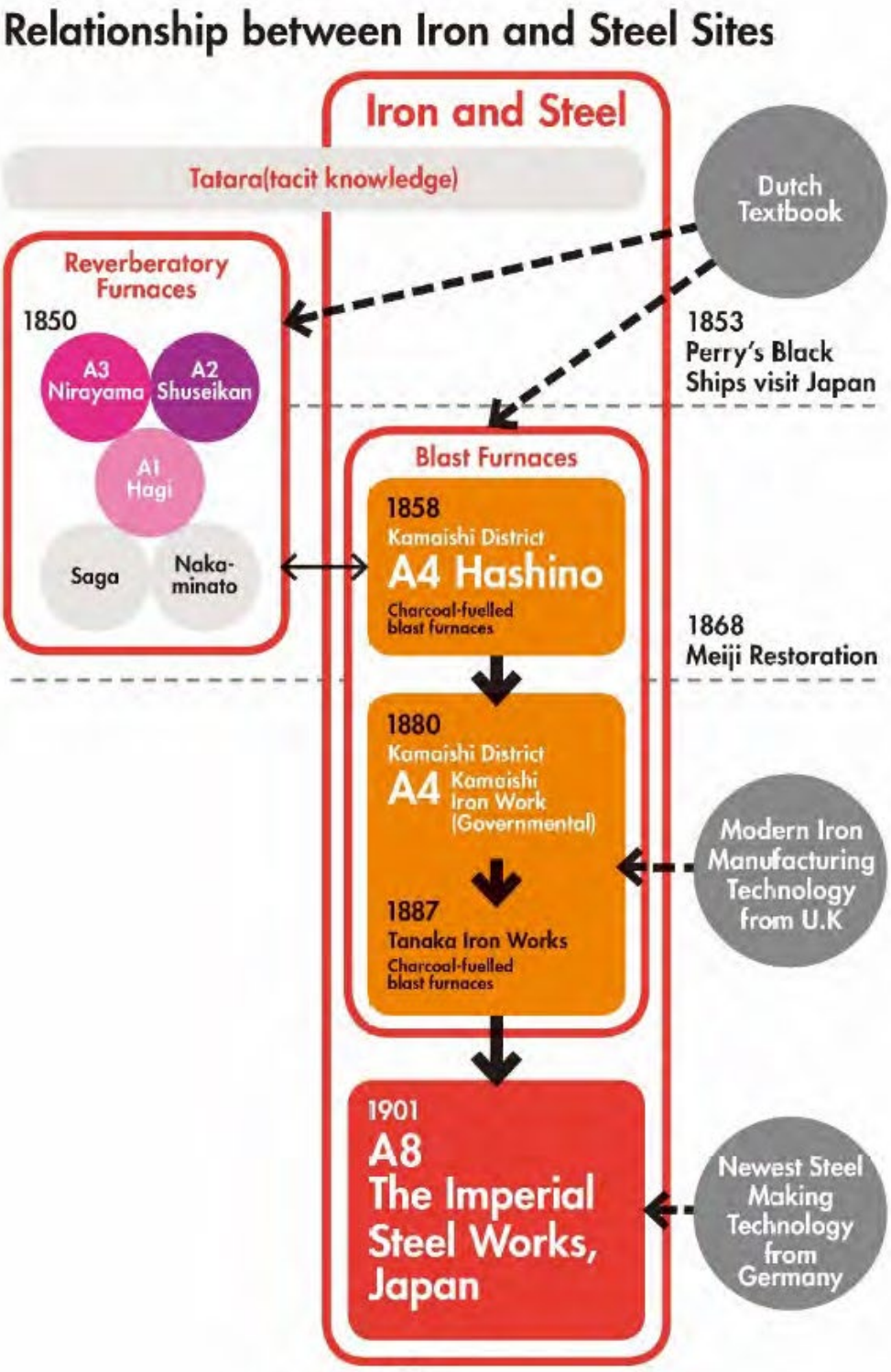

Relationship between Iron and Steel Sites
Iron and Steel
Tatara(tacit knowledge)
Dutch Textbook
Reverberatory Furnaces
1850
A3 Nirayama
A2 Shuseikan
A1 Hagi
Saga
Naka-minato
1853 Perry's Black Ships visit Japan
Blast Furnaces
1858
Kamaishi District
A4 Hashino
Charcoal-fuelled blast furnaces
1868 Meiji Restoration
1880
Kamaishi District
A4 Kamaishi Iron Work (Governmental)
1887
Tanaka Iron Works
Charcoal-fuelled blast furnaces
Modern Iron Manufacturing Technology from U.K
1901
A8
The Imperial Steel Works, Japan
Newest Steel Making Technology from Germany

Figure 3-2

Presentation Using “Liquid Galaxy,” Etc.

The Industrial Heritage Information Centre, which was established in March 2020 pursuant to the Interpretation Strategy, uses an immersive video multi-display that draws on the World Heritage OUV period (1850s-1910), as well as the Consideration of the Full History of Sites schematic. It explains through images the history and transformation of component parts in the various areas, as well as the way that people lived, etc., presenting these in a way that enables visitors to experience in a very real way the evolution of the property, the contribution to OUV, and the full history.
This area will also establish a digital archive of documents gathered by the Industrial Heritage Information Centre and the visitor centres in the area, which will be gradually reflected in the interpretation tools.

Kagoshima Area Component Parts

The Kagoshima Area contains three component parts in total, all heritage that relates to iron & steel and shipbuilding.

| | |
|---|---|
| Relevant industries: Iron and steel<br>Name of component part:<br>Shuseikan (Reverberatory Furnace)<br>(Overview of component part)<br>Lord Shimadzu Nariakira of the Satsuma Domain was quick to realize the importance of coastal defense after the shock of the Qing Dynasty's defeat in the Opium War. He started the Shuseikan Project with cannon manufacturing and shipbuilding at its core, pursuing the development of various industries. The first industrial complex in Japan employed 1,200 people at its height. |  |
| Relevant industries: Shipbuilding<br>Name of component part:<br>Shuseikan (Former Machinery Factory)<br>(Overview of component part)<br>A repair shop completed in 1865 for machinery related to Western-style ships. Modeled after Nagasaki Ironworks which was of Dutch design, The shop was built by the Satsuma Domain with traditional construction techniques. It is the earliest Western factory built in Japan that still exists today, with machinery imported from the Netherlands for metal processing and repairing steam engines. |  |
| Relevant industries: Shipbuilding<br>Name of component part: Shuseikan (Foreign Engineers' Residence)<br>(Overview of component part)<br>The Kagoshima Spinning Mill, Japan's first Western-style spinning mill factory that used steam engines, invited British engineers for technological guidance. This structure was built to house such engineers. |  |

| | |
|---|---|
| Relevant industries: Iron and steel<br>Name of component part:<br>Terayama Charcoal Kiln<br>(Overview of component part)<br>The remains of a charcoal kiln that was used to produce charcoal as fuel for the Shuseikan Project. The charcoal kiln remaining was built in 1858, and the kiln itself is in its original form, made of sturdy masonry. To prepare for the shortage in charcoal supply resulting from the Shuseikan Project, Nariakira ordered a charcoal kiln installed in Terayama Yoshino-cho to produce powerful white charcoal. |  |
| Relevant industries: Iron and steel, shipbuilding<br>Name of component part:<br>Sekiyoshi Sluice Gate of Yoshino Leat<br>(Overview of component part)<br>The remains of the leat that supplied water as power for the Shuseikan Project. The primary power source was a water mill, and Nariakira built a new canal in 1852 to supply water to the Shuseikan water mill. The sluice gate of the time remains in Sekiyoshi, and a part of the leat still serves irrigation purposes today. |  |

World Heritage Plaques

In line with the UNESCO Guidelines, World Heritage plaques have been installed at the various component parts to inform visitors properly about the OUV of the property.

Kagoshima Area: Distribution of Interpretation Facilities

Kagoshima Area: Hierarchy of Physical Interpretation and Presentation

Access Guide Maps

An English-version access map to guide visitors to component parts in each area has been created in addition to the Japanese version and is distributed free to visitors. This map gives an introduction to all component parts in the area and is structured to help visitors reach as many of them as possible.

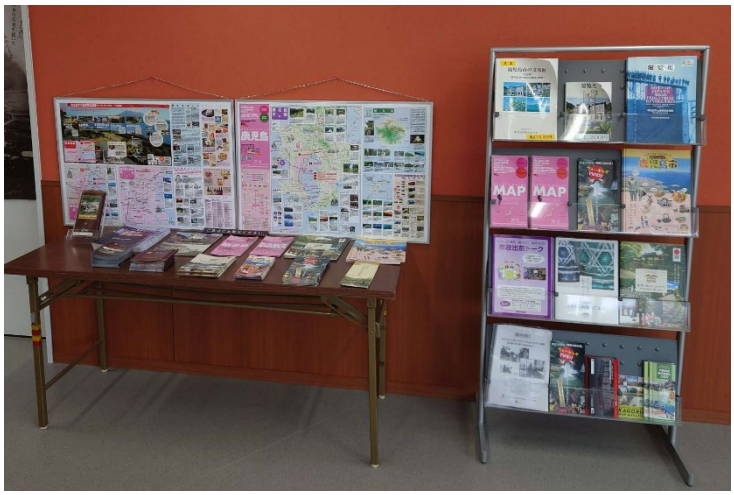
By linking the maps to a smartphone app, information can be communicated about component parts not open to the public using augmented reality (AR) functions to show 3D models, videos, and 360-degree panorama views of inaccessible sites.



Information Counters

These are set up in administrative institutions and airports to distribute access guide maps and other information.


Kagoshima City Hall




Foreign Engineers' Residence (Ijinkan)
Management Office

## Guide Map Distribution Points and Number of Maps Distributed

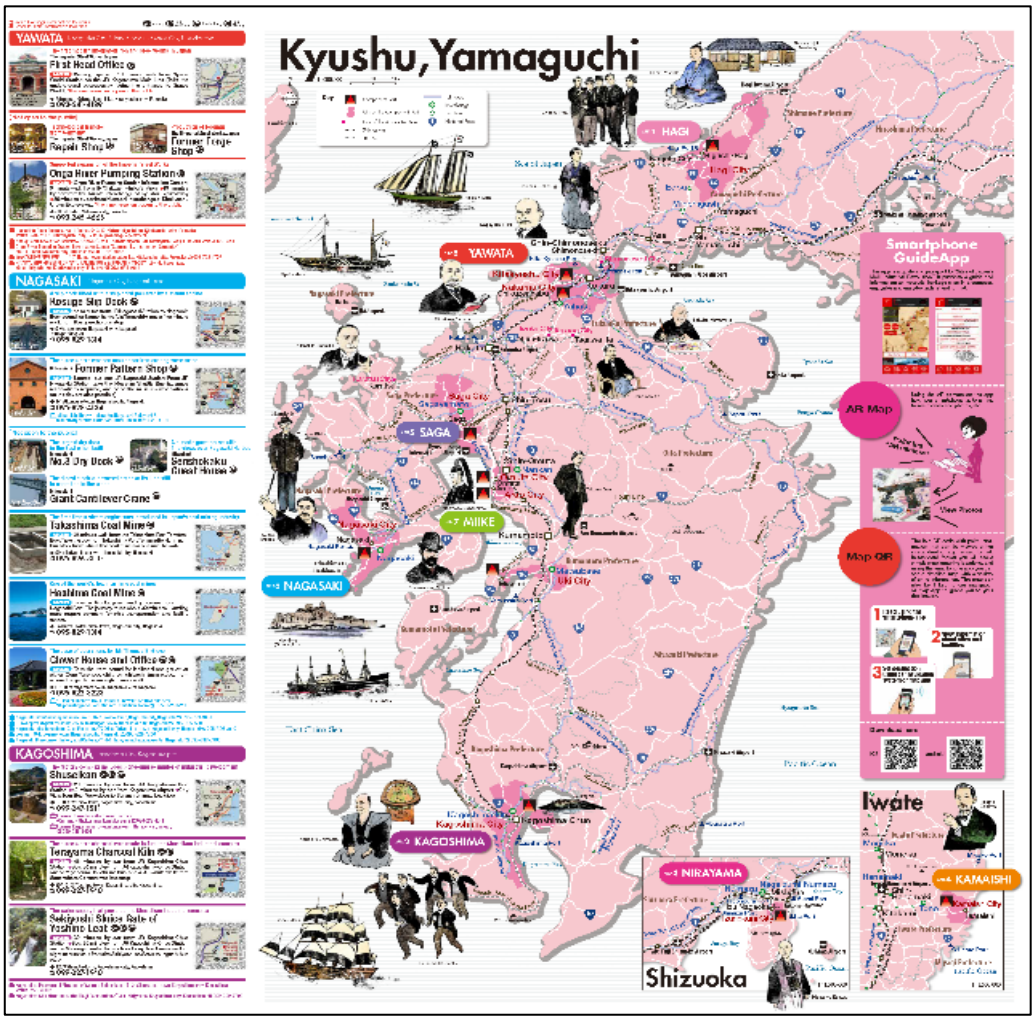
Guide map distribution points and the number of maps distributed are as follows.

| Overall map | | Kagoshima Map | |
|---|---|---|---|
| **No. distributed** | **177,762** | **No. distributed** | **38,958** |
| Japanese & English | 177,762 | Japanese | 34,178 |
| **Main distribution point** | **No. distributed** | **Main distribution point** | **No. distributed** |
| Administrative organizations | 300 | Administrative organizations | 980 |
| Airports | 550 | Airports/ Airlines | 1,450 |
| Hotels | 50 | Hotels | 3,000 |
| Car rental agencies | 100 | Car rental agencies | 500 |
| JR (Railway) | 600 | JR (Railway) | 1,400 |
| Tourist information centers | 700 | Tourist information centers | 231 |
| Michi-no-eki roadside stations | 4,400 | Michi-no-eki roadside stations | 3,752 |
| NEXCO | 168,500 | NEXCO | 15,050 |
| Public interest corporation/foundation/ incorporated association | 550 | Public interest corporation/foundation/ incorporated association | 1,600 |
| | | | |
| Other | 2,012 | Other | 10,995 |
| JR Kyushu Hakata Station General Information | | Sengan-en | |
| West Nippon Expressway Retail Co., Ltd. | | Fukuoka Airport | |
| West Nippon Expressway Service Holdings Company Limited | | The Yakushima Environmental and Cultural Foundation | |
| Fugetsu Foods Co., Ltd. | | Kitakyushu Convention & Visitors Association | |
| Fukuoka International Airport Co., Ltd. | | JR Kagoshima Chuo Station Tourist Information Center | |
| Nagasaki Airport | | JR Miyazaki Station Tourist Information Center | |
| Kagoshima Prefectural Library | | Kitakyushu Convention & Visitors Association | |
| JR Kagoshima Chuo Station Tourist Information Center | | Kagoshima City Shopping Street Federation | |
| Kitakyushu Convention & Visitors Association | | Fukuoka City Tourist Information Center | |
| Omura City Hall Industrial Promotion Dept. | | Kagoshima Airport | |
| JR Miyazaki Station Tourist Information Center | | Fukuoka International Airport Co., Ltd. | |
| | | Kagoshima Prefectural Library | |
| | | Satsuma Students Museum | |
| | | Satoyama wo Kangaerukai Nonprofit Organisation (NPO Satoyama) | |

| Total no. distributed for the entire area |
|---|
| **464,025** |

World Heritage Route

In accordance with the Interpretation Strategy, and also as noted in pages 395–396 of the Nomination Document, the World Heritage Route Promotion Council was founded to provide guidance and tourism infrastructure for understanding World Heritage as a whole. The Council attracts visitors to all component parts and related sites by producing maps, apps, and GPS navigation and by installing road signs and other signage using the common logo to promote the Sites of Japan's Meiji Industrial Revolution so that visitors are able to understand the World Heritage value constituted by the 23 component parts.
Work will continue to be undertaken steadily pursuant to the Nomination Document and the Interpretation Plan.




Map on p. 396 of the Nomination Document


World Heritage Route Promotion Council meeting

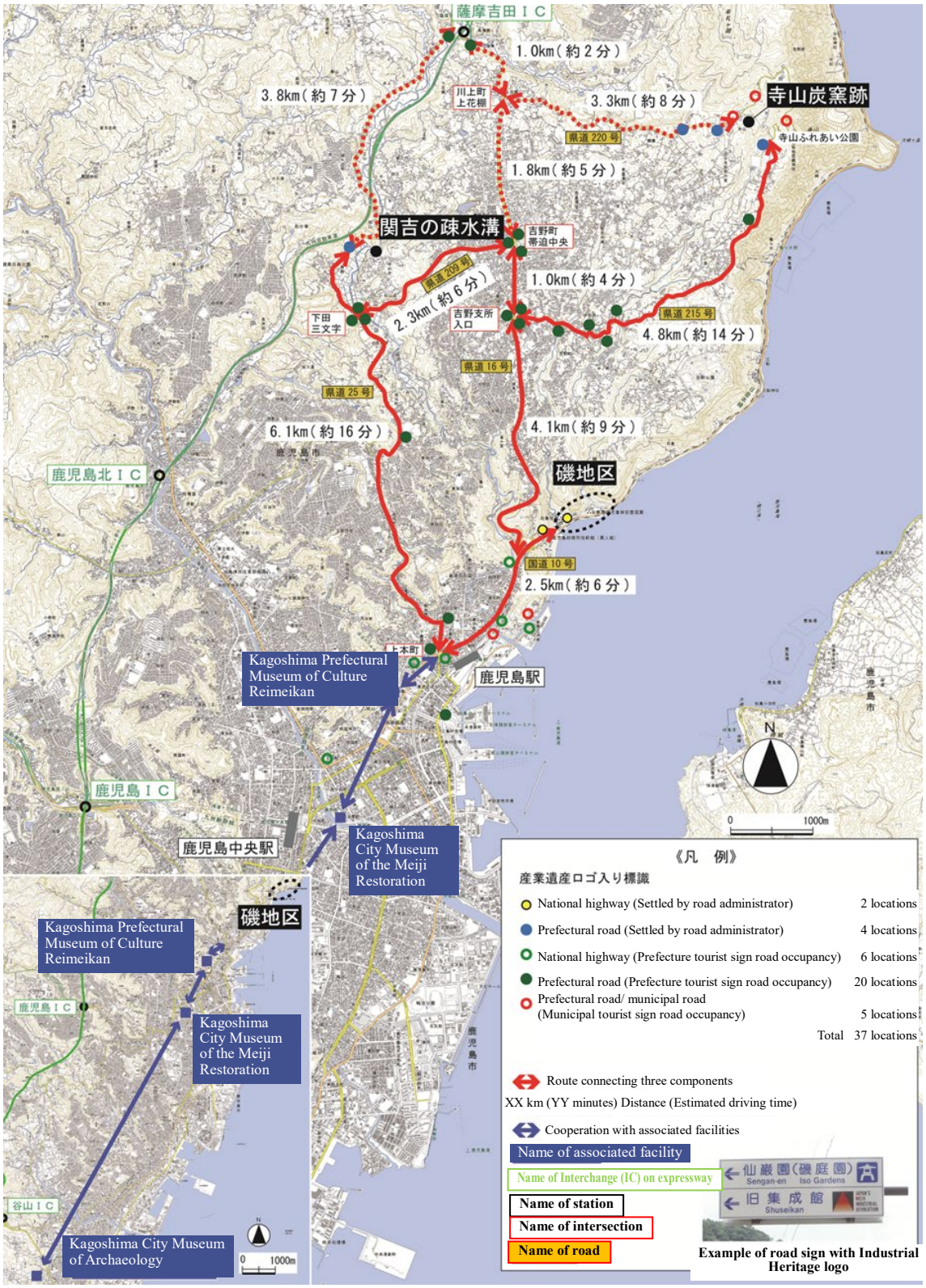
Installation of Road Signage, Etc., Using the Common Logo

Status of installation of road signage

| Place | No. of signs installed |
|---|---|
| Kagoshima City | 37 |

Photos of road signage


Locations of Road Signs Using the Common Logo

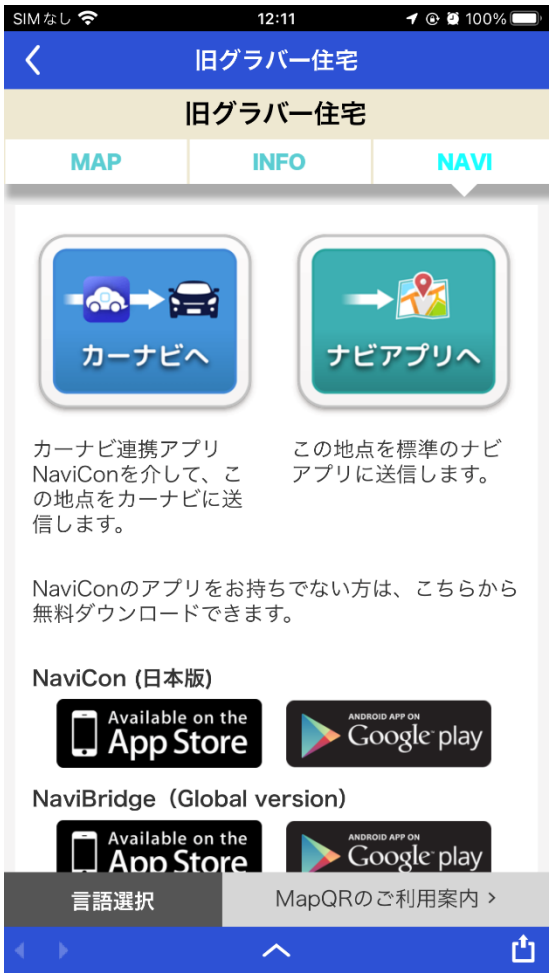


Linkage with Car Navigation (Denso Car Navigation)

Example of linkage with smartphone app so that the target destination can be sent to a car navigation system




The destination can be sent directly from a smartphone to the car navigation system.

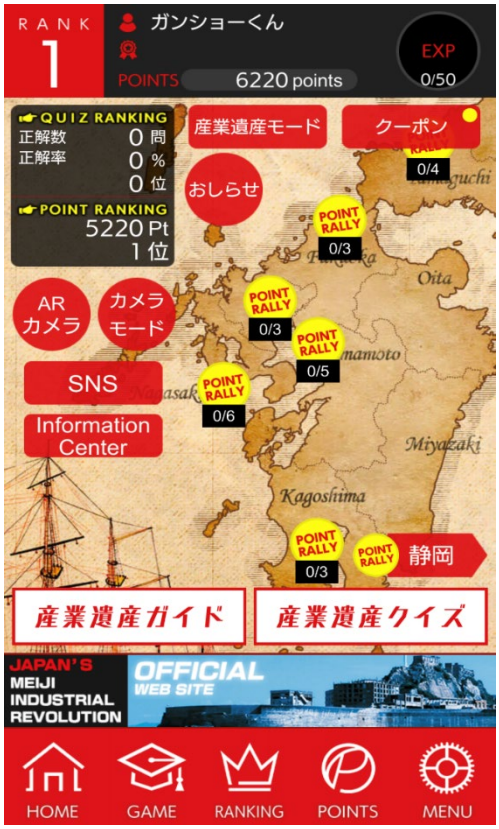




A video on how to use the application has been put up on YouTube.

App Utilization

The app introduces the Sites of Japan's Meiji Industrial Revolution, including detailed stories and explanations, as well as the historical background, using video and computer graphics, etc. Users can earn points by playing games and using the AR camera on the app and use them as coupons for souvenirs and other prizes. As such, it serves as a mechanism for both deepening understanding of World Heritage value and feeding back into World Heritage Route tours. The smartphone app is available in Japanese, English, Korean, simplified Chinese, traditional Chinese, and Vietnamese.




Use of Line App

Points acquired on the app can be exchanged for coupons.

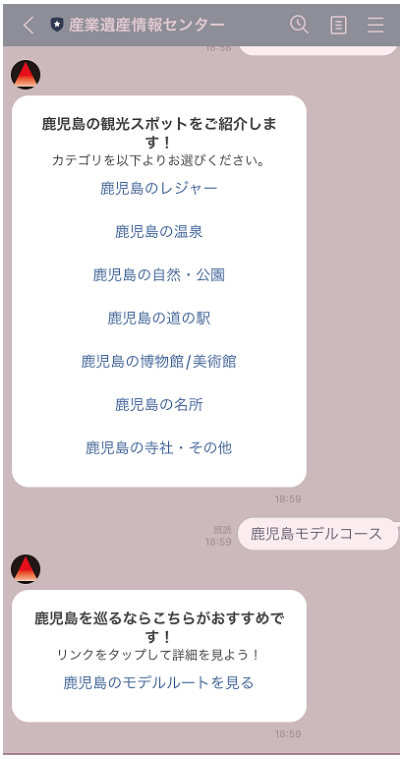


Point-of-purchase advertising has been created and placed in stations and information centres, etc., to encourage people to sign up to the LINE app.

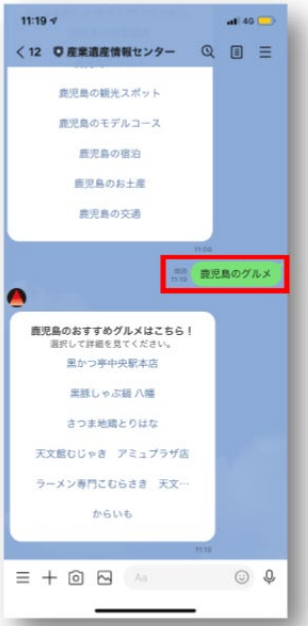
LINE is used as a runway for achieving two-way communication geared to the circumstances of the user based on locational information, such as the use of existing guide apps and communication about coupons that can be used in shops at the area visited. The service is provided in multiple languages so as to support international visitors.

LINE functions (examples)

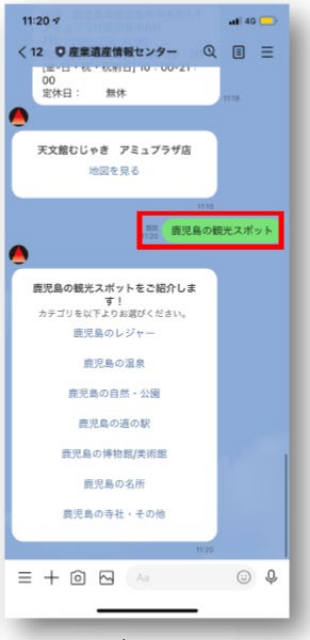

Introduction to model courses



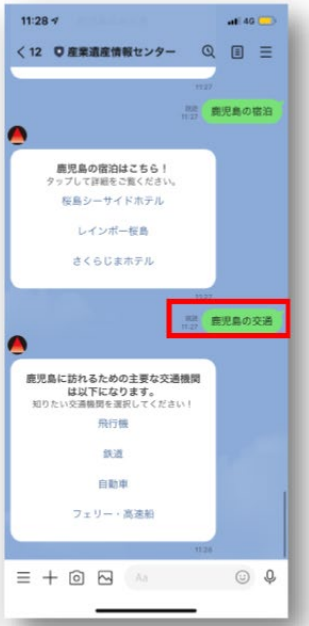

AI chatbot function



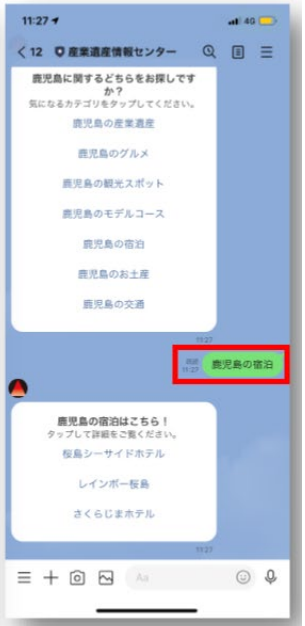

Gourmet information




Tourist spots




Traffic information




Accommodation information

Digital Signage Functions

Digital signage has been installed in the Industrial Heritage Information Centre as a mechanism for encouraging multi-destination tourism by displaying local guide maps and information on multi-destination industrial heritage routes. AI chatbots have also been installed to respond to a wide range of multi-destination routes and tourism questions in real time.


Enhancement of digital content

The Kagoshima Area disseminates information related to the component parts through the websites of Kagoshima Prefecture, Kagoshima City, Kagoshima Modernization Industrial Heritage Partnership Council and the Facebook pages of Kagoshima Prefecture and Kagoshima City.
Kagoshima Prefecture has also developed a smartphone app to show images recreating facilities in operation through VR/ AR, 360-degree panorama CG, videos, and other content that are produced, aiming for further understanding by visitors on-site.

[Shuseikan 360-degree panorama CG]

[Terayama Charcoal Kiln CG]

[Sekiyoshi Sluice Gate of Yoshino Leat CG]

[CG of the Former Kagoshima Foreign Engineers' Residence, Kagoshima Spinning Mill, etc.]

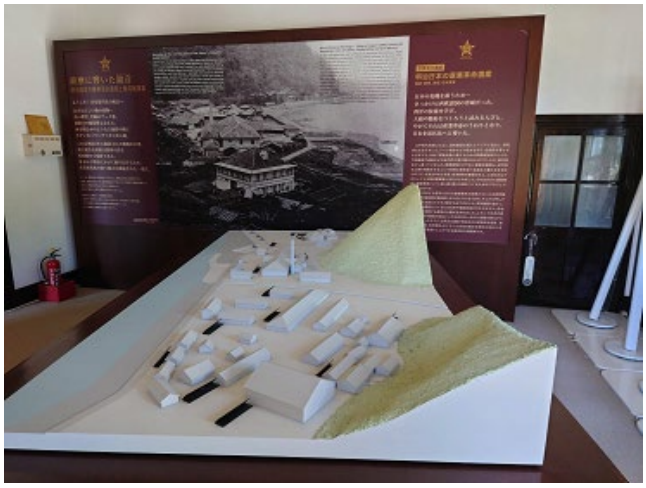
Visitor Centres

The Kagoshima Area is equipped with one visitor centre and five auxiliary facilities with exhibits of component parts and the industrial sector in line with the interpretation strategy. Each facility cooperates with the local community to prepare exhibits that best bring out the true World Heritage values in harmony with the historical and cultural values of the region. They aim to create exhibits that allow visitors to understand the value of the components easily.

Based on points raised in interpretation audits, local visitor centres will work with the Industrial Heritage Information Centre to digitize a huge volume of primary historic materials and use digital tools to enhance exhibits.

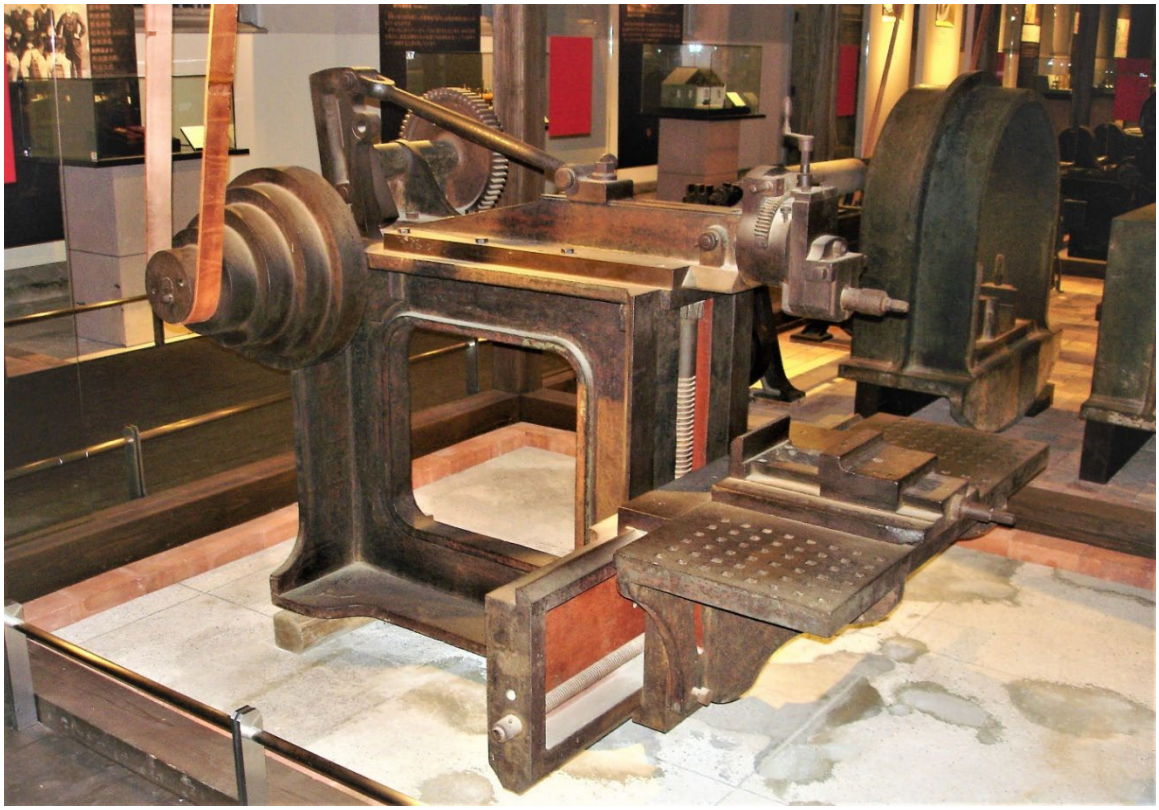
[Former Kagoshima Foreign Engineers' Residence (Ijinkan)]

A model of Shuseikan in its entirety, an exhibit recreating the lives of engineers, the relocation history of the Engineers' Residence, interpretive videos, models, and panels for the Shuseikan Project, and an introduction to the component parts situated across eleven cities in eight prefectures can all be found at this facility.

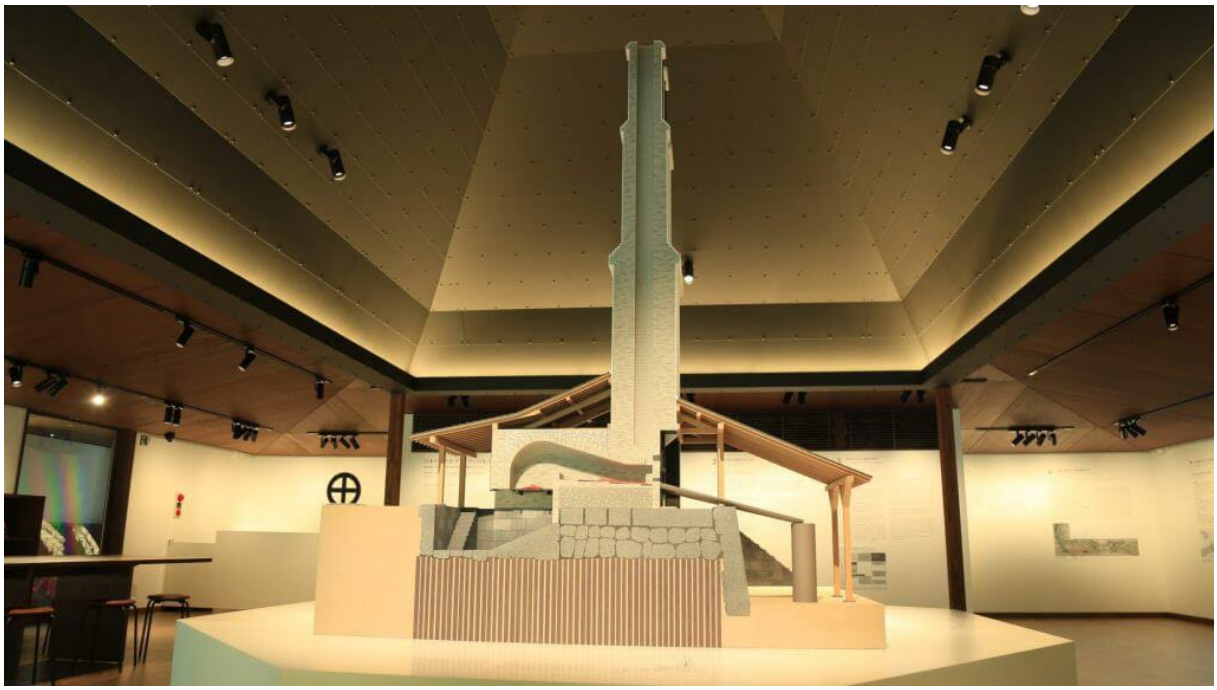


[Former Shuseikan Machinery Factory (Currently Shokoshuseikan)]
One of the buildings that represent the second phase of the Shuseikan Project. It currently serves as the Shoko Shuseikan Museum, where exhibits on the Shuseikan Project, as well as the history and culture of the Shimadzu Clan, are on display.

(Former exhibit)



[Kagoshima World Heritage Orientation Centre]
A facility where visitors can gain a deep understanding of stories and values surrounding Satsuma, centering around the reverberatory furnace remains that are an important component in the “Sites of Japan’s Meiji Industrial Revolution.” An overview of the “Sites of Japan’s Meiji Industrial Revolution,” the history up to its inscription as a World Heritage Site, and displays on Shimadzu Nariakira and the Shuseikan Project can be found.



[Kagoshima Prefectural Museum of Culture Reimeikan]
Built on the former site of Kagoshima Castle, this museum holds academic research and displays on the region's history and cultural heritage. Displays related to the "Sites of Japan's Meiji Industrial Revolution" can also be found, such as of modernization projects and the traditional techniques that can be seen in skill used for stonewall masonry.


[Kagoshima City Museum of the Meiji Restoration]
Located in Kajiya-cho where many individuals who contributed to the Meiji Restoration were from, the facility makes it easy for visitors to learn about Satsuma at the end of the Edo era and the heroes who supported the Meiji Restoration. Models and videos regarding Shimadzu Nariakira and the Shuseikan Project are on display.


[Kagoshima City Museum of Archaeology]
The history of Kagoshima City, from the Paleolithic to the modern age, is introduced using buried cultural properties and other items. Interpretation of the “Sites of Japan’s Meiji Industrial Revolution” is also provided through excavation survey results, panels, and models.


Monitor tour

Children's education programs

School visits to provide lectures to elementary school and junior high school students

Visits to schools were made to provide lectures utilizing the supplementary reading book "Kagoshima Time Travel," aiming to raise interest among children and students in the component parts of the Sites of Japan's Meiji Industrial Revolution that exist in the prefecture and to deepen their understanding of these components in terms of World Heritage values, as well as to foster awareness as citizens of the prefecture to pass on this understanding to future generations.

World Cultural Heritage Children's University

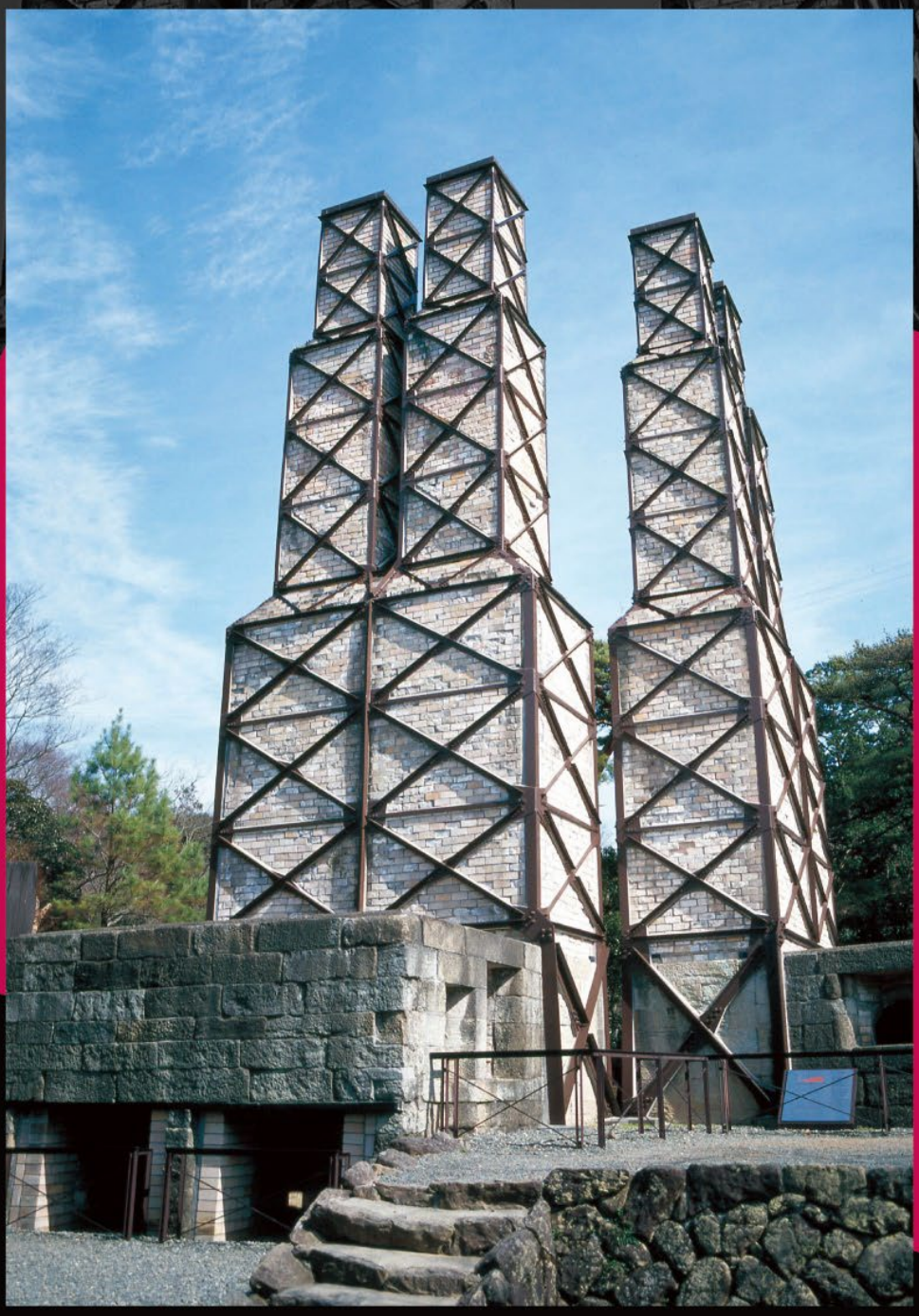
This event was held to commemorate the fifth anniversary of the inscription to help citizens deepen their understanding of the "Sites of Japan's Meiji Industrial Revolution" and the component parts within Kagoshima.

# Appendix 1-2

Appendix 1-3

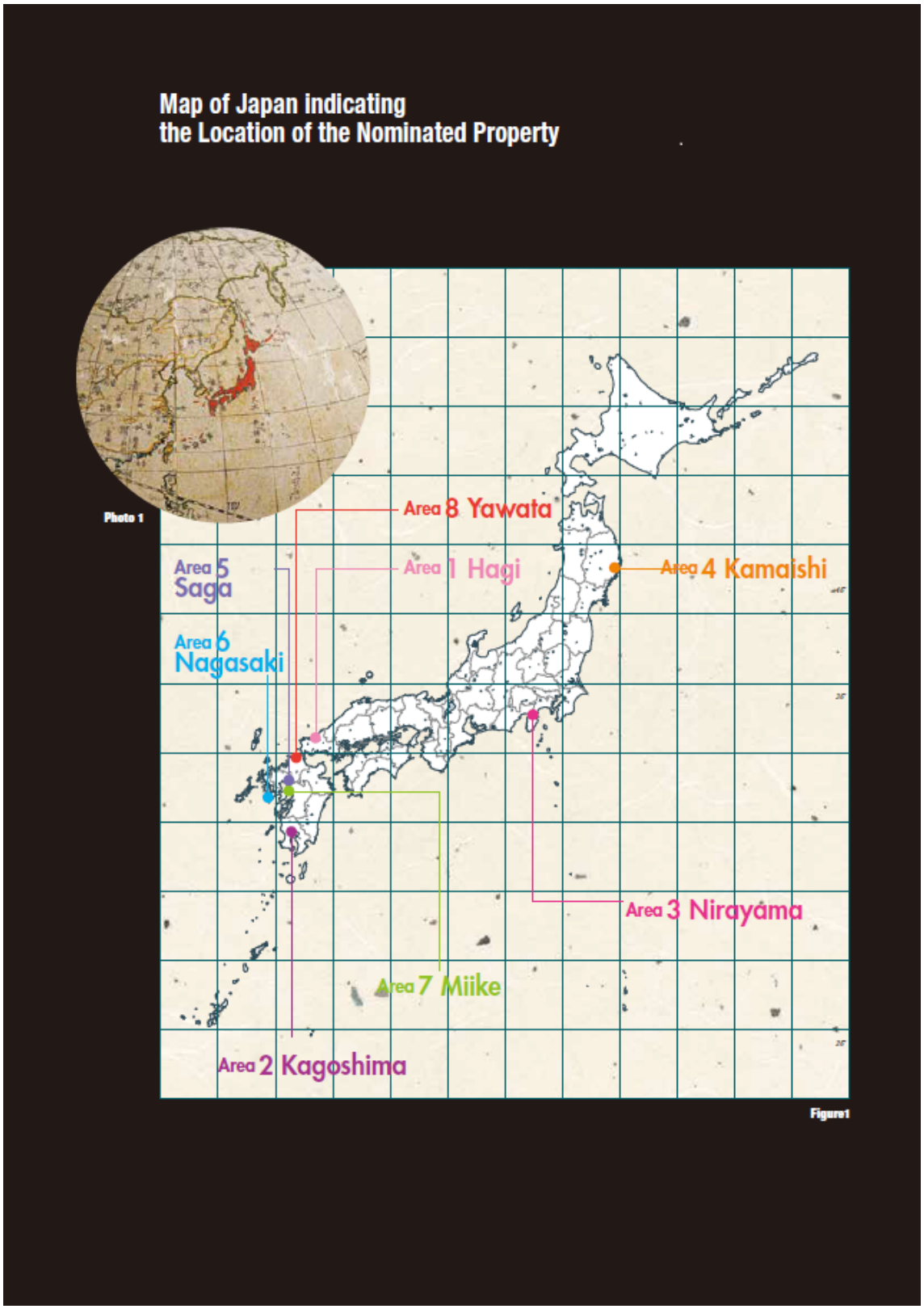
Area3 Nirayama

# AREA-SPECIFIC INTERPRETATION PLAN



Nirayama Conservation Council

【Area List】


Map of Japan indicating
the Location of the Nominated Property
Photo 1
Area 8 Yawata
Area 1 Hagi
Area 4 Kamaishi
Area 5
Saga
Area 6
Nagasaki
Area 3 Nirayama
Area 7 Miike
Area 2 Kagoshima
Figure1

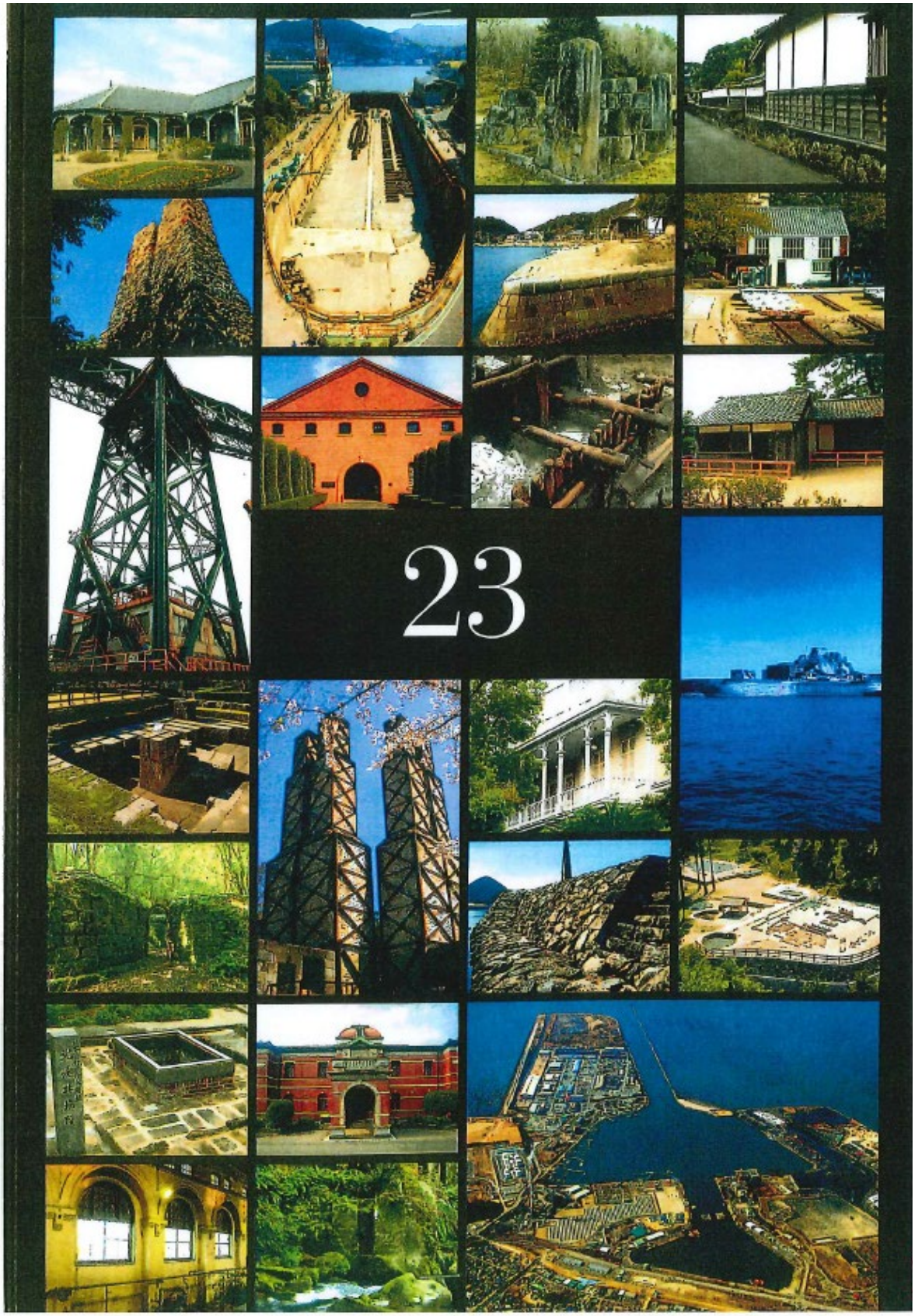
【Component Name】

## List of the Component Parts

| Area | Site | ID | Component Part |
|---|---|---|---|
| A1 Hagi | 1 Hagi Proto-industrial Heritage | 1-1 | Hagi Reverberatory Furnace |
| | | 1-2 | Ebisugahana Shipyard |
| | | 1-3 | Ohitayama Tatara Iron Works |
| | | 1-4 | Hagi Castle Town |
| | | 1-5 | Shokasonjuku Academy |
| A2 Kagoshima | 2 Shuseikan | 2-1 | Shuseikan |
| | | 2-2 | Terayama Charcoal Kiln |
| | | 2-3 | Sekiyoshi Sluice Gate of Yoshino Leat |
| A3 Nirayama | 3 Nirayama Reverberatory Furnaces | 3-1 | Nirayama Reverberatory Furnaces |
| A4 Kamaishi | 4 Hashino Iron Mining and Smelting Site | 4-1 | Hashino Iron Mining and Smelting Site |
| A5 Saga | 5 Mietsu Naval Dock | 5-1 | Mietsu Naval Dock |
| A6 Nagasaki | 6 Nagasaki Shipyard | 6-1 | Kosuge Slip Dock |
| | | 6-2 | Mitsubishi No.3 Dry Dock |
| | | 6-3 | Mitsubishi Giant Cantilever Crane |
| | | 6-4 | Mitsubishi Former Pattern Shop |
| | | 6-5 | Mitsubishi Senshokaku Guest House |
| | 7 Takashima Coal Mine | 6-6 | Takashima Coal Mine |
| | | 6-7 | Hashima Coal Mine |
| | 8 Glover House and Office | 6-8 | Glover House and Office |
| A7 Miike | 9 Miike Coal Mine and Miike Port | 7-1 | Miike Coal Mine and Miike Port |
| | 10 Misumi West Port | 7-2 | Misumi West Port |
| A8 Yawata | 11 The Imperial Steel Works, Japan | 8-1 | The Imperial Steel Works, Japan |
| | | 8-2 | Onga River Pumping Station |

Table1

3


23

SITES OF
JAPAN'S
MEIJI INDUSTRIAL
REVOLUTION
IRON & STEEL, SHIPBUILDING
AND COAL MINING

# Executive Summary

## Brief Synthesis

"Sites of Japan's Meiji Industrial Revolution: : Iron and Steel, Shipbuilding and Coal Mining" comprise a singular ensemble of industrial heritage sites that represent the first successful transfer of industrialization from the West to a non-Western nation.

From the middle of the 19th century to the early 20th century, Japan achieved rapid industrialization that was founded on the key industrial sectors of shipbuilding, iron and steel, and coal mining. The initial phase was one of trial and error experimentation in iron making and shipbuilding, based mostly on Western textbooks, and by copying examples of Western ships. This was followed by the more successful importation of Western technology and the expertise to operate it and, by the late Meiji period, full-blown industrialization through newly acquired domestic expertise and the active adaptation of Western technology to best suit Japanese needs and social traditions. This successful industrialization was achieved in just a little over 50 years without colonization, and on Japan's own terms. The property is testimony to this unique phase in world history.

# Justification for Criteria

**Criterion (ii)**

The property is a series of heritage sites that, together, uniquely illustrate the process by which feudal Japan sought technology transfer from Western Europe and America from the middle of the 19th century. This technology was adopted and progressively adapted to satisfy specific domestic needs and social traditions, thus enabling Japan to become a world-ranking industrial nation by the early 20th century.

**Criterion (iv)**

The technological ensemble of key industrial sites of shipbuilding, iron and steel, and coal mining is testimony to Japan's unique achievement in world history as the first non-Western country to successfully industrialize. Viewed as an Asian cultural response to Western industrial values, the ensemble had no counterpart elsewhere in the world.

# Statement of Integrity

The 23 component parts are the best, and often the only, surviving examples of the key attributes that represent shipbuilding, the iron and steel, and coal mining industries and that are necessary to express Outstanding Universal Value. In each case, the boundary of the component part has been drawn to include the essential features that, overall, contribute to Outstanding Universal Value.

Component parts are in good condition and have mechanisms in place to control deterioration and keep sites free from the adverse effects of development. They have been variously affected by continued use, re-use or lengthy periods of abandonment, and their physical integrity varies between well preserved and fragmentary, the latter being sufficiently intact to be able to represent the former whole. In some cases, where the evidence is primarily archaeological, sufficient investigation has been carried out to verify that a substantial archaeological site survives in good condition for further study and presentation. In other cases, in particular those that remain in operational industrial use, ongoing use and maintenance have resulted in an extraordinarily high level of integrity of working industrial elements.

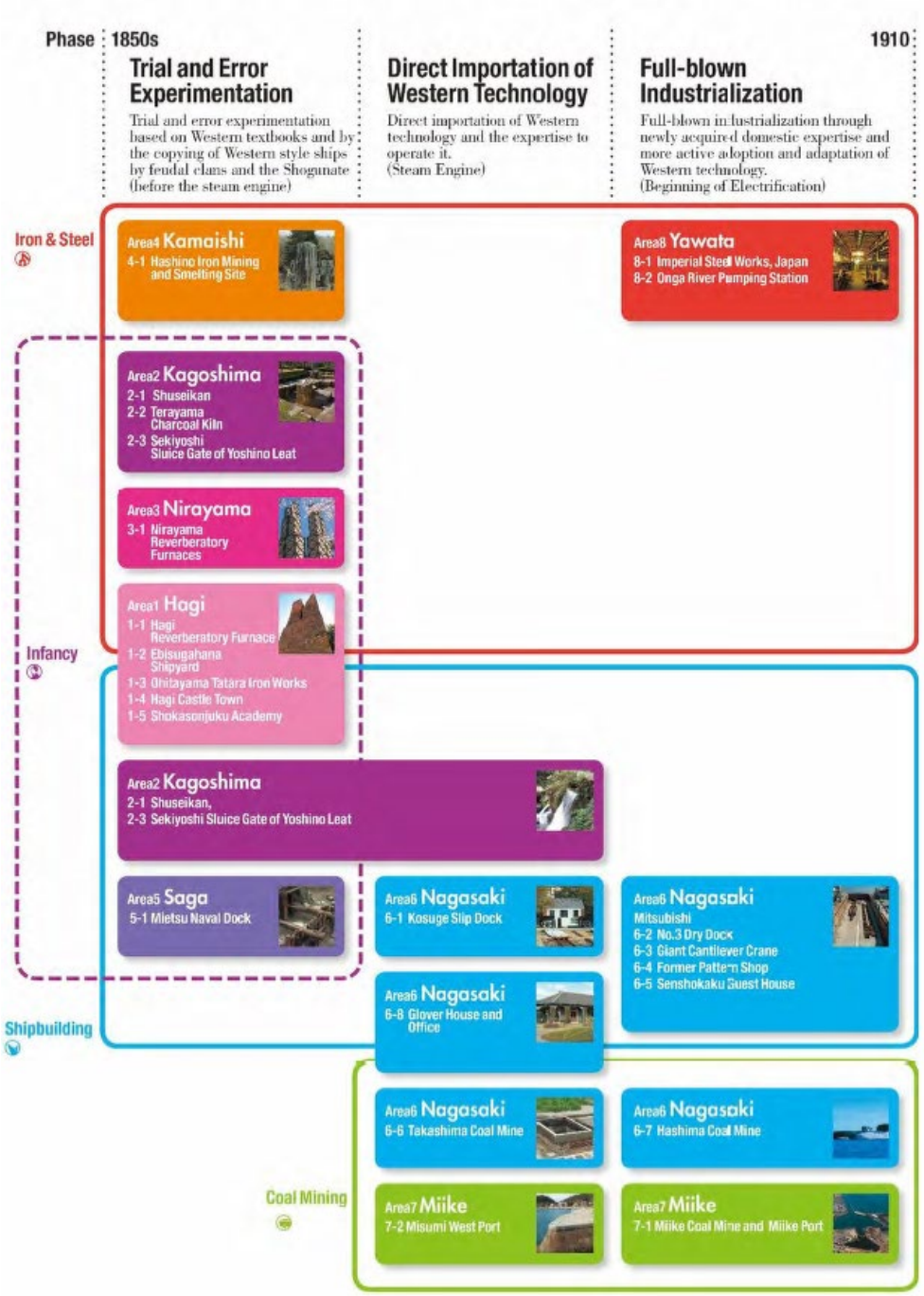
# Statement of Authenticity

The property as a whole as well as at the level of each component part meets the conditions of authenticity in relation to Outstanding Universal Value. It has a high degree of authenticity as the best surviving group of industrial remains that represent, and demonstrate, the first, and rapid, transfer of industrialization from the West to a non-Western nation.

With regard to 'form and design' and 'materials and substance', the component parts constitute the original forms and materials of the range of industrial components necessary to represent the transfer of heavy industry from the West to Japan. Some contain sites that range from fragmentary or archaeological, that are nonetheless authentic relics of important industrial components of the series, to those that comprise substantially intact authentic physical remains that have been managed for many years as historic sites which display these characteristics. Others possess an extremely complete survival not only of form, design and materials but also of continuing use and function.

Industrial History Related to the Nirayama Area

The Nirayama Area encompasses component parts that retain records related to iron and steel in the first phase, Trial and Error Experimentation, in the World Cultural Heritage "Sites of Japan's Meiji Industrial Revolution: Iron and Steel, Shipbuilding and Coal Mining."



The Interpretation Strategy which the Cabinet Secretariat submitted to UNESCO on November 30, 2017, as an appendix to the State of Conservation Report noted the following:

**11. Interpretation Plan (extract)**

**(1) Consistent OUV rollout across all component parts**

Based on the Interpretation Strategy, the consistent interpretation of OUV should be presented across all component parts. This will be agreed by all stakeholders, and coordinated and implemented commonly in a branded World Heritage style.

**(2) and (3) Progress in dealing with the "full history" of each site, including information gathering related to workers**

Advice from international experts who are members of the Expert Committee on the Industrial Heritage including Operational Properties (Cabinet Secretariat of Japan), from the international heritage expert who was the ICOMOS technical evaluation field assessor of the World Heritage nomination of the "Sites of Japan's Meiji Industrial Revolution", and from the President of the ICOMOS International Scientific Committee on Interpretation and Presentation, comprises the following four key policies:

1) Focus on the interpretation of Outstanding Universal Value; in conformity with the primary purpose of the World Heritage, OUV of the inscribed property should be presented clearly at each site, not confusing with other, albeit related, issues. Based on this, Recommendation g)* should be implemented.

2) The scope of the "full history" of each site, except for the OUV period (from 1850s to 1910) as described on page 78, falls into two parts: prior to 1850s, and from 1910 to the present. The target of the full history should be narrowed down, considering the local values that supplement the understanding of the background of each component part. Where relevant, with regard to the interpretation of the full history on the location of each component part, high quality research such as collecting primary historical documents and recording oral testimonies should be carried out, and the result of this research should, at some stage, be made publicly available through appropriate media.

* Recommendation g)

> *"Preparing an interpretive strategy for the presentation of the nominated property, which gives particular emphasis to the way each of the sites contributes to OUV and reflects one or more of the phases of industrialisation; and also allows an understanding of the full history of each site."*

Based on the Interpretation Strategy, we have had multiple audits of the current status of interpretation at the component parts and visitor centres, etc., in the various areas undertaken by international experts familiar with industrial assets and the interpretation thereof in countries around the world.
As a result, auditor Barry Gamble identified the following issues in relation to the Nirayama area.

- Izunokuni City's development of the Furnace Visitor Centre (200,000 visitors in 2018) and the ongoing enhancement of the site is to be commended. Since the audit in 2017, the further works undertaken (tree management, new signage, land acquisition, conservation works) provide a more holistic understanding and experience of the site. For example, the now clearer visual connection between the river and the furnaces illustrates the direct relationship between the two elements. These works also embrace other experiences around the site such as the tea plantation and the viewing areas.
- The City's ongoing conservation, management and presentation of the site is an exemplar model that should be shared with the other Areas. It also clearly demonstrates one of the aims of the WH Convention, that is the WHS should have social and economic benefits to the local and broader communities.
- Izunokuni City is proposing to install the "common exhibition" within the visitor centre's entrance area. The visitor will then be able to better understand and experience the engaging and well-designed exhibition on the Component Part and its broader history. Currently, the quality and content of the presentation of overall OUV of the series is not adequate in comparison with the (occasional) over-emphasis of the contribution of the site (Component Part).
- The presentation of the site should also include what, and where, significant events/impacts/achievements relevant to Nirayama were experienced elsewhere in the WHS and beyond. Content should draw from the widely-consulted and approved texts in the Nomination Document.

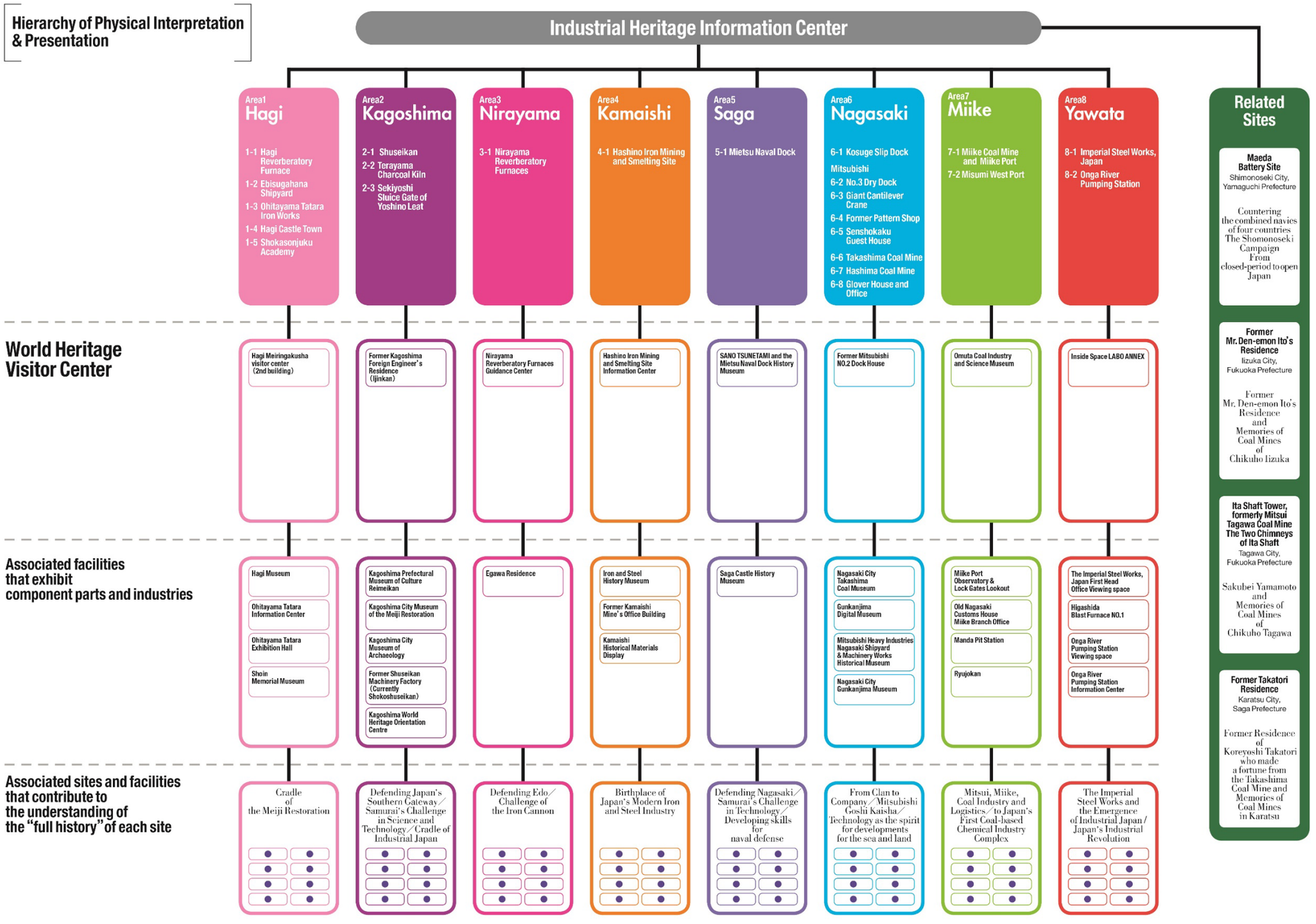
- There is the opportunity with the Egawa House for Izunokuni City to enhance its interpretation while also supporting an increase in visitation to the Egawa House (currently around 30,000, with an estimated annual carrying capacity of 50,000); thus extending the overall visitor experience to the area and expanding on the WHS story. However, this will need to be carefully managed to retain the current personable and intimate experience, and ensure that the structures and gardens are not adversely impacted. Around 50,000 visitors seem viable as a manageable and achievable target.
- The new archival facility at the Egawa House provides the opportunity to provide additional educational experiences and materials that could be used for exhibitions etc.
- Izunokuni City is proposing to remove the Heda Shipbuilding Museum from the third tier of the Interpretation Strategy's hierarchy in developing their interpretation plan. There was a discussion that this associative site demonstrates one of the significant impacts of the Nirayama Reverberatory Furnaces' technological achievements and one of the WHS three themes. The museum is not managed by Izunokuni City. The removal of this facility from the heirarchy's third tier will not have an adverse impact on the interpretation of the WHS OUV and its attributes.

Discussions have been held regarding this interpretation plan for the Nirayama Area thus far by the local conservation council.
As referred to in the evaluation above, an issue for this area is realizing an interpretation that better reflects the World Heritage values in harmony with the historical and cultural values of the region through the addition of the common exhibition. Thus, the timing in which exhibits are replaced will factor in the common exhibition, and this issue will be addressed in a systematic way. The common exhibition will be implemented in coordination with the Industrial Heritage Information Centre.
Other recommendations will also be put into consideration, and improvement to interpretation will be appropriately addressed with regard to visitor management at Egawa Residence.
The local conservation council will review the implementation progress of this plan and consider ways to make improvements as appropriate going forward.

Local Conservation Council meeting

Hierarchy of Physical Interpretation and Presentation

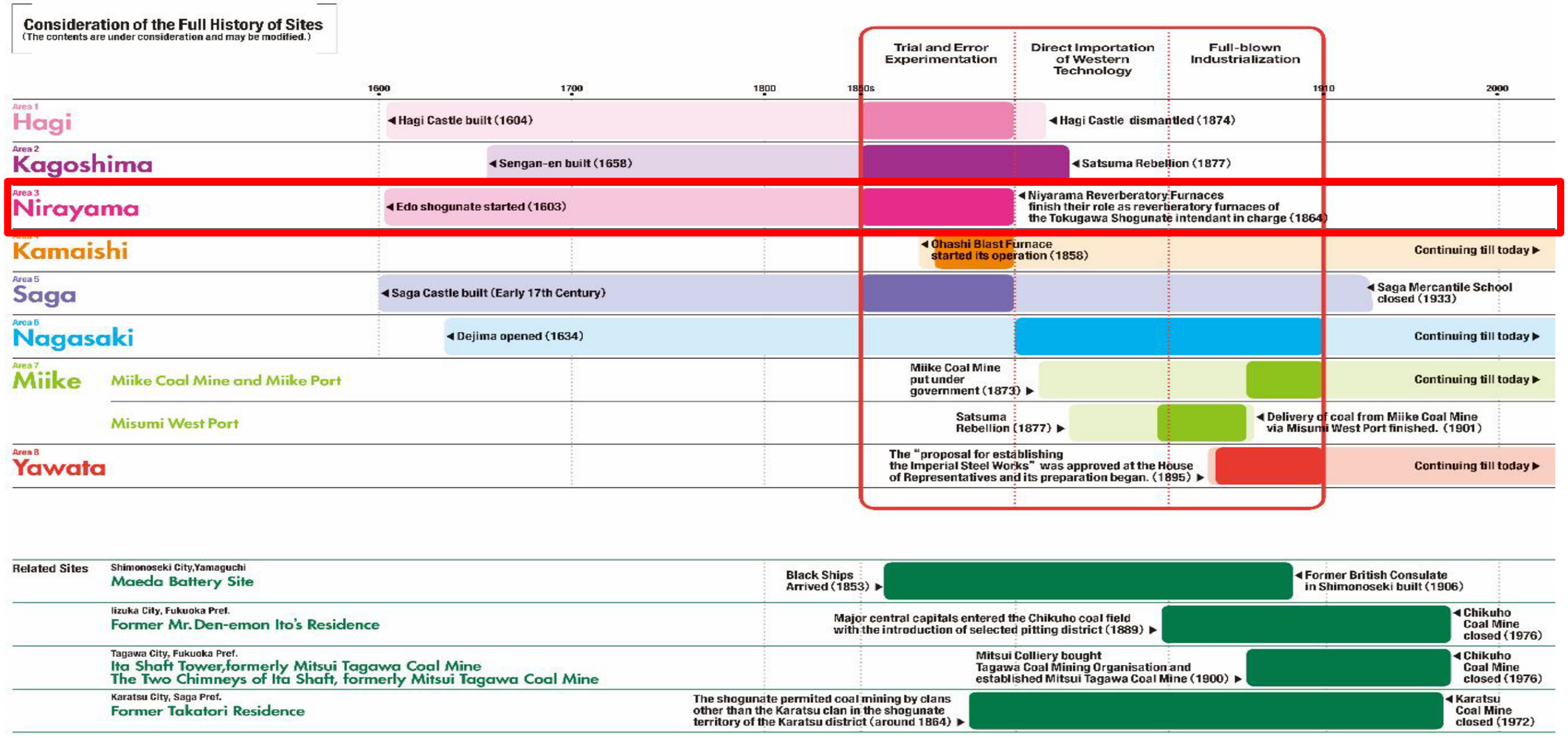
The Industrial Heritage Information Centre and the various local visitor centres will work together to build a system enabling the effective communication of the OUV of the Sites of Japan's Meiji Industrial Revolution.




Related sites: Sites that were component part candidates in the provisional UNESCO World Heritage listing on the January 5, 2009, and that comprise industrial heritage (valuable assets that provide insight into the historical background and social situation of the time) that will be utilized in an integrated manner with the World Heritage Listed "Sites of Japan's Meiji Industrial Revolution."

Consideration of the Full History of Sites

The Interpretation Strategy which the Cabinet Secretariat submitted to UNESCO in 2017, addressed consideration of the full history of sites as shown in the figure below.



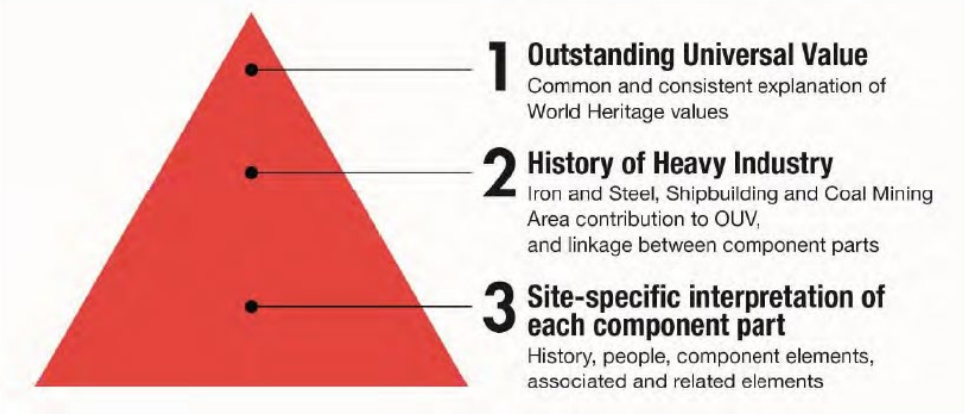
Interpretation in the Nirayama Area

Approach of the Interpretation Strategy

The Interpretation Strategy provides the following schematic in relation to concepts for interpretation and presentation.

Interpretation for the Nirayama area too will be approached in line with this in order to resolve the issues identified in interpretation audits.

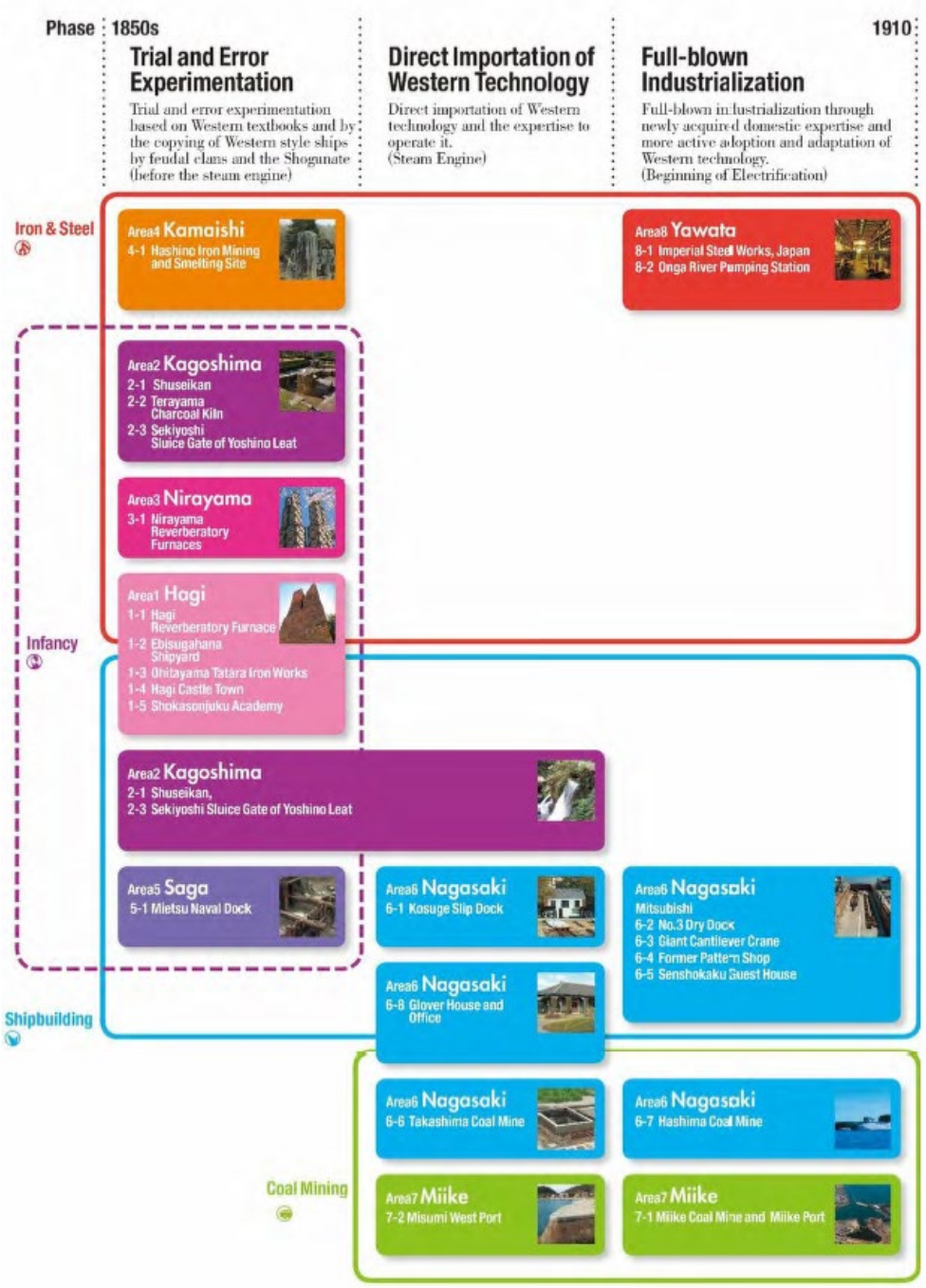
**Interpretation and presentation of the Sites of Japan's Meiji Industrial Revolution: Hierarchy of value and themes**




OUV stands at the top of the interpretation pyramid at the Industrial Heritage Information Centre and the various regions' visitor centres and is therefore the top-priority theme over the interpretation and presentation of individual regions and industries, such as history specific to an area or component part. Addressing interpretation in the order of (1) OUV, (2) the history of heavy industry, and (3) site-specific interpretation of each component part, as shown above, will ensure consistent presentation across the property

**Interpretation flow at each local visitor centre**

Hierarchy of Interpretation


Phase
1850s
1910
Trial and Error Experimentation
Trial and error experimentation based on Western textbooks and by the copying of Western style ships by feudal clans and the Shogunate (before the steam engine)
Direct Importation of Western Technology
Direct importation of Western technology and the expertise to operate it. (Steam Engine)
Full-blown Industrialization
Full-blown industrialization through newly acquired domestic expertise and more active adoption and adaptation of Western technology. (Beginning of Electrification)
Iron & Steel
Infancy
Shipbuilding
Coal Mining
Area4 Kamaishi
4-1 Hashino Iron Mining and Smelting Site
Area8 Yawata
8-1 Imperial Steel Works, Japan
8-2 Onga River Pumping Station
Area2 Kagoshima
2-1 Shuseikan
2-2 Terayama Charcoal Kiln
2-3 Sekiyoshi Sluice Gate of Yoshino Leat
Area3 Nirayama
3-1 Nirayama Reverberatory Furnaces
Area1 Hagi
1-1 Hagi Reverberatory Furnace
1-2 Ebisugahana Shipyard
1-3 Ohitayama Tatara Iron Works
1-4 Hagi Castle Town
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Area5 Saga
5-1 Mietsu Naval Dock
Area6 Nagasaki
6-1 Kosuge Slip Dock
Area6 Nagasaki
Mitsubishi
6-2 No.3 Dry Dock
6-3 Giant Cantilever Crane
6-4 Former Pattern Shop
6-5 Senshokaku Guest House
Area6 Nagasaki
6-8 Glover House and Office
Area6 Nagasaki
6-6 Takashima Coal Mine
Area6 Nagasaki
6-7 Hashima Coal Mine
Area7 Miike
7-2 Misumi West Port
Area7 Miike
7-1 Miike Coal Mine and Miike Port

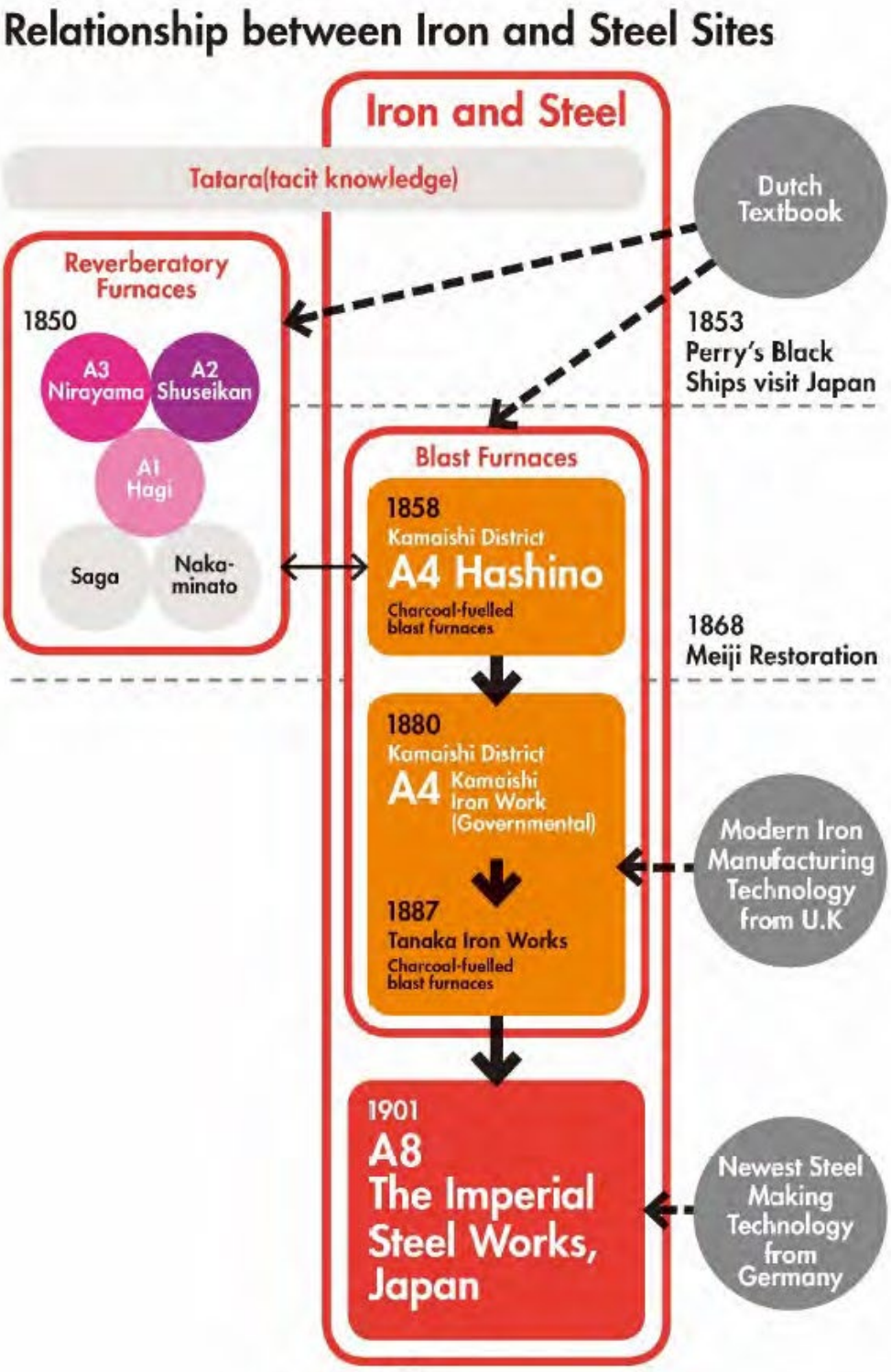

Relationship between Iron and Steel Sites
Iron and Steel
Tatara(tacit knowledge)
Dutch Textbook
Reverberatory Furnaces
1850
A3 Nirayama
A2 Shuseikan
A1 Hagi
Saga
Naka-minato
1853 Perry's Black Ships visit Japan
Blast Furnaces
1858
Kamaishi District
A4 Hashino
Charcoal-fuelled blast furnaces
1868 Meiji Restoration
1880
Kamaishi District
A4 Kamaishi Iron Work (Governmental)
1887
Tanaka Iron Works
Charcoal-fuelled blast furnaces
Modern Iron Manufacturing Technology from U.K
1901
A8
The Imperial Steel Works, Japan
Newest Steel Making Technology from Germany

Figure 3-2

Presentation Using “Liquid Galaxy,” Etc.

The Industrial Heritage Information Centre, which was established in March 2020 pursuant to the Interpretation Strategy, uses an immersive video multi-display that draws on the World Heritage OUV period (1850s-1910), as well as the Consideration of the Full History of Sites schematic. It explains through images the history and transformation of component parts in the various areas, as well as the way that people lived, etc., presenting these in a way that enables visitors to experience in a very real way the evolution of the property, the contribution to OUV, and the full history.
This area will also establish a digital archive of documents gathered by the Industrial Heritage Information Centre and the visitor centres in the area, which will be gradually reflected in the interpretation tools.

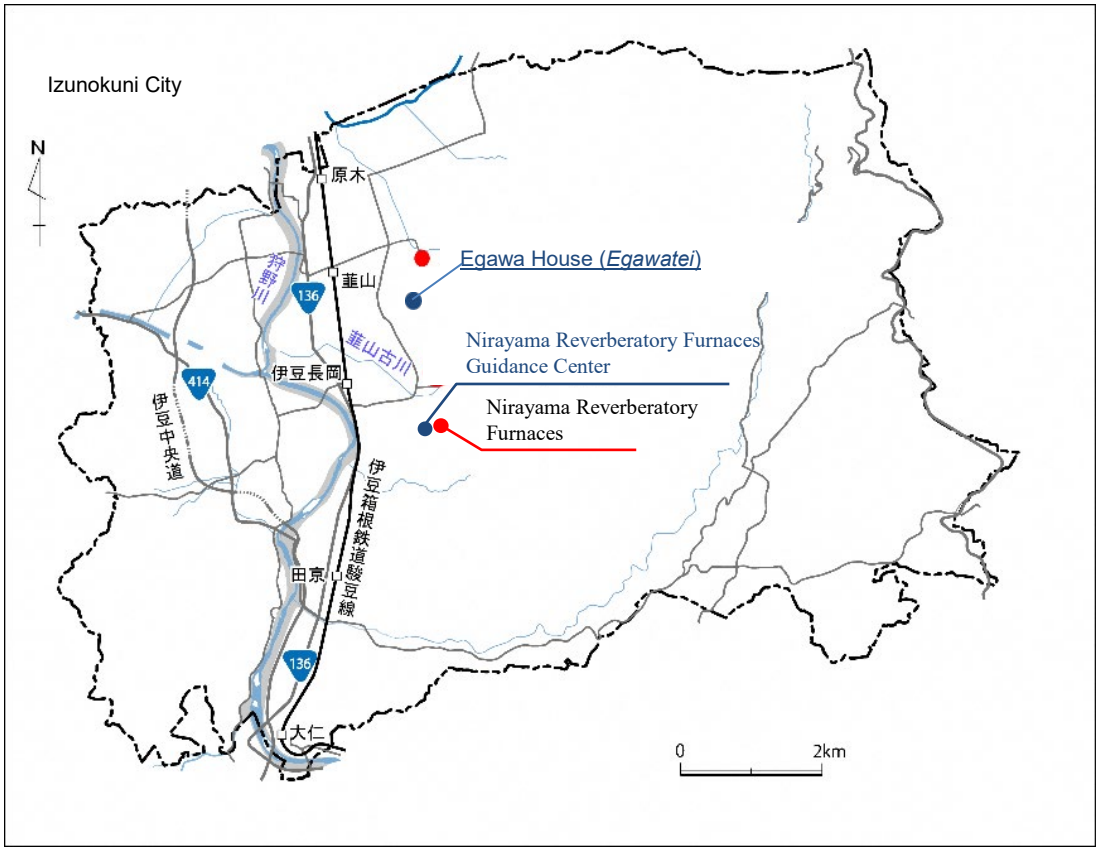
Nirayama Area Component Parts

| | |
|---|---|
| Relevant industries: Iron and steel |  |
| Name of component part: The Nirayama Reverberatory Furnaces | |
| (Overview of component part)<br>This is one of three reverberatory furnaces still remaining today out of eleven that were made for constructing cannons to address the sense of crisis looming regarding coastal defense. Egawa Hidetatsu, a Shogunate intendent in Nirayama, proposed its construction in response to the arrival of the Black Ships. His son, Hidetoshi, completed the construction with traditional techniques in cooperation with engineers of the Saga domain using documents by a major general of the Dutch army, Huguenin. | |

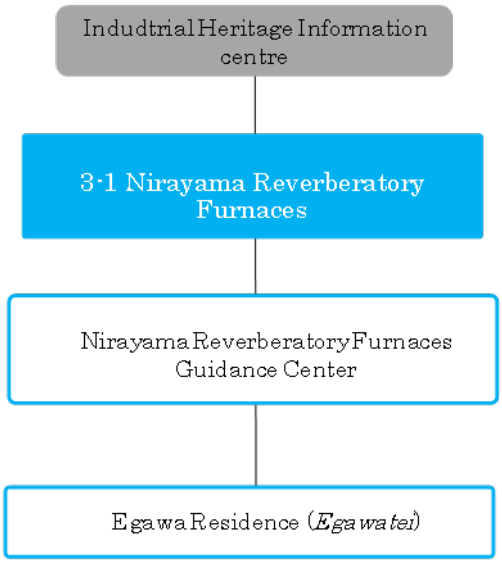
World Heritage Plaques

In line with the UNESCO Guidelines, World Heritage plaques have been installed at the various component parts to inform visitors properly about the OUV of the property.

Nirayama Area: Distribution of Interpretation Facilities



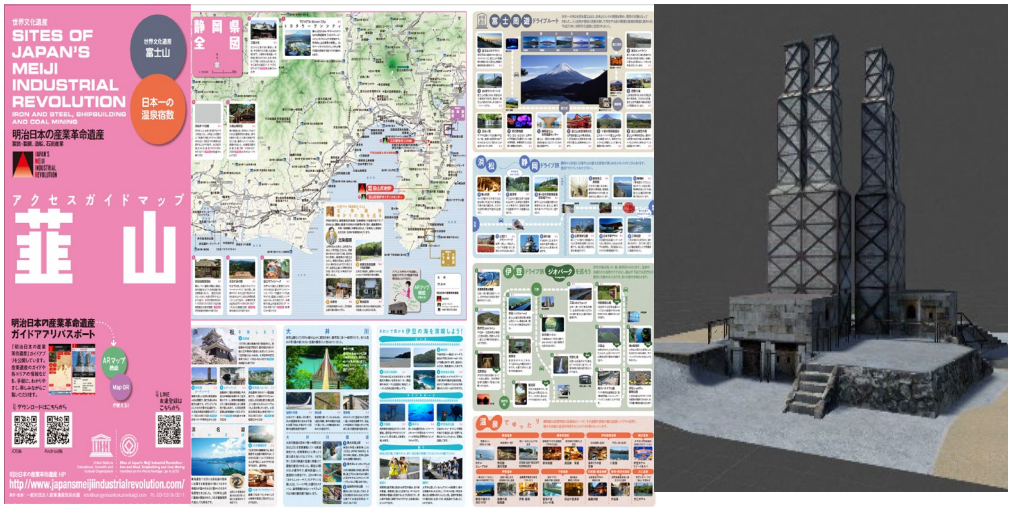
Nirayama Area: Hierarchy of Physical Interpretation and Presentation




Access Guide Maps

An English-version access map to guide visitors to component parts in each area has been created in addition to the Japanese version and is distributed free to visitors. This map gives an introduction to all component parts in the area and is structured to help visitors reach as many of them as possible.

By linking the maps to a smartphone app, information can be communicated about component parts not open to the public using augmented reality (AR) functions to show 3D models, videos, and 360-degree panorama views of inaccessible sites.



Information Counters

These are set up in administrative institutions to distribute access guide maps and other information.


Izunokuni City Hall

Nirayama Reverberatory Furnaces Guidance Center

GuideMap Distribution Points and Number of Maps Distributed

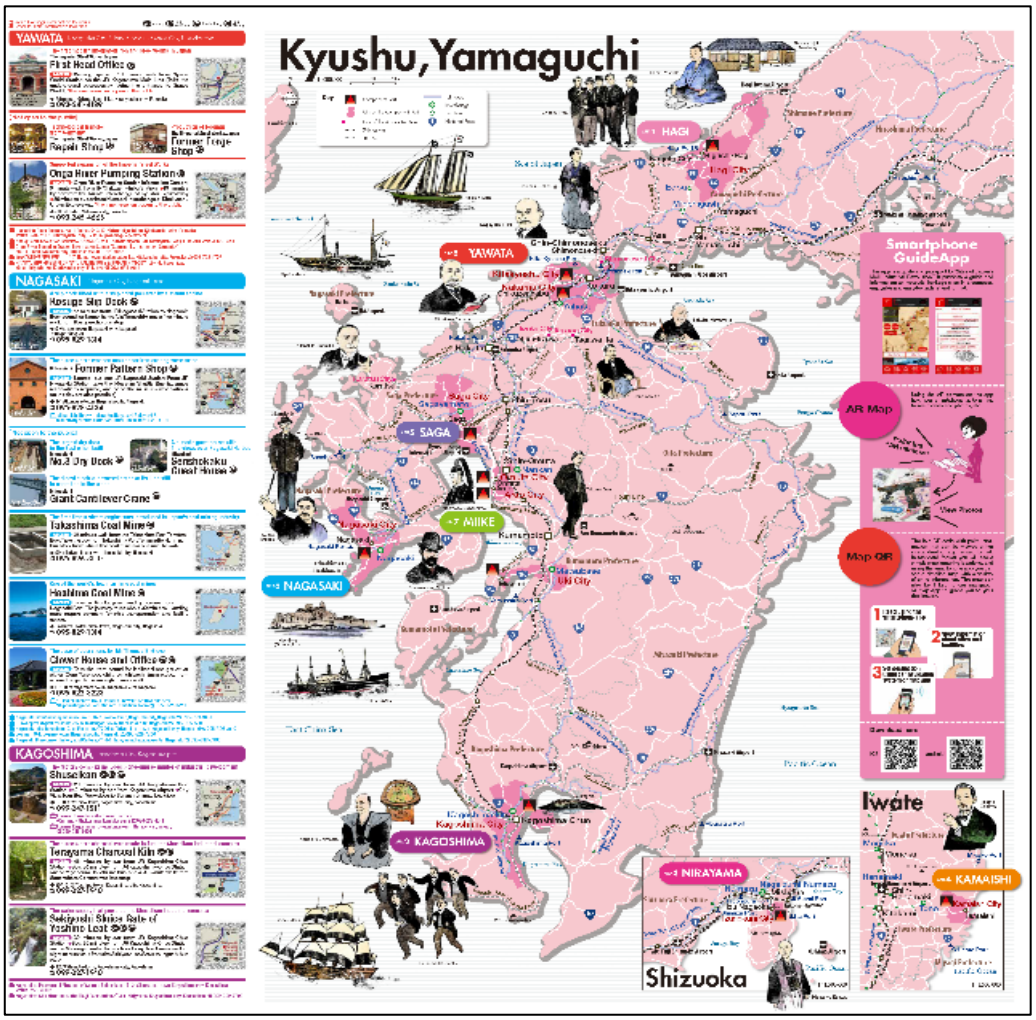
Guide map distribution points and the number of maps distributed are as follows.

| Overall map | | Nirayama Map | |
|---|---|---|---|
| **No. distributed** | **177,762** | **No. distributed** | **1,810** |
| Japanese & English | 177,762 | Japanese | 1,310 |
| **Main distribution point** | **No. distributed** | **Main distribution point** | **No. distributed** |
| Administrative organizations | 300 | Administrative organizations | 1,510 |
| Airports | 550 | Airports | 0 |
| Hotels | 50 | Hotels | 0 |
| Car rental agencies | 100 | Car rental agencies | 0 |
| JR (Railway) | 600 | JR (Railway) | 0 |
| Tourist information centers | 700 | Tourist information centers | 0 |
| Michi-no-eki roadside stations | 4,400 | Michi-no-eki roadside stations | 0 |
| NEXCO (Expressway) | 168,500 | NEXCO (Expressway) | 0 |
| Public interest corporation/foundation/ incorporated association | 550 | Public interest corporation/foundation/ incorporated association | 0 |
| | | | |
| Other | 2,012 | Other | 300 |
| JR Kyushu Hakata Station General Information | | Nakama City Regional Exchange Center – Nakama *gaido no kai* (guide group) | |
| West Nippon Expressway Retail Co., Ltd. | | Kagoshima Prefecture Tourism/Culture Sports Promotion Division | |
| West Nippon Expressway Service Holdings Company Limited | | Izunokuni City, Shizuoka | |
| Fugetsu Foods Co., Ltd. | | | |
| Fukuoka International Airport Co., Ltd. | | | |
| Nagasaki Airport | | | |
| Kagoshima Prefectural Library | | | |
| JR Kagoshima Chuo Station Tourist Information Center | | | |
| Kitakyushu Convention & Visitors Association | | | |
| Omura City Hall Industrial Promotion Dept. | | | |
| JR Miyazaki Station Tourist Information Center | | | |
| | | | |

| Total no. distributed for the entire area |
|---|
| **464,025** |

World Heritage Route

In accordance with the Interpretation Strategy, and also as noted in pages 395–396 of the Nomination Document, the World Heritage Route Promotion Council was founded to provide guidance and tourism infrastructure for understanding World Heritage as a whole. The Council attracts visitors to all component parts and related sites by producing maps, apps, and GPS navigation and by installing road signs and other signage using the common logo to promote the Sites of Japan's Meiji Industrial Revolution so that visitors are able to understand the World Heritage value constituted by the 23 component parts.
Work will continue to be undertaken steadily pursuant to the Nomination Document and the Interpretation Plan.




Map on p. 396 of the Nomination Document


World Heritage Route Promotion Council meeting

Installation of Road Signage, Etc., Using the Common Logo

Status of installation of road signage

| Place | No. of signs installed |
|---|---|
| Izunokuni City | 3 |
| Kannami-cho | 1 |

Photos of road signage

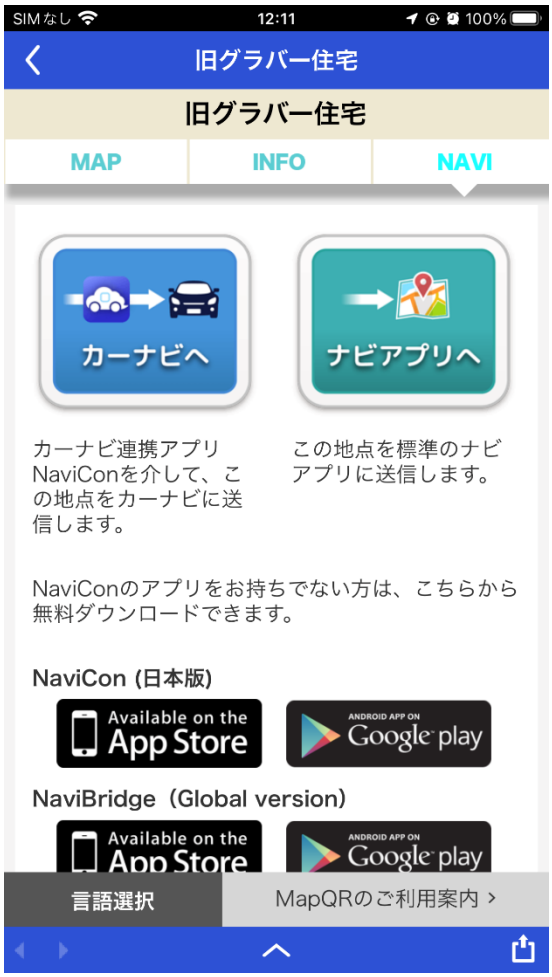

Locations of Road Signs Using the Common Logo

Linkage with Car Navigation (Denso Car Navigation)

Example of linkage with smartphone app so that the target destination can be sent to a car navigation system




The destination can be sent directly from a smartphone to the car navigation system.

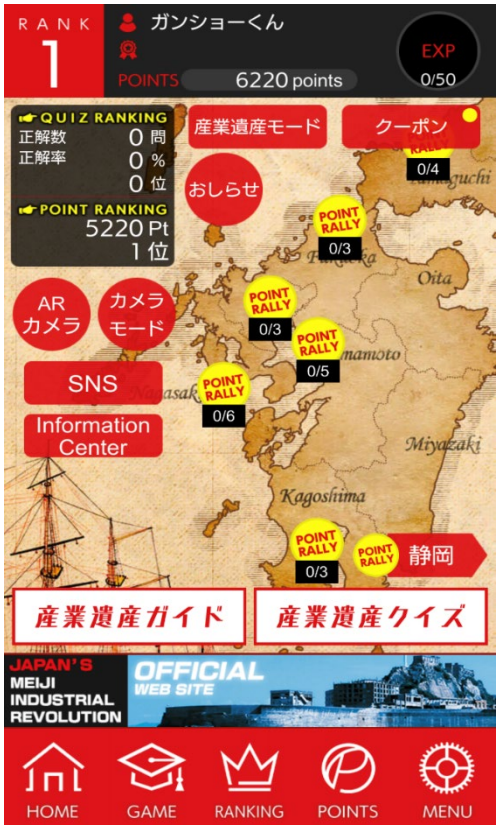




A video on how to use the application has been put up on YouTube.

App Utilization

The app introduces the Sites of Japan's Meiji Industrial Revolution, including detailed stories and explanations, as well as the historical background, using video and computer graphics, etc. Users can earn points by playing games and using the AR camera on the app and use them as coupons for souvenirs and other prizes. As such, it serves as a mechanism for both deepening understanding of World Heritage value and feeding back into World Heritage Route tours. The smartphone app is available in Japanese, English, Korean, simplified Chinese, traditional Chinese, and Vietnamese.




Use of Line App

Points acquired on the app can be exchanged for coupons.

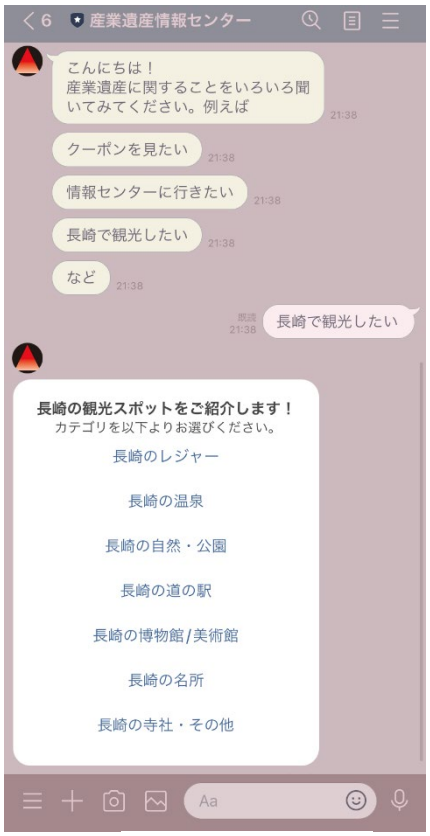


Point-of-purchase advertising has been created and placed in stations and information centres, etc., to encourage people to sign up to the LINE app.

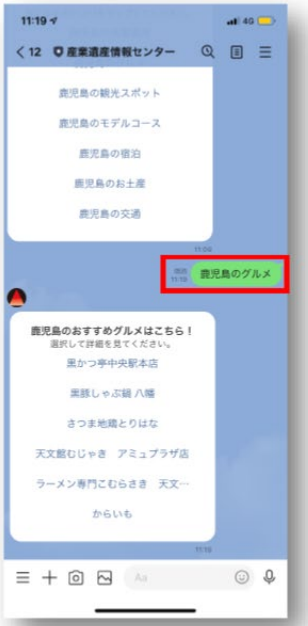
LINE is used as a runway for achieving two-way communication geared to the circumstances of the user based on locational information, such as the use of existing guide apps and communication about coupons that can be used in shops at the area visited. The service is provided in multiple languages so as to support international visitors.

LINE functions (examples)

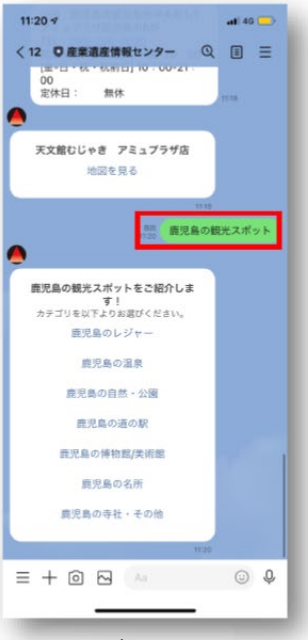

Introduction to model courses



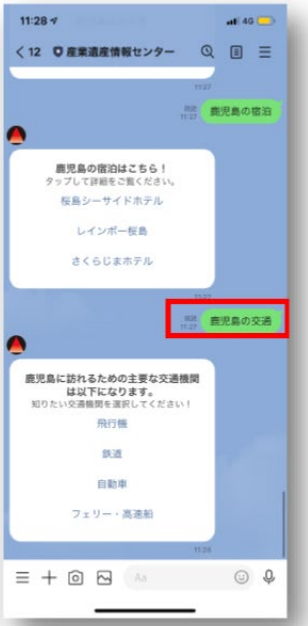

AI chatbot function



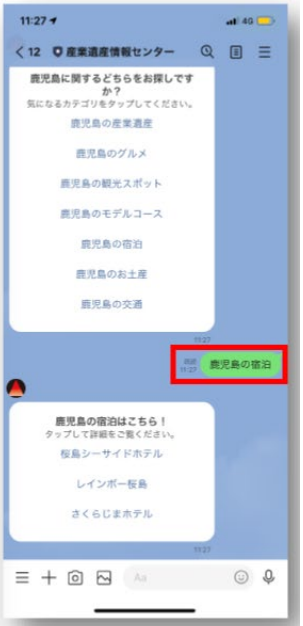

Gourmet information




Tourist spots




Traffic information




Accommodation information

Digital Signage Functions

Digital signage has been installed in the Industrial Heritage Information Centre as a mechanism for encouraging multi-destination tourism by displaying local guide maps and information on multi-destination industrial heritage routes. AI chatbots have also been installed to respond to a wide range of multi-destination routes and tourism questions in real time.


Visitor Centres

The Nirayama Area is equipped with one visitor centre and one auxiliary facility with exhibits of component parts and the industrial sector in line with the interpretation strategy. Each facility cooperates with the local community to prepare exhibits that best bring out the true World Heritage values in harmony with the historical and cultural values of the region. They aim to create exhibits that allow visitors to easily understand the value of the components. Based on points raised in interpretation audits, local visitor centres will work with the Industrial Heritage Information Centre to digitize a huge volume of primary historic materials and use digital tools to enhance exhibits.

[Nirayama Reverberatory Furnaces Guidance Center]

The Nirayama Reverberatory Furnaces Guidance Center provides information on the value of the Sites of Japan's Meiji Industrial Revolution, presents descriptive videos on large screens, displays original material and panels to exhibit the history of the Nirayama Reverberatory Furnaces, and explains its positioning as a component part.

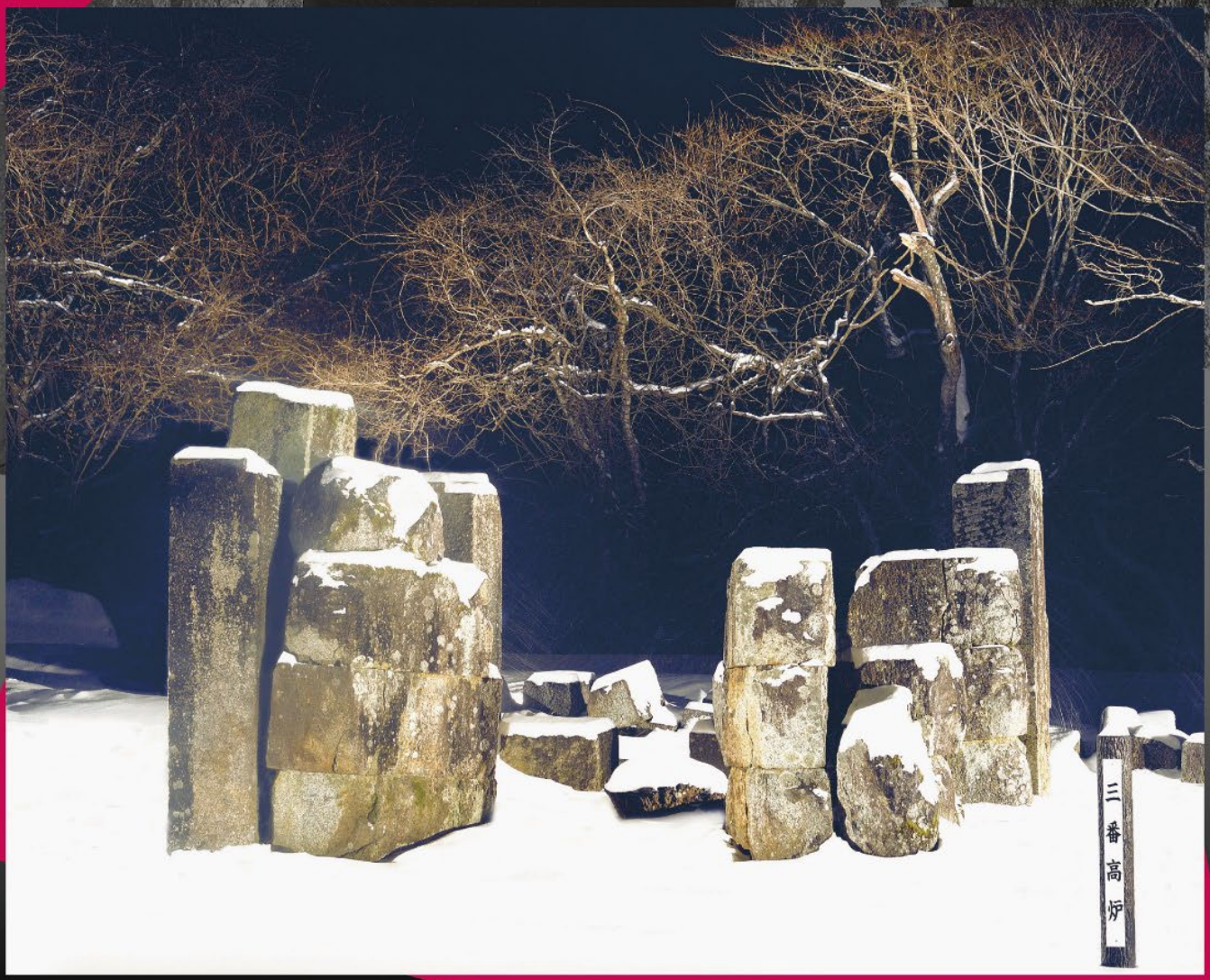
[Egawa Residence (*Egawatei*)]

Egawa Redidence is an important cultural property that was the residence of the Shogunate intendent Egawa Hidetatsu, who was in charge of the construction of the Nirayama Reverberatory Furnaces. Many historical documents stored at the residence corroborate the authenticity of the Nirayama Reverberatory Furnaces. The residence is open to the public, and exhibits pertaining to the Nirayama Reverberatory Furnaces are on display.

Area4 Kamaishi

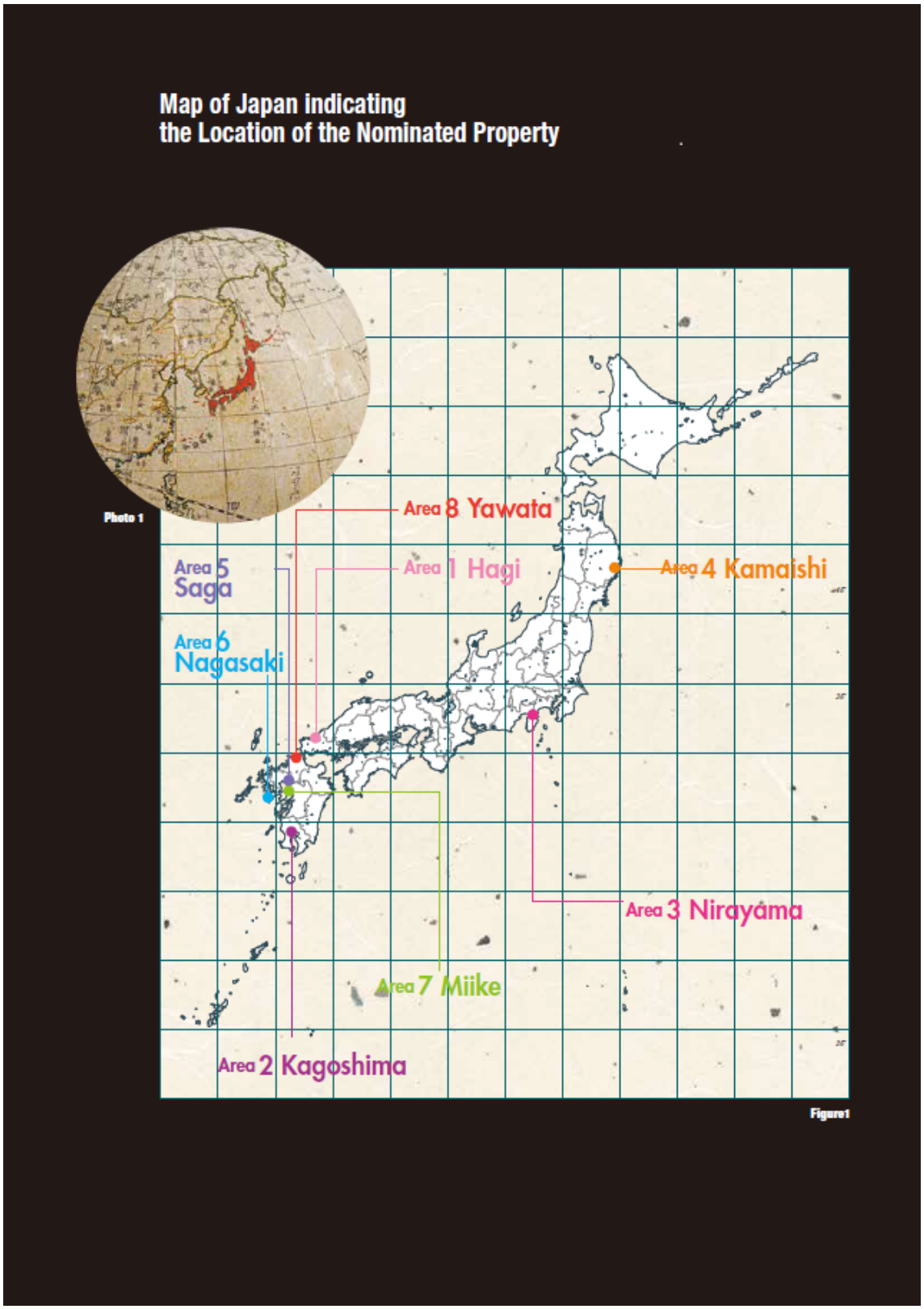
Appendix 1-4

# AREA-SPECIFIC INTERPRETATION PLAN




Kamaishi Conservation Council

【Area List】


Map of Japan indicating
the Location of the Nominated Property
Photo 1
Area 8 Yawata
Area 5 Saga
Area 1 Hagi
Area 4 Kamaishi
Area 6 Nagasaki
Area 3 Nirayama
Area 7 Miike
Area 2 Kagoshima
Figure1

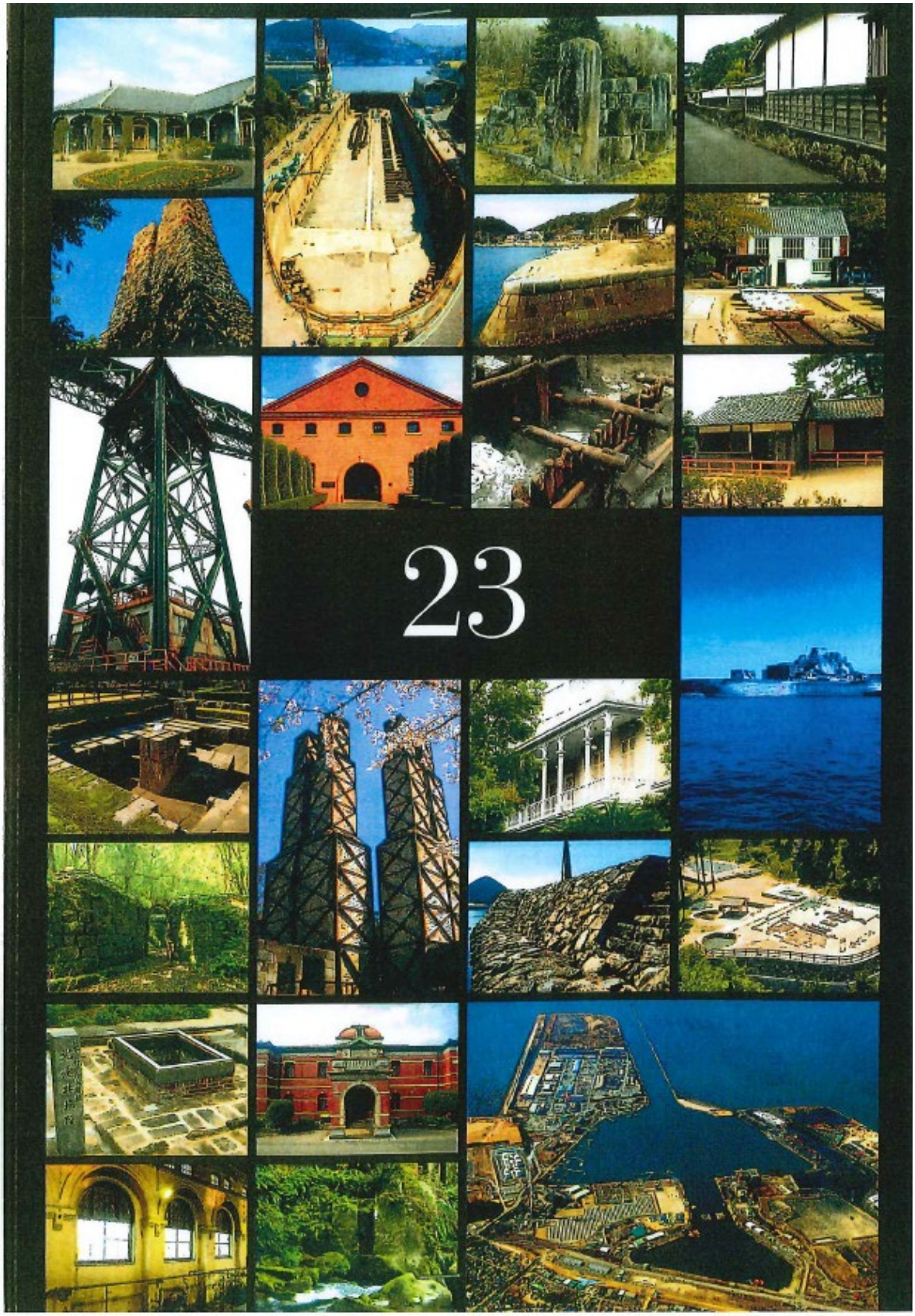
【Component Name】

## List of the Component Parts

| Area | Site | ID | Component Part |
|---|---|---|---|
| A1 Hagi | 1 Hagi Proto-industrial Heritage | 1-1 | Hagi Reverberatory Furnace |
| | | 1-2 | Ebisugahana Shipyard |
| | | 1-3 | Ohitayama Tatara Iron Works |
| | | 1-4 | Hagi Castle Town |
| | | 1-5 | Shokasonjuku Academy |
| A2 Kagoshima | 2 Shuseikan | 2-1 | Shuseikan |
| | | 2-2 | Terayama Charcoal Kiln |
| | | 2-3 | Sekiyoshi Sluice Gate of Yoshino Leat |
| A3 Nirayama | 3 Nirayama Reverberatory Furnaces | 3-1 | Nirayama Reverberatory Furnaces |
| A4 Kamaishi | 4 Hashino Iron Mining and Smelting Site | 4-1 | Hashino Iron Mining and Smelting Site |
| A5 Saga | 5 Mietsu Naval Dock | 5-1 | Mietsu Naval Dock |
| A6 Nagasaki | 6 Nagasaki Shipyard | 6-1 | Kosuge Slip Dock |
| | | 6-2 | Mitsubishi No.3 Dry Dock |
| | | 6-3 | Mitsubishi Giant Cantilever Crane |
| | | 6-4 | Mitsubishi Former Pattern Shop |
| | | 6-5 | Mitsubishi Senshokaku Guest House |
| | 7 Takashima Coal Mine | 6-6 | Takashima Coal Mine |
| | | 6-7 | Hashima Coal Mine |
| | 8 Glover House and Office | 6-8 | Glover House and Office |
| A7 Miike | 9 Miike Coal Mine and Miike Port | 7-1 | Miike Coal Mine and Miike Port |
| | 10 Misumi West Port | 7-2 | Misumi West Port |
| A8 Yawata | 11 The Imperial Steel Works, Japan | 8-1 | The Imperial Steel Works, Japan |
| | | 8-2 | Onga River Pumping Station |

Table1

3


23

SITES OF
JAPAN'S
MEIJI INDUSTRIAL
REVOLUTION
IRON & STEEL, SHIPBUILDING
AND COAL MINING

# Executive Summary

## Brief Synthesis

"Sites of Japan's Meiji Industrial Revolution: : Iron and Steel, Shipbuilding and Coal Mining" comprise a singular ensemble of industrial heritage sites that represent the first successful transfer of industrialization from the West to a non-Western nation.

From the middle of the 19th century to the early 20th century, Japan achieved rapid industrialization that was founded on the key industrial sectors of shipbuilding, iron and steel, and coal mining. The initial phase was one of trial and error experimentation in iron making and shipbuilding, based mostly on Western textbooks, and by copying examples of Western ships. This was followed by the more successful importation of Western technology and the expertise to operate it and, by the late Meiji period, full-blown industrialization through newly acquired domestic expertise and the active adaptation of Western technology to best suit Japanese needs and social traditions. This successful industrialization was achieved in just a little over 50 years without colonization, and on Japan's own terms. The property is testimony to this unique phase in world history.

# Justification for Criteria

**Criterion (ii)**

The property is a series of heritage sites that, together, uniquely illustrate the process by which feudal Japan sought technology transfer from Western Europe and America from the middle of the 19th century. This technology was adopted and progressively adapted to satisfy specific domestic needs and social traditions, thus enabling Japan to become a world-ranking industrial nation by the early 20th century.

**Criterion (iv)**

The technological ensemble of key industrial sites of shipbuilding, iron and steel, and coal mining is testimony to Japan's unique achievement in world history as the first non-Western country to successfully industrialize. Viewed as an Asian cultural response to Western industrial values, the ensemble had no counterpart elsewhere in the world.

# Statement of Integrity

The 23 component parts are the best, and often the only, surviving examples of the key attributes that represent shipbuilding, the iron and steel, and coal mining industries and that are necessary to express Outstanding Universal Value. In each case, the boundary of the component part has been drawn to include the essential features that, overall, contribute to Outstanding Universal Value.

Component parts are in good condition and have mechanisms in place to control deterioration and keep sites free from the adverse effects of development. They have been variously affected by continued use, re-use or lengthy periods of abandonment, and their physical integrity varies between well preserved and fragmentary, the latter being sufficiently intact to be able to represent the former whole. In some cases, where the evidence is primarily archaeological, sufficient investigation has been carried out to verify that a substantial archaeological site survives in good condition for further study and presentation. In other cases, in particular those that remain in operational industrial use, ongoing use and maintenance have resulted in an extraordinarily high level of integrity of working industrial elements.

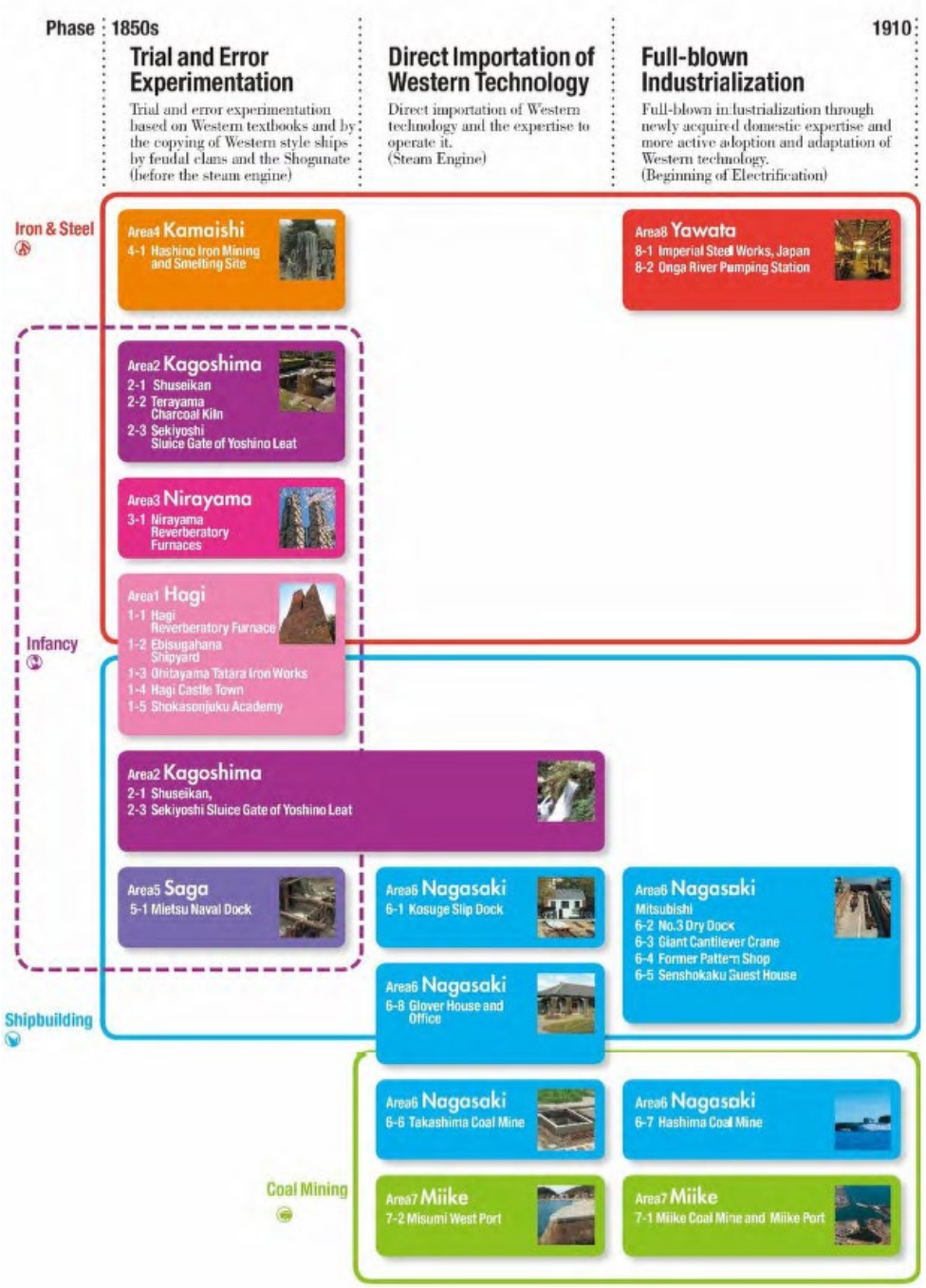
# Statement of Authenticity

The property as a whole as well as at the level of each component part meets the conditions of authenticity in relation to Outstanding Universal Value. It has a high degree of authenticity as the best surviving group of industrial remains that represent, and demonstrate, the first, and rapid, transfer of industrialization from the West to a non-Western nation.

With regard to 'form and design' and 'materials and substance', the component parts constitute the original forms and materials of the range of industrial components necessary to represent the transfer of heavy industry from the West to Japan. Some contain sites that range from fragmentary or archaeological, that are nonetheless authentic relics of important industrial components of the series, to those that comprise substantially intact authentic physical remains that have been managed for many years as historic sites which display these characteristics. Others possess an extremely complete survival not only of form, design and materials but also of continuing use and function.

Industrial History Related to the Kamaishi Area

The Kamaishi Area encompasses component parts that retain records related to iron and steel in the first phase, Trial and Error Experimentation, of the World Cultural Heritage "Sites of Japan's Meiji Industrial Revolution: Iron and Steel, Shipbuilding and Coal Mining."



The Interpretation Strategy which the Cabinet Secretariat submitted to UNESCO on November 30, 2017, as an appendix to the State of Conservation Report noted the following:

**11. Interpretation Plan (extract)**

**(1) Consistent OUV rollout across all component parts**

Based on the Interpretation Strategy, the consistent interpretation of OUV should be presented across all component parts. This will be agreed by all stakeholders, and coordinated and implemented commonly in a branded World Heritage style.

**(2) and (3) Progress in dealing with the "full history" of each site, including information gathering related to workers**

Advice from international experts who are members of the Expert Committee on the Industrial Heritage including Operational Properties (Cabinet Secretariat of Japan), from the international heritage expert who was the ICOMOS technical evaluation field assessor of the World Heritage nomination of the "Sites of Japan's Meiji Industrial Revolution", and from the President of the ICOMOS International Scientific Committee on Interpretation and Presentation, comprises the following four key policies:

1) Focus on the interpretation of Outstanding Universal Value; in conformity with the primary purpose of the World Heritage, OUV of the inscribed property should be presented clearly at each site, not confusing with other, albeit related, issues. Based on this, Recommendation g)* should be implemented.

2) The scope of the "full history" of each site, except for the OUV period (from 1850s to 1910) as described on page 78, falls into two parts: prior to 1850s, and from 1910 to the present. The target of the full history should be narrowed down, considering the local values that supplement the understanding of the background of each component part. Where relevant, with regard to the interpretation of the full history on the location of each component part, high quality research such as collecting primary historical documents and recording oral testimonies should be carried out, and the result of this research should, at some stage, be made publicly available through appropriate media.

* Recommendation g)

> *"Preparing an interpretive strategy for the presentation of the nominated property, which gives particular emphasis to the way each of the sites contributes to OUV and reflects one or more of the phases of industrialisation; and also allows an understanding of the full history of each site."*

Based on the Interpretation Strategy, we have had multiple audits of the current status of interpretation at the component parts and visitor centres, etc., in the various areas undertaken by international experts familiar with industrial assets and the interpretation thereof in countries around the world.
As a result, auditor Barry Gamble identified the following issues in relation to the Kamaishi area.

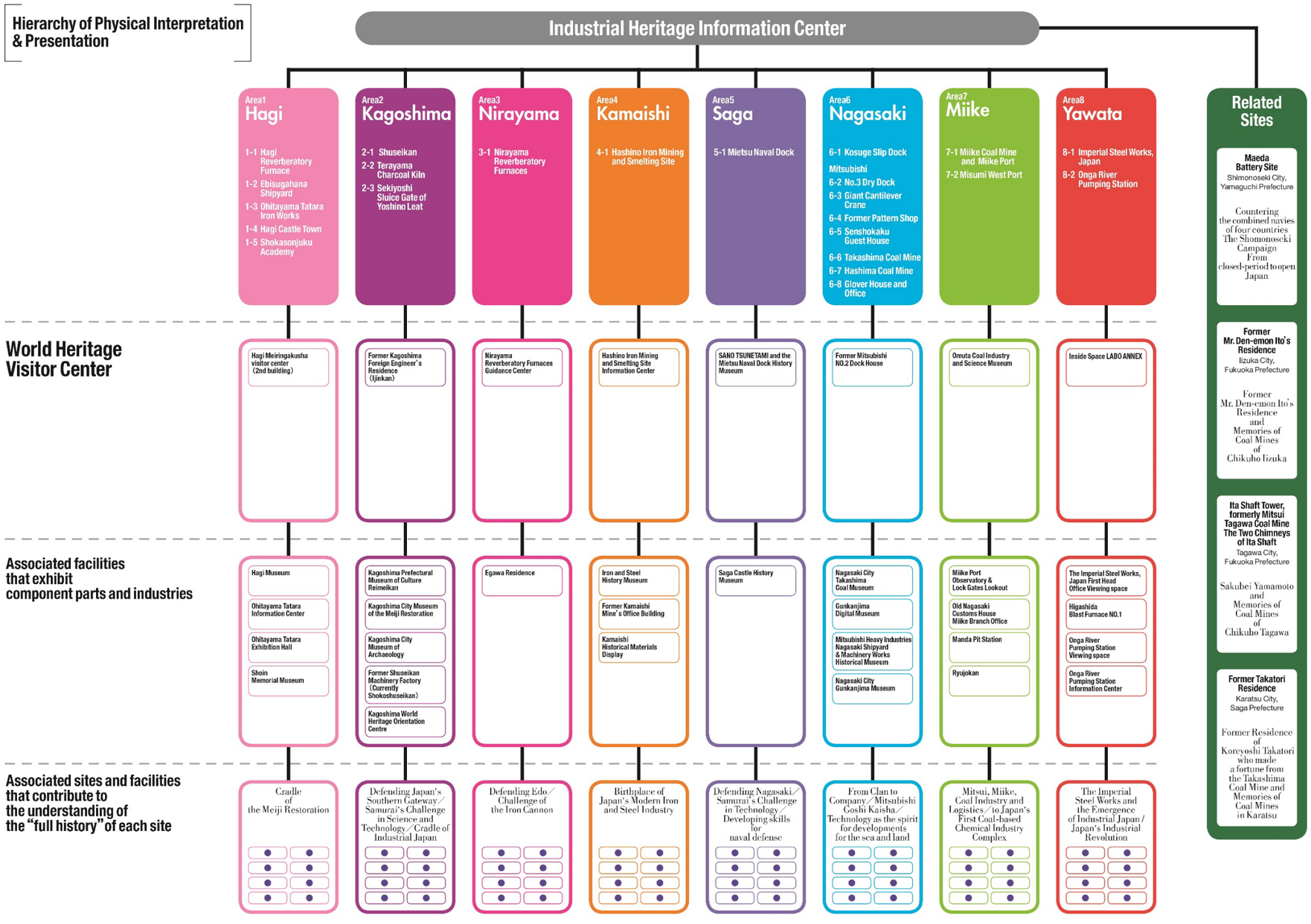
- Since the last audit, key changes and developments at the Hashino Iron Mining Smelting site and Information Centre include the presentation of information with the introduction of new interpretation panels and the updated application (based on augmented reality) to use with mobile devices. Both provide information in more than one language. The Information Centre provides a well-balanced presentation of the WHS OUV, followed by the contribution made by the Component Part and how it links with other relevant Component Parts. Its fuller history is also outlined.
- At the Iron and Steel History Museum (13,000 visitors), ongoing interpretation and presentation includes further developing the exhibition content to clearly demonstrate the connection and links between Niryama, and Yawata, via Kamaishi. It also includes the impacts of the legacy of iron mining and smelting, and its continuous development, until the present day. The museum presents in more than one language, including the furnace sound and light show, exhibition panels and labels, and a guide book.
- At the Former Kamaishi Mine Office site, holistic improvements offer a more diverse experience that provides a wider interpretation and presentation of the site eg new interpretive panels which show how the site operated. This is provided in multiple languages, museum labels, and a guide leaflet.
- The Kamaishi Historical Material Display provides an appropriate associative understanding of the fuller history of the Area drawing links with the WHS and this Component Part. Labels in English.
- Training for guides and teachers and educational programs which focus on smelting.

Discussions have been held regarding this interpretation plan for the Kamaishi Area thus far by the local conservation council.
In light of the evaluation above, exhibits will continue to be installed that better reflect the World Heritage values in harmony with the historical and cultural values of the region, as well as programs for visitors to deepen their understanding of World Heritage values in cooperation with the Industrial Heritage Information Centre.
The local conservation council will review the implementation progress of this plan and consider ways to make improvements as appropriate.

Local Conservation Council meeting

Hierarchy of Physical Interpretation and Presentation

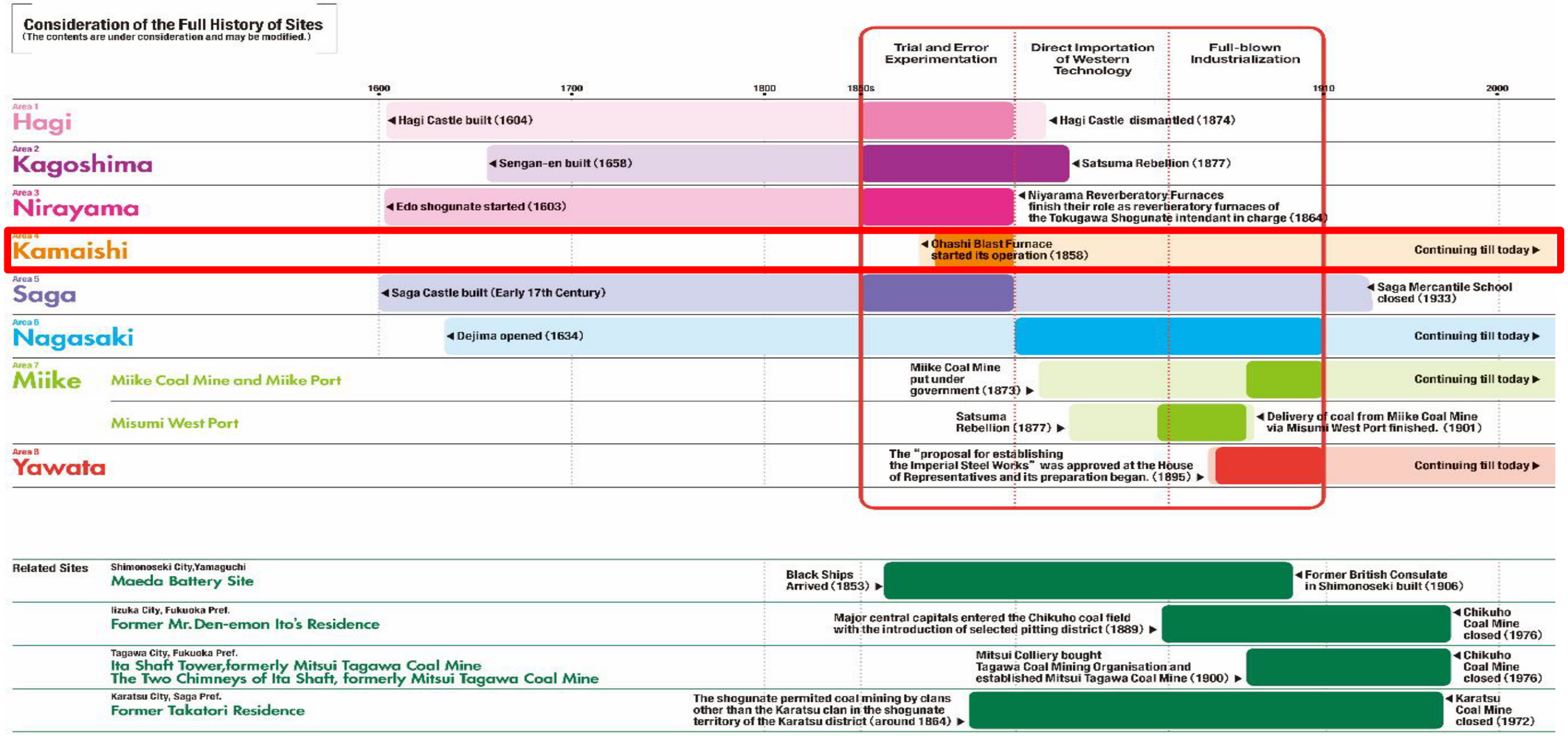
The Industrial Heritage Information Centre and the various local visitor centres will work together to build a system enabling the effective communication of the OUV of the Sites of Japan's Meiji Industrial Revolution.




Related sites: Sites that were component part candidates in the provisional UNESCO World Heritage listing on the January 5, 2009, and that comprise industrial heritage (valuable assets that provide insight into the historical background and social situation of the time) that will be utilized in an integrated manner with the World Heritage Listed "Sites of Japan's Meiji Industrial Revolution."

Consideration of the Full History of Sites

The Interpretation Strategy which the Cabinet Secretariat submitted to UNESCO in 2017, addressed consideration of the full history of sites as shown in the figure below.



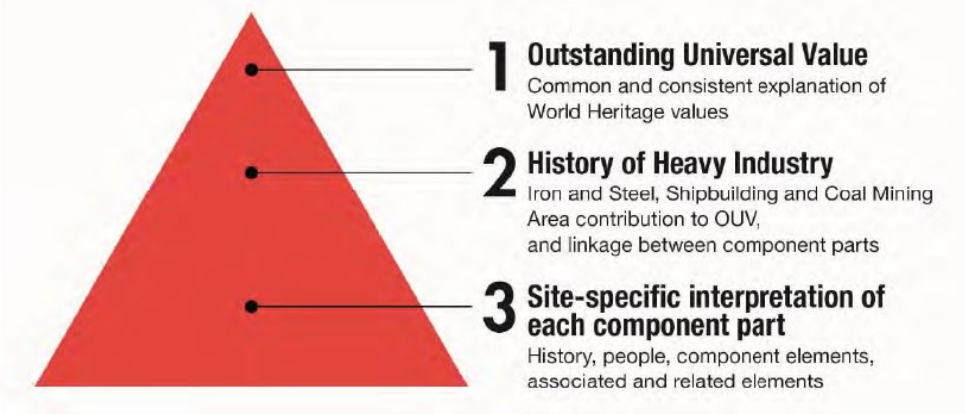
Interpretation in the Kamaishi Area

Approach of the Interpretation Strategy

The Interpretation Strategy provides the following schematic in relation to concepts for interpretation and presentation.

Interpretation for the Kamaishi area too will be approached in line with this in order to resolve the issues identified in interpretation audits.

**Interpretation and presentation of the Sites of Japan's Meiji Industrial Revolution: Hierarchy of value and themes**




OUV stands at the top of the interpretation pyramid at the Industrial Heritage Information Centre and the various regions' visitor centres and is therefore the top-priority theme over the interpretation and presentation of individual regions and industries, such as history specific to an area or component part. Addressing interpretation in the order of (1) OUV, (2) the history of heavy industry, and (3) site-specific interpretation of each component part, as shown above, will ensure consistent presentation across the property

**Interpretation flow at each local visitor centre**

Hierarchy of Interpretation

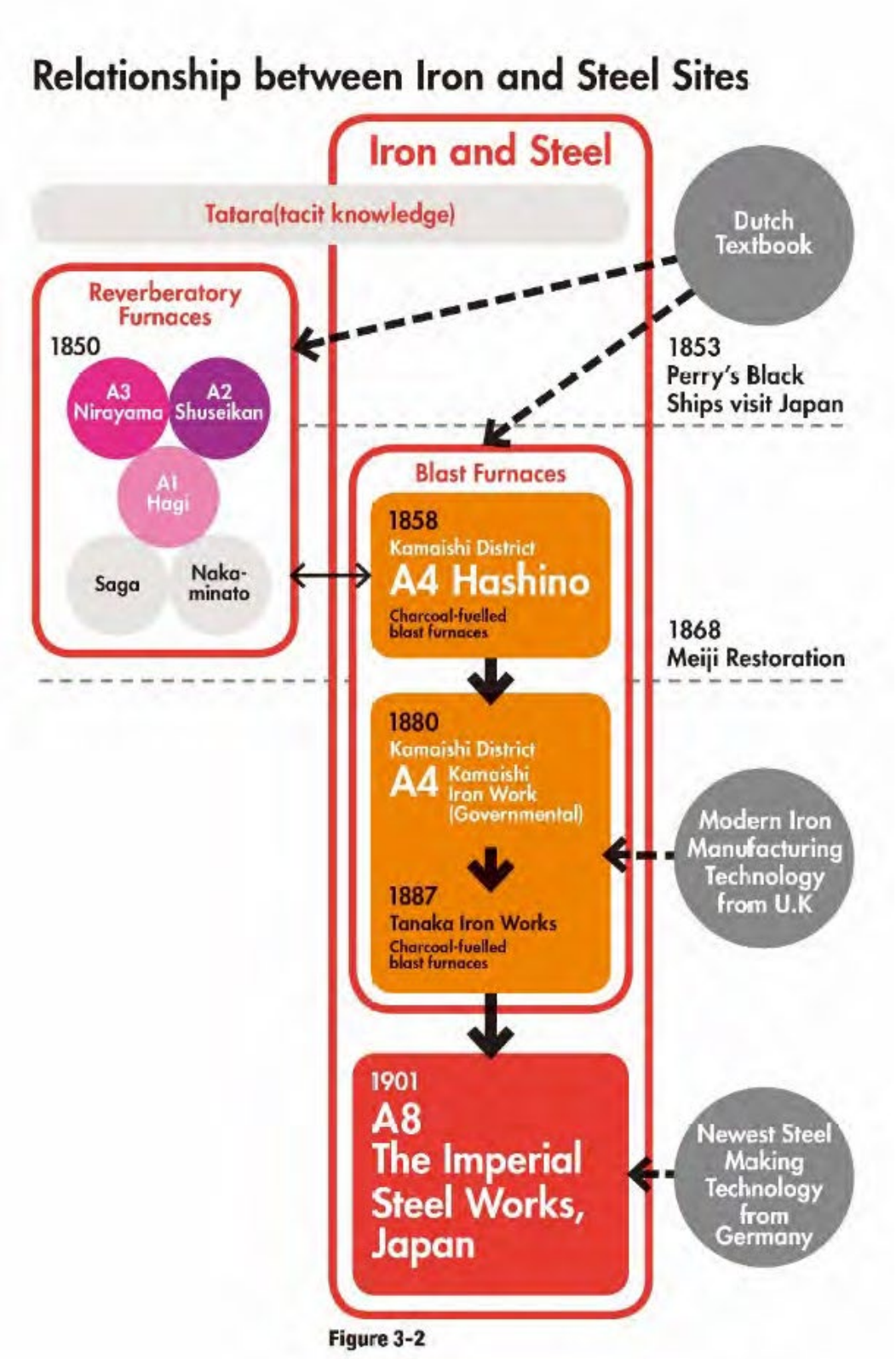

Relationship between Iron and Steel Sites
Iron and Steel
Tatara(tacit knowledge)
Dutch Textbook
Reverberatory Furnaces
1850
A3 Nirayama
A2 Shuseikan
A1 Hagi
Saga
Naka-minato
1853
Perry's Black Ships visit Japan
Blast Furnaces
1858
Kamaishi District
A4 Hashino
Charcoal-fuelled blast furnaces
1868
Meiji Restoration
1880
Kamaishi District
A4 Kamaishi Iron Work (Governmental)
1887
Tanaka Iron Works
Charcoal-fuelled blast furnaces
Modern Iron Manufacturing Technology from U.K
1901
A8
The Imperial Steel Works, Japan
Newest Steel Making Technology from Germany

Figure 3-2

Presentation Using “Liquid Galaxy,” Etc.

The Industrial Heritage Information Centre, which was established in March 2020 pursuant to the Interpretation Strategy, uses an immersive video multi-display that draws on the World Heritage OUV period (1850s-1910), as well as the Consideration of the Full History of Sites schematic. It explains through images the history and transformation of component parts in the various areas, as well as the way that people lived, etc., presenting these in a way that enables visitors to experience in a very real way the evolution of the property, the contribution to OUV, and the full history.
This area will also establish a digital archive of documents gathered by the Industrial Heritage Information Centre and the visitor centers in the area, which will be gradually reflected in the interpretation tools.

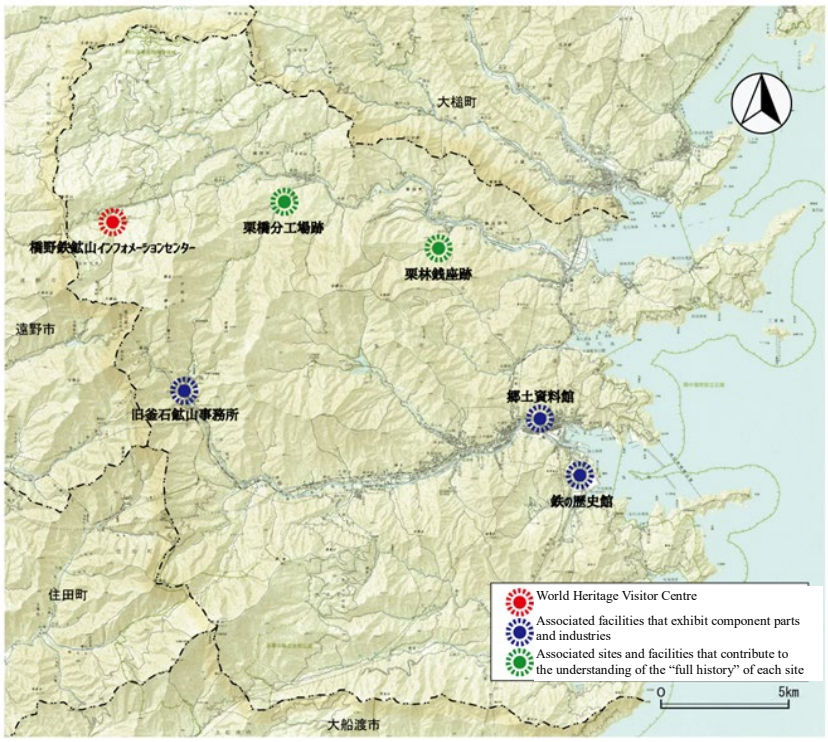
Kamaishi Area Component Parts

| | |
|---|---|
| Relevant industries: Iron and steel |  |
| Name of component part: Hashino Iron Mining and Smelting Site | |
| (Overview of component part)<br>Japan's oldest surviving remains of a blast furnace. Using iron ore from Japan's largest iron mine Kamaishi Mine as raw material, Takato Oshima from the Morioka Domain incorporated blast furnace techniques referencing only Dutch books. The component part comprises the remains of a mining site used for iron mining, a transport route to transport the iron, and blast furnaces for smelting, preserving the industrial landscape of the time. It is an asset as a pioneer of the industrial revolution in the iron and steel sector. | |

World Heritage Plaques

In line with the UNESCO Guidelines, World Heritage plaques have been installed at the various component parts to inform visitors properly about the OUV of the property.

Interpretation facilities in the Kamaishi Area




Kamaishi Area: Hierarchy of Physical Interpretation and Presentation

Access Guide Maps

An English-version access map to guide visitors to component parts in each area has been created in addition to the Japanese version and is distributed free to visitors. This map gives an introduction to all component parts in the area and is structured to help visitors reach as many of them as possible.

By linking the maps to a smartphone app, information can be communicated about component parts not open to the public using augmented reality (AR) functions to show 3D models, videos, and 360-degree panorama views of inaccessible sites.



Information Counters

These are set up in administrative institutions and airports to distribute access guide maps and other information.

Iron and Steel History Museum


Tourist information center

## Guide Map Distribution Points and Number of Maps Distributed

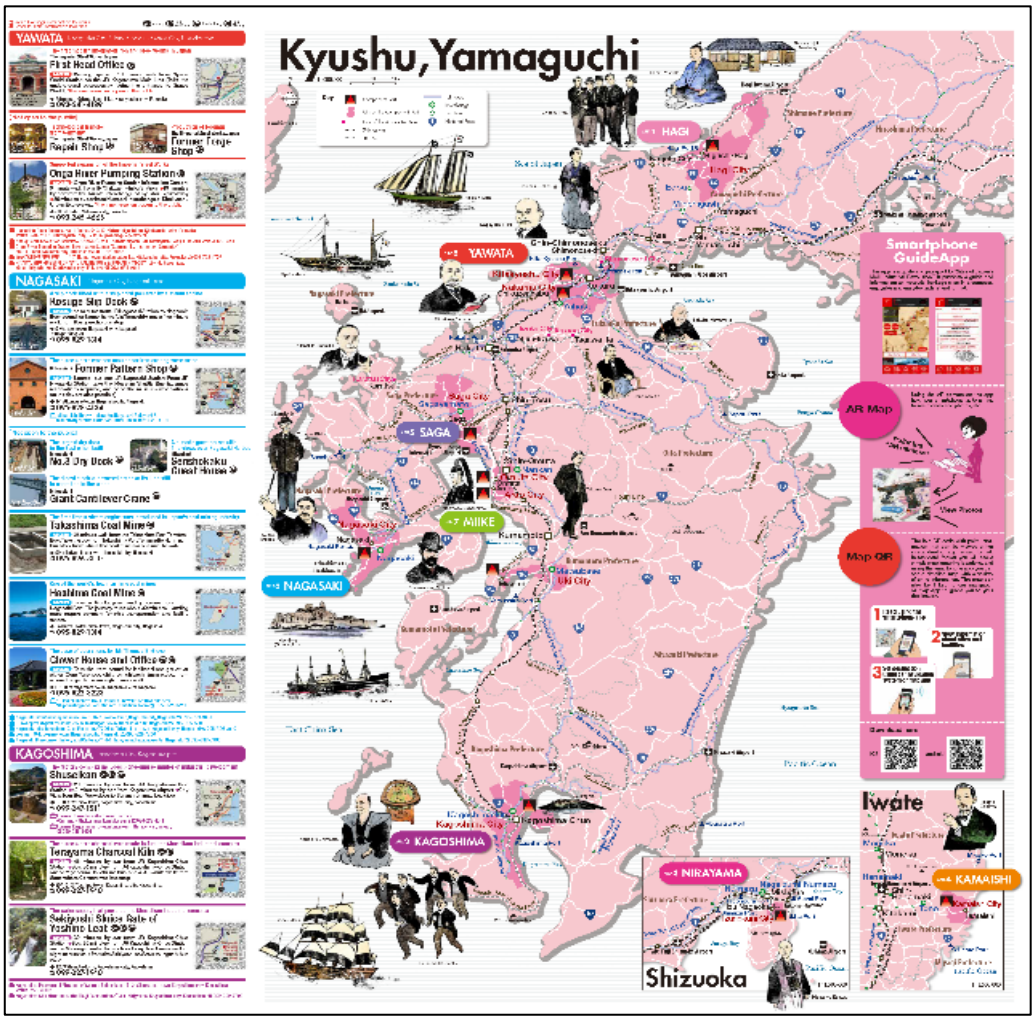
Guide map distribution points and the number of maps distributed are as follows.

| Overall map | | Kamaishi Map | |
|---|---|---|---|
| **No. distributed** | **177,762** | **No. distributed** | **44,135** |
| Japanese & English | 177,762 | Japanese | 23,754 |
| **Main distribution point** | **No. distributed** | **Main distribution point** | **No. distributed** |
| Administrative organizations | 300 | Administrative organizations | 41,650 |
| Airports | 550 | Airports | 0 |
| Hotels | 50 | Hotels | 980 |
| Car rental agencies | 100 | Car rental agencies | 0 |
| JR (Railway) | 600 | JR (Railway) | 0 |
| Tourist information centers | 700 | Tourist information centers | 0 |
| Michi-no-eki roadside stations | 4,400 | Michi-no-eki roadside stations | 0 |
| NEXCO | 168,500 | NEXCO | 0 |
| Public interest corporation/foundation/ incorporated association | 550 | Public interest corporation/foundation/ incorporated association | 0 |
| | | | |
| Other | 2,012 | Other | 1,505 |
| JR Kyushu Hakata Station General Information | | Inside the Kamaishi City Iron and Steel Museum | |
| West Nippon Expressway Retail Co., Ltd. | | World Heritage Division, Culture and Sports Department, Kamaishi City | |
| West Nippon Expressway Service Holdings Company Limited | | Hotel Folkloro Sanriku Kamaishi | |
| Fugetsu Foods Co., Ltd. | | Ninohe City Hotel | |
| Fukuoka International Airport Co., Ltd. | | Rikuchu Kaigan Grand Hotel | |
| Nagasaki Airport | | Hotel Bright Inn Morioka | |
| Kagoshima Prefectural Library | | Hiraizumi Hotel Musashibo | |
| JR Kagoshima Chuo Station Tourist Information Center | | Morioka Grand Hotel | |
| Kitakyushu Convention & Visitors Association | | The Park Hotel Jodogahama | |
| Omura City Hall Industrial Promotion Dept. | | APA Hotel Kitakami-Ekinishi | |
| JR Miyazaki Station Tourist Information Center | | Iwate Hotel Shidotaira | |
| | | | |

| Total no. distributed for the entire area |
|---|
| **464,025** |

World Heritage Route

In accordance with the Interpretation Strategy, and also as noted in pages 395–396 of the Nomination Document, the World Heritage Route Promotion Council was founded to provide guidance and tourism infrastructure for understanding World Heritage as a whole. The Council attracts visitors to all component parts and related sites by producing maps, apps, and GPS navigation and by installing road signs and other signage using the common logo to promote the Sites of Japan's Meiji Industrial Revolution so that visitors are able to understand the World Heritage value constituted by the 23 component parts.
Work will continue to be undertaken steadily pursuant to the Nomination Document and the Interpretation Plan.




Map on p. 396 of the Nomination Document


World Heritage Route Promotion Council meeting

Installation of Road Signage, Etc., Using the Common Logo

Status of installation of road signage

| Place | No. of signs installed |
|---|---|
| Kamaishi City | 20 |
| Otsuchi-cho | 1 |

Photos of road signage

In front of Michi-no-eki Kamaishi Sennintoge


Teramae intersection

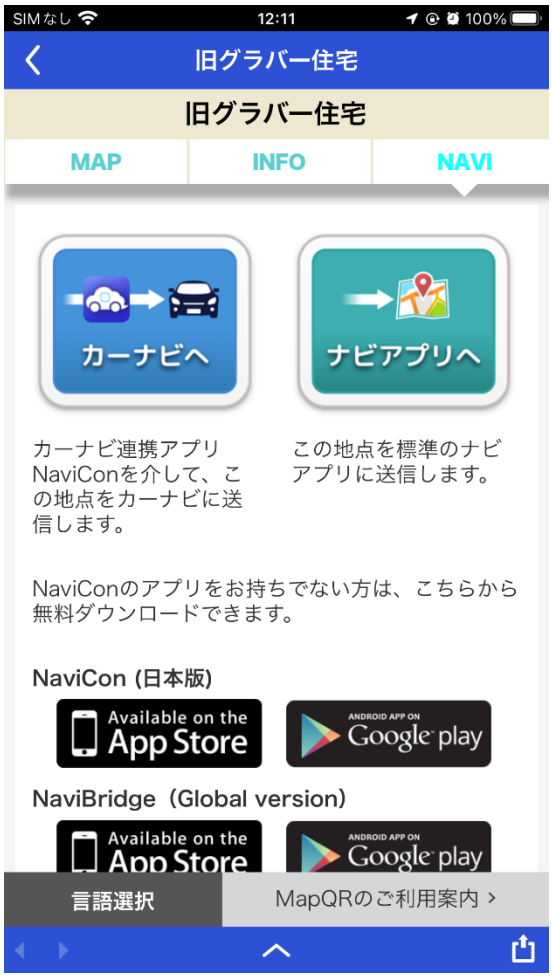
Locations of Road Signs Using the Common Logo

Linkage with Car Navigation (Denso Car Navigation)

Example of linkage with smartphone app so that the target destination can be sent to a car navigation system




The destination can be sent directly from a smartphone to the car navigation system.

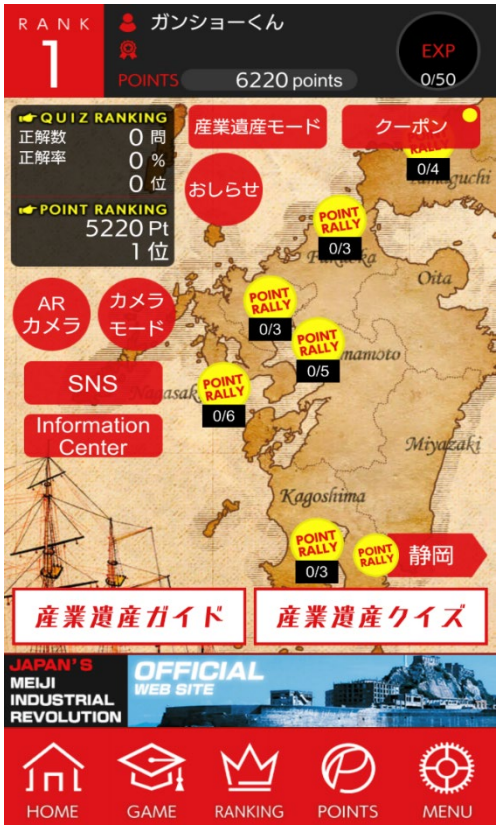




A video on how to use the application has been put up on YouTube.

App Utilization

The app introduces the Sites of Japan's Meiji Industrial Revolution, including detailed stories and explanations, as well as the historical background, using video and computer graphics, etc. Users can earn points by playing games and using the AR camera on the app and use them as coupons for souvenirs and other prizes. As such, it serves as a mechanism for both deepening understanding of World Heritage value and feeding back into World Heritage Route tours. The smartphone app is available in Japanese, English, Korean, simplified Chinese, traditional Chinese, and Vietnamese.




Use of Line App

Points acquired on the app can be exchanged for coupons.



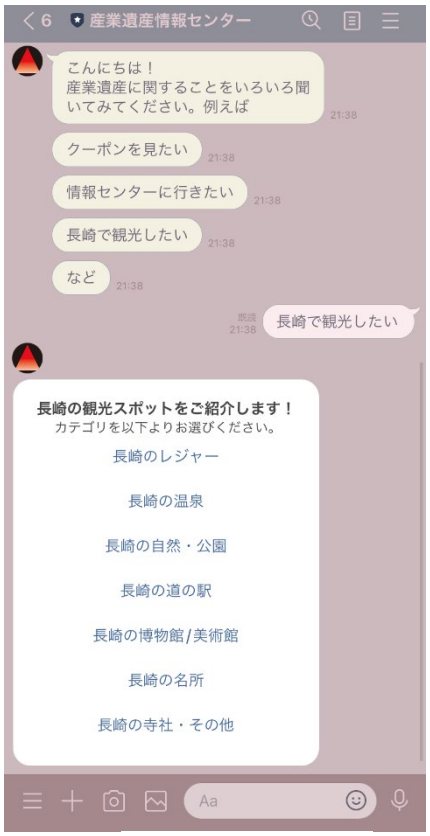
Point-of-purchase advertising has been created and placed in stations and information centres, etc., to encourage people to sign up to the LINE app.

LINE is used as a runway for achieving two-way communication geared to the circumstances of the user based on locational information, such as the use of existing guide apps and communication about coupons that can be used in shops at the area visited. The service is provided in multiple languages so as to support international visitors.

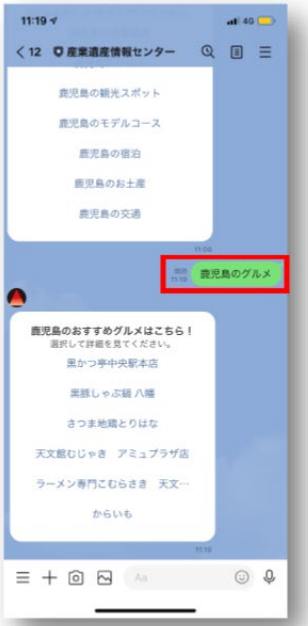
**Appendix 1-4**

LINE functions (examples)

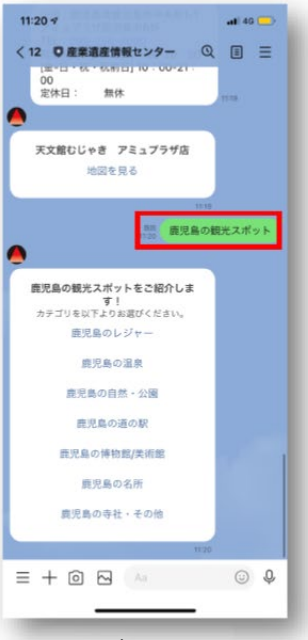

Introduction to model courses



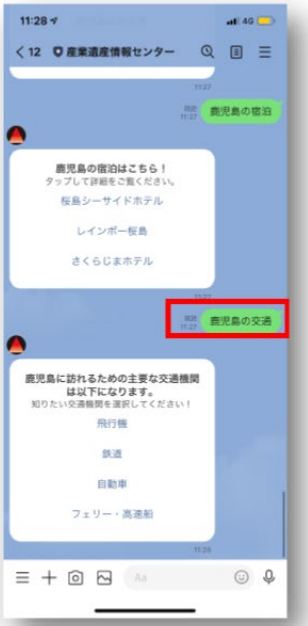

AI chatbot function



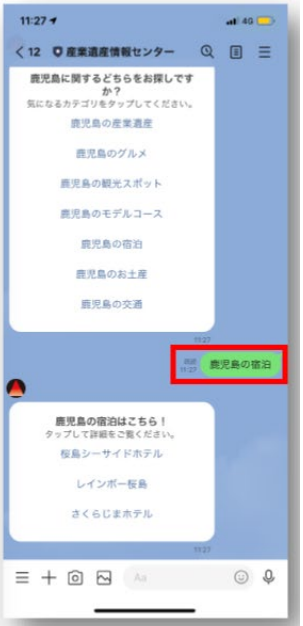

Gourmet information




Tourist spots




Traffic information




Accommodation information

Enhancement of digital content

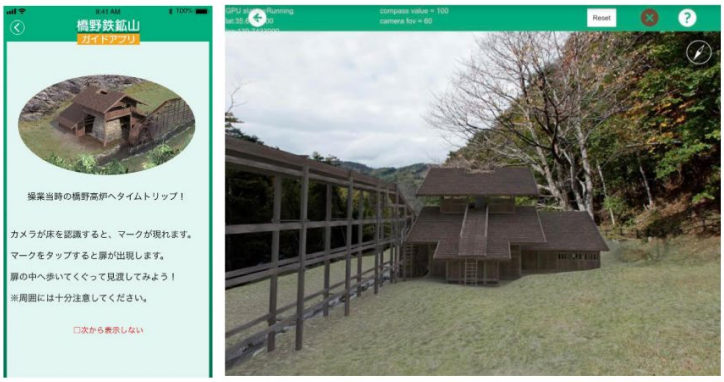
For the Kamaishi Area, information is provided through a smartphone application, with content created using digital technology that recreates scenes from iron-making in the past and of the blast furnace edifice.
Going forward, the smartphone application utilizing digital content will be enhanced for the blocks that will be made open to the public in conjunction with surveys and work based on the restoration and public utilization plan for the Hashino Iron Mine.

Initiatives

| Relevant component | Initiative details | Schedule | Entity in charge |
|---|---|---|---|
| Hashino Iron Mining & Smelting Site | Hashino Iron Mining and Smelting Site Tourism Guide App | 2018 | Iwate Prefecture |
| Hashino Iron Mining & Smelting Site | Hashino Iron Mining and Smelting Site Second Blast Furnace AR images | 2019 | Kamaishi City |
| Hashino Iron Mining & Smelting Site | Deliver information on components with the Kamaishi, Iwate guide map integrated with AR and MapQR | 2019 | National Congress of Industrial Heritage |

*As of September 30, 2022

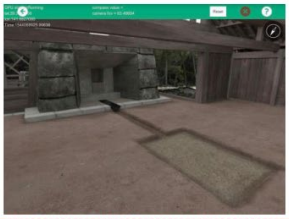
Example of digital technology interpretation of blast furnace
(AR image of Hashino Iron Mining and Smelting Site blast furnace)




・ 別ウィンドウでムービーを表示
・ ムービーは1種

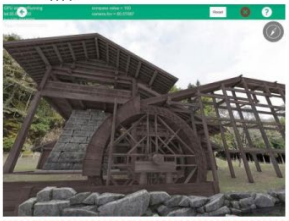
・ パノラマアングルは全部で４種

640 VR2



650 VR3

VR4 660



**Appendix 1-4**

Digital Signage Functions

Digital signage has been installed in the Industrial Heritage Information Centre as a mechanism for encouraging multi-destination tourism by displaying local guide maps and information on multi-destination industrial heritage routes. AI chatbots have also been installed to respond to a wide range of multi-destination routes and tourism questions in real time.


Visitor Centres

The Kamaishi Area is equipped with one visitor center and three auxiliary facilities with exhibits of component parts and the industrial sector in line with the interpretation strategy. Each facility cooperates with the local community to prepare exhibits that best bring out the true World Heritage values in harmony with the historical and cultural values of the region. They aim to create exhibits that allow visitors to understand the value of the components easily.

Based on points raised in interpretation audits, local visitor centres will work with the Industrial Heritage Information Centre to digitize a huge volume of primary historic materials and use digital tools to enhance exhibits.

[Hashino Iron Mining and Smelting Information Center]

An introduction to the OUV and 23 component parts of the World Heritage “Sites of Japan’s Meiji Industrial Revolution” is available, and the history of the Hashino Iron Mining and Smelting Site, as well as an overview of the facilities (ruins), are explained in detail here. An excavation survey is conducted every year, and results are exhibited between November and early December.

**Appendix 1-4**

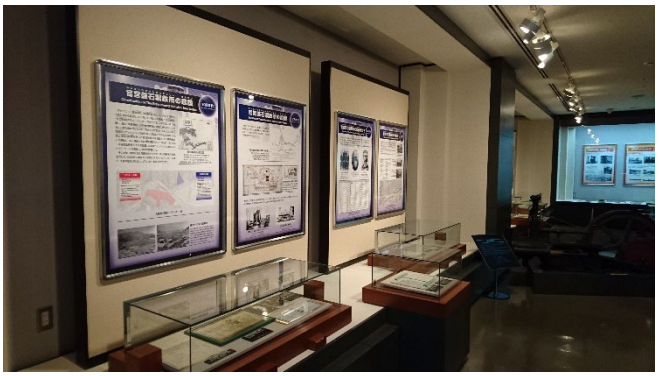
[Iron and Steel History Museum]

Visitors can learn about the history of iron and steel centered around the father of modern ironmaking, Takato Oshima, and the history of the Hashino Iron Mining and Smelting Site. The entire history of ironmaking surrounding the World Heritage “Sites of Japan’s Meiji Industrial Revolution” (1850-1910) is introduced here.


Exterior

General production theater

First floor



Second floor

[Former Kamaishi Mine's Office Building]

A concrete formwork block-structured building built in 1951 was the general office for the Kamaishi Mine and is a registered tangible cultural property of Japan. The building is located at the site of the Ohashi blast furnace, the birthplace of modern ironmaking, and currently exhibits focusing on the remains of the blast furnace and digging (mining) at the Kamaishi Mine.

Second floor (Mining gallery)

Second floor (Minerals room)

**Appendix 1-4**

[ Kamaishi Historical Materials Display]

Features the nature, archaeology, and folk customs of Kamaishi. Wide-ranging materials related to the bombardment by the Allied forces in 1945 and to tsunamis, in particular, are exhibited. An intricate 1/100 scale model of the Hashino blast furnace ruins is on display in the ironmaking area.

Exterior

Earthquake corner

War disaster corner

Ironmaking corner
(Hashino blast furnace ruins model)

Monitor tour

Children's education programs

Experience ironmaking

Experience casting

Ore collecting

Iron certification


Iron educational presentation

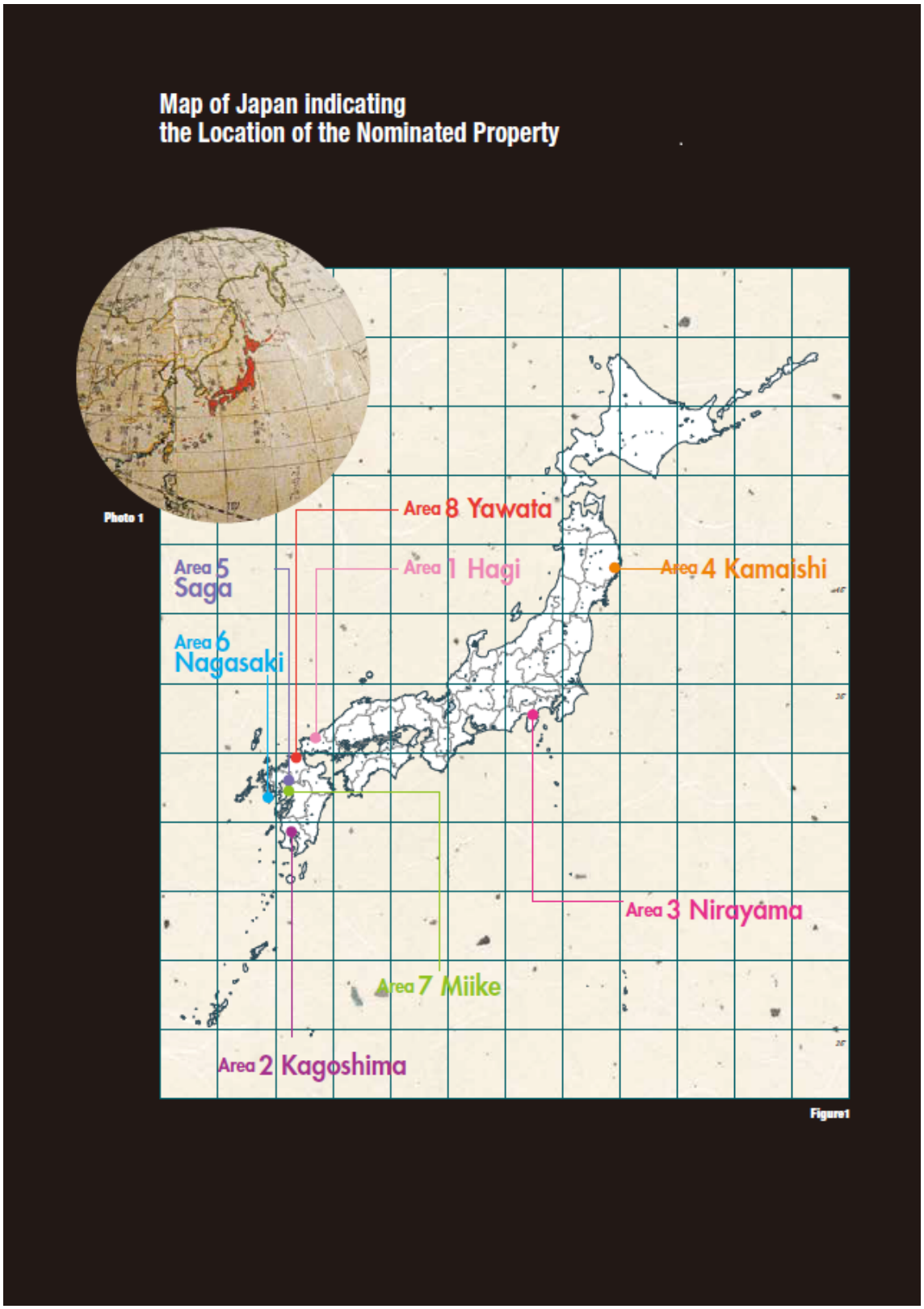
Appendix 1-5

# Area5 Saga

# AREA-SPECIFIC INTERPRETATION PLAN

Saga Conservation Council

【Area List】


Map of Japan indicating
the Location of the Nominated Property
Photo 1
Area 8 Yawata
Area 5 Saga
Area 1 Hagi
Area 4 Kamaishi
Area 6 Nagasaki
Area 3 Nirayama
Area 7 Miike
Area 2 Kagoshima
Figure1

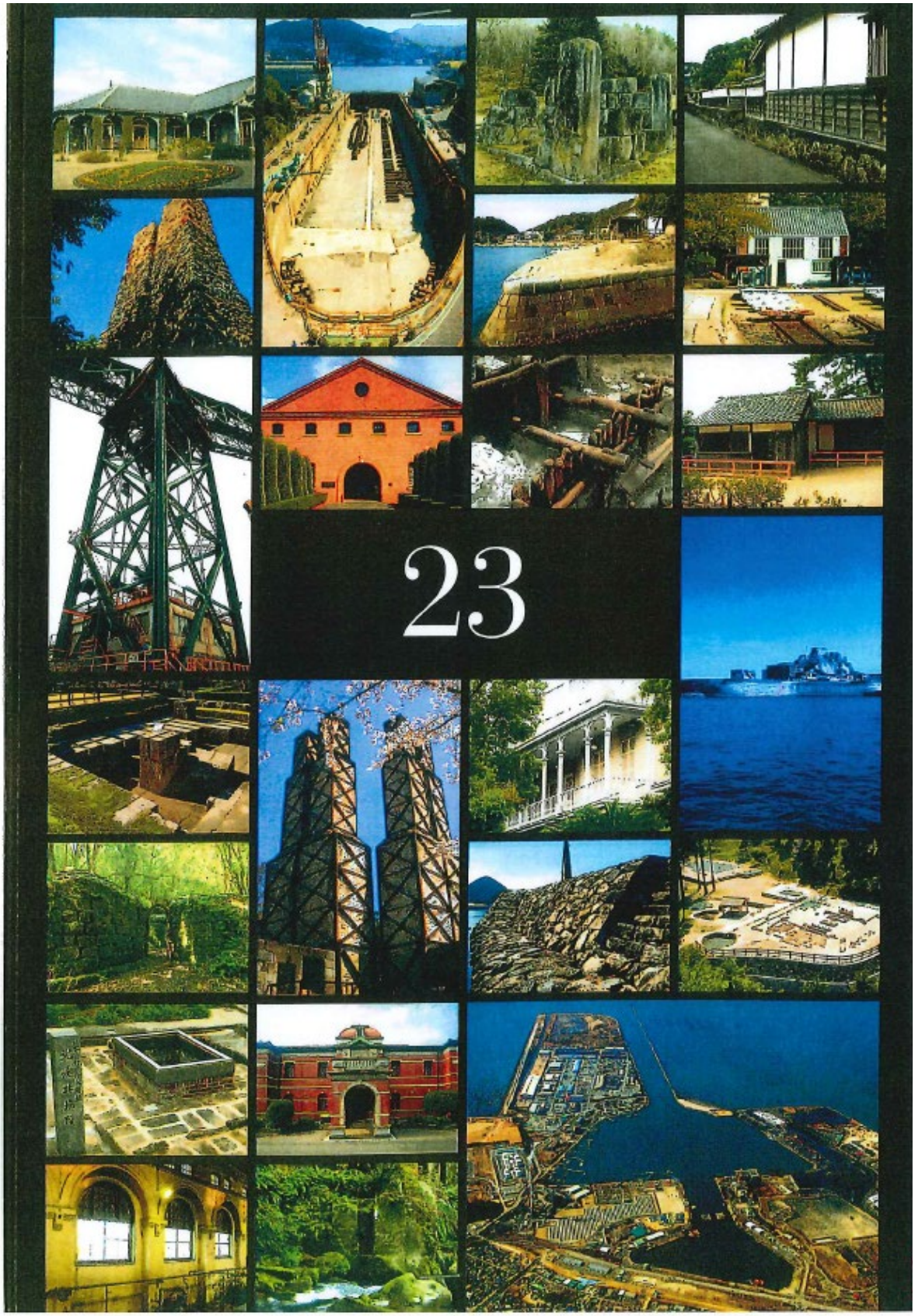
【Component Name】

## List of the Component Parts

| Area | Site | ID | Component Part |
|---|---|---|---|
| A1 Hagi | 1 Hagi Proto-industrial Heritage | 1-1 | Hagi Reverberatory Furnace |
| | | 1-2 | Ebisugahana Shipyard |
| | | 1-3 | Ohitayama Tatara Iron Works |
| | | 1-4 | Hagi Castle Town |
| | | 1-5 | Shokasonjuku Academy |
| A2 Kagoshima | 2 Shuseikan | 2-1 | Shuseikan |
| | | 2-2 | Terayama Charcoal Kiln |
| | | 2-3 | Sekiyoshi Sluice Gate of Yoshino Leat |
| A3 Nirayama | 3 Nirayama Reverberatory Furnaces | 3-1 | Nirayama Reverberatory Furnaces |
| A4 Kamaishi | 4 Hashino Iron Mining and Smelting Site | 4-1 | Hashino Iron Mining and Smelting Site |
| A5 Saga | 5 Mietsu Naval Dock | 5-1 | Mietsu Naval Dock |
| A6 Nagasaki | 6 Nagasaki Shipyard | 6-1 | Kosuge Slip Dock |
| | | 6-2 | Mitsubishi No.3 Dry Dock |
| | | 6-3 | Mitsubishi Giant Cantilever Crane |
| | | 6-4 | Mitsubishi Former Pattern Shop |
| | | 6-5 | Mitsubishi Senshokaku Guest House |
| | 7 Takashima Coal Mine | 6-6 | Takashima Coal Mine |
| | | 6-7 | Hashima Coal Mine |
| | 8 Glover House and Office | 6-8 | Glover House and Office |
| A7 Miike | 9 Miike Coal Mine and Miike Port | 7-1 | Miike Coal Mine and Miike Port |
| | 10 Misumi West Port | 7-2 | Misumi West Port |
| A8 Yawata | 11 The Imperial Steel Works, Japan | 8-1 | The Imperial Steel Works, Japan |
| | | 8-2 | Onga River Pumping Station |

Table1

3


23

SITES OF
JAPAN'S
MEIJI INDUSTRIAL
REVOLUTION
IRON & STEEL, SHIPBUILDING
AND COAL MINING

# Executive Summary

## Brief Synthesis

"Sites of Japan's Meiji Industrial Revolution: : Iron and Steel, Shipbuilding and Coal Mining" comprise a singular ensemble of industrial heritage sites that represent the first successful transfer of industrialization from the West to a non-Western nation.

From the middle of the 19th century to the early 20th century, Japan achieved rapid industrialization that was founded on the key industrial sectors of shipbuilding, iron and steel, and coal mining. The initial phase was one of trial and error experimentation in iron making and shipbuilding, based mostly on Western textbooks, and by copying examples of Western ships. This was followed by the more successful importation of Western technology and the expertise to operate it and, by the late Meiji period, full-blown industrialization through newly acquired domestic expertise and the active adaptation of Western technology to best suit Japanese needs and social traditions. This successful industrialization was achieved in just a little over 50 years without colonization, and on Japan's own terms. The property is testimony to this unique phase in world history.

# Justification for Criteria

**Criterion (ii)**

The property is a series of heritage sites that, together, uniquely illustrate the process by which feudal Japan sought technology transfer from Western Europe and America from the middle of the 19th century. This technology was adopted and progressively adapted to satisfy specific domestic needs and social traditions, thus enabling Japan to become a world-ranking industrial nation by the early 20th century.

**Criterion (iv)**

The technological ensemble of key industrial sites of shipbuilding, iron and steel, and coal mining is testimony to Japan's unique achievement in world history as the first non-Western country to successfully industrialize. Viewed as an Asian cultural response to Western industrial values, the ensemble had no counterpart elsewhere in the world.

# Statement of Integrity

The 23 component parts are the best, and often the only, surviving examples of the key attributes that represent shipbuilding, the iron and steel, and coal mining industries and that are necessary to express Outstanding Universal Value. In each case, the boundary of the component part has been drawn to include the essential features that, overall, contribute to Outstanding Universal Value.

Component parts are in good condition and have mechanisms in place to control deterioration and keep sites free from the adverse effects of development. They have been variously affected by continued use, re-use or lengthy periods of abandonment, and their physical integrity varies between well preserved and fragmentary, the latter being sufficiently intact to be able to represent the former whole. In some cases, where the evidence is primarily archaeological, sufficient investigation has been carried out to verify that a substantial archaeological site survives in good condition for further study and presentation. In other cases, in particular those that remain in operational industrial use, ongoing use and maintenance have resulted in an extraordinarily high level of integrity of working industrial elements.

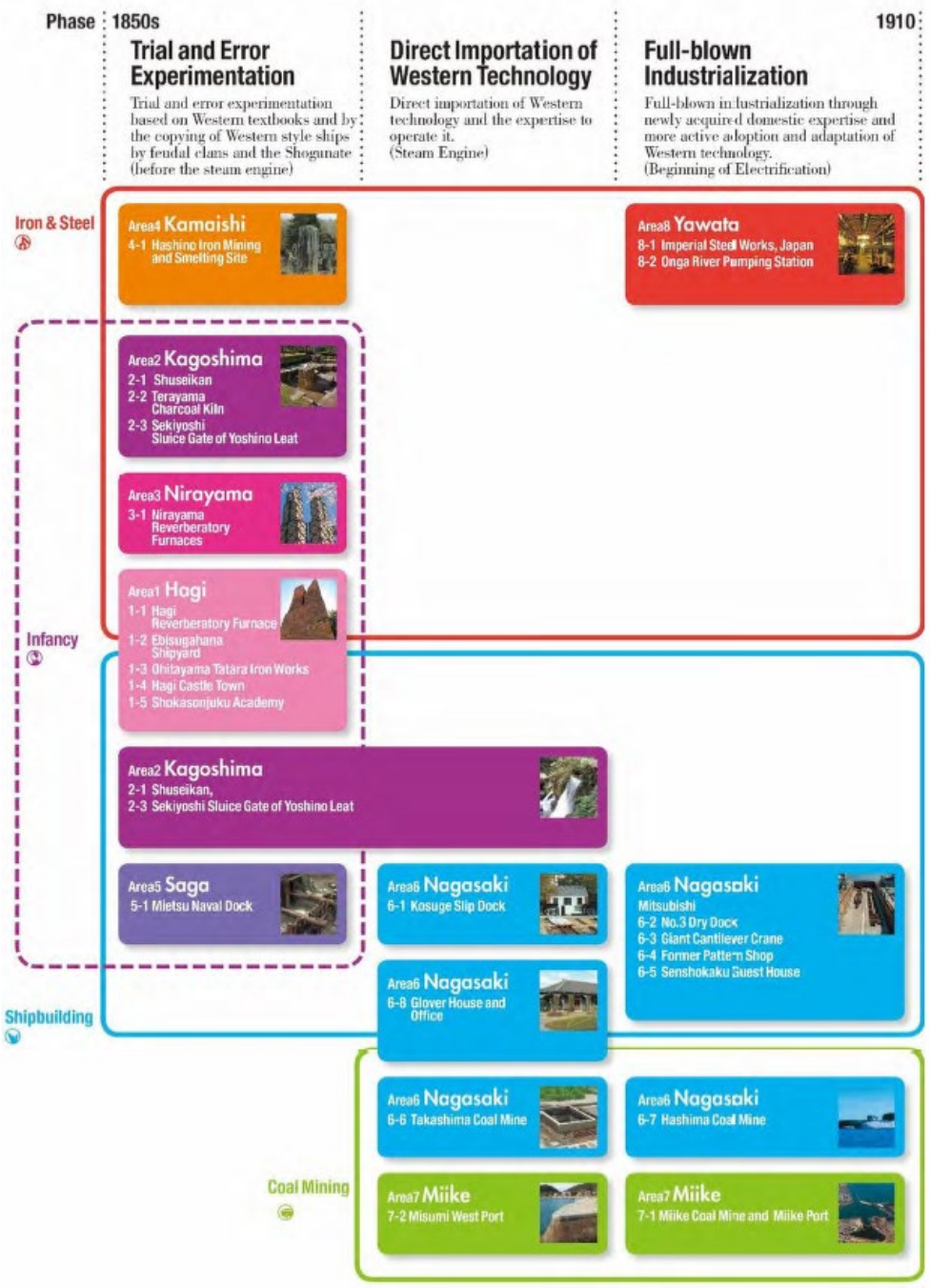
# Statement of Authenticity

The property as a whole as well as at the level of each component part meets the conditions of authenticity in relation to Outstanding Universal Value. It has a high degree of authenticity as the best surviving group of industrial remains that represent, and demonstrate, the first, and rapid, transfer of industrialization from the West to a non-Western nation.

With regard to 'form and design' and 'materials and substance', the component parts constitute the original forms and materials of the range of industrial components necessary to represent the transfer of heavy industry from the West to Japan. Some contain sites that range from fragmentary or archaeological, that are nonetheless authentic relics of important industrial components of the series, to those that comprise substantially intact authentic physical remains that have been managed for many years as historic sites which display these characteristics. Others possess an extremely complete survival not only of form, design and materials but also of continuing use and function.

Industrial History Related to the Saga Area

The Saga area contains multiple component parts chronicling the first phases (Trial and Error Experimentation) of Shipbuilding aspects of the World Heritage Listed “Sites of Japan’s Meiji Industrial Revolution: Iron and Steel, Shipbuilding and Coal Mining.”



The Interpretation Strategy which the Cabinet Secretariat submitted to UNESCO on November 30, 2017, as an appendix to the State of Conservation Report noted the following:

**11. Interpretation Plan (extract)**

**(1) Consistent OUV rollout across all component parts**

Based on the Interpretation Strategy, the consistent interpretation of OUV should be presented across all component parts. This will be agreed by all stakeholders, and coordinated and implemented commonly in a branded World Heritage style.

**(2) and (3) Progress in dealing with the "full history" of each site, including information gathering related to workers**

Advice from international experts who are members of the Expert Committee on the Industrial Heritage including Operational Properties (Cabinet Secretariat of Japan), from the international heritage expert who was the ICOMOS technical evaluation field assessor of the World Heritage nomination of the "Sites of Japan's Meiji Industrial Revolution", and from the President of the ICOMOS International Scientific Committee on Interpretation and Presentation, comprises the following four key policies:

1) Focus on the interpretation of Outstanding Universal Value; in conformity with the primary purpose of the World Heritage, OUV of the inscribed property should be presented clearly at each site, not confusing with other, albeit related, issues. Based on this, Recommendation g)* should be implemented.

2) The scope of the "full history" of each site, except for the OUV period (from 1850s to 1910) as described on page 78, falls into two parts: prior to 1850s, and from 1910 to the present. The target of the full history should be narrowed down, considering the local values that supplement the understanding of the background of each component part. Where relevant, with regard to the interpretation of the full history on the location of each component part, high quality research such as collecting primary historical documents and recording oral testimonies should be carried out, and the result of this research should, at some stage, be made publicly available through appropriate media.

* Recommendation g)

> *"Preparing an interpretive strategy for the presentation of the nominated property, which gives particular emphasis to the way each of the sites contributes to OUV and reflects one or more of the phases of industrialisation; and also allows an understanding of the full history of each site."*

Based on the Interpretation Strategy, we have had multiple audits of the current status of interpretation at the component parts and visitor centres, etc., in the various areas undertaken by international experts familiar with industrial assets and the interpretation thereof in countries around the world.
As a result, auditor Barry Gamble identified the following issues in relation to the Saga area.

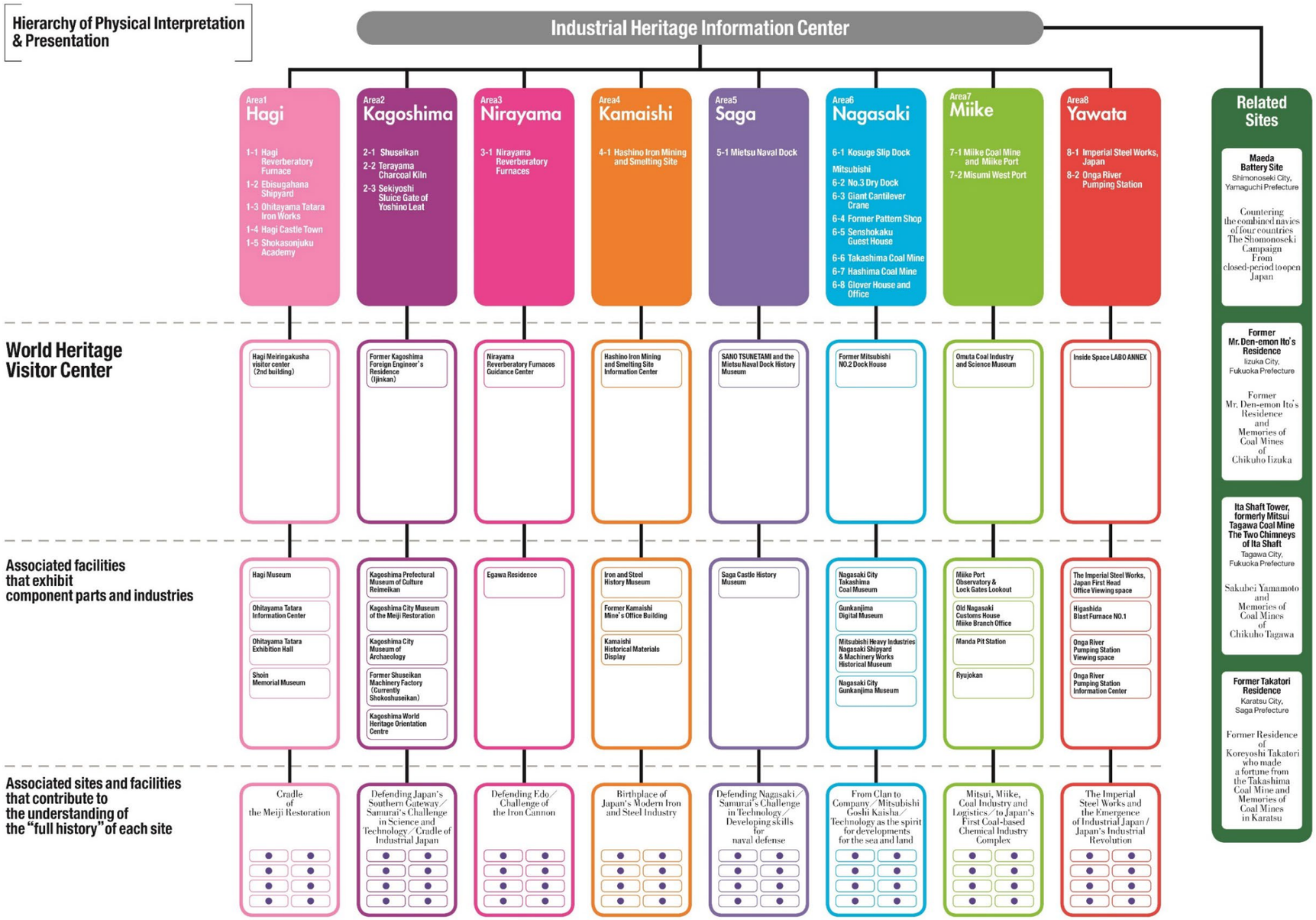
- Ongoing professional work at Mietsu Naval Dock and the associated museum, including excavation archaeology, furthers the interpretation and conservation of the Component Part. This is to be complimented.
- The plans they have developed to inform the development of Mietsu Naval Dock and the museum are to be commended.
- The OUV and linkages with other component parts (especially those in Nagasaki where there are very close historic relationships) will be essential in these developments, and an accurate (evidenced) and balanced history is crucial, as in all Component Parts. Content should draw from the widely-consulted and approved texts in the Nomination Document.

Discussions have been held regarding this interpretation plan for the Saga Area thus far by the local conservation council.
The issues pointed out as a result of the above interpretation audit—achieving linkage with other component parts, including those in Nagasaki, and introducing a balanced, accurate history—have been addressed along with other continuous enhancements in cooperation with the Industrial Heritage Information Centre and relevant areas. Exhibits that better reflect the World Heritage values in harmony with the historical and cultural values of the region were also installed.

Local Conservation Council meeting

Hierarchy of Physical Interpretation and Presentation

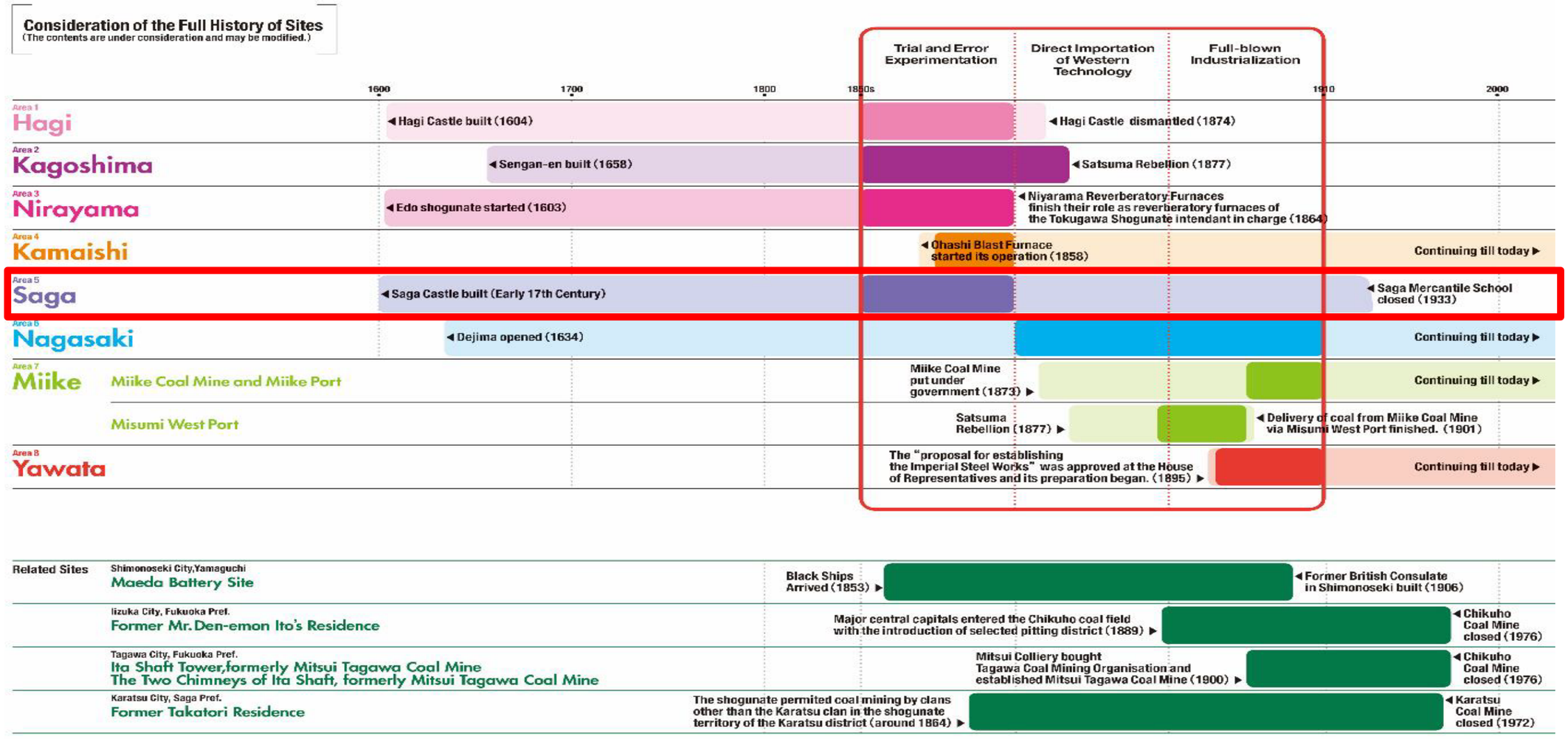
The Industrial Heritage Information Centre and the various local visitor centres will work together to build a system enabling the effective communication of the OUV of the Sites of Japan's Meiji Industrial Revolution.




Related sites: Sites that were component part candidates in the provisional UNESCO World Heritage listing on the January 5, 2009, and that comprise industrial heritage (valuable assets that provide insight into the historical background and social situation of the time) that will be utilized in an integrated manner with the World Heritage Listed "Sites of Japan's Meiji Industrial Revolution."

Consideration of the Full History of Sites

The Interpretation Strategy which the Cabinet Secretariat submitted to UNESCO in 2017, addressed consideration of the full history of sites as shown in the figure below.



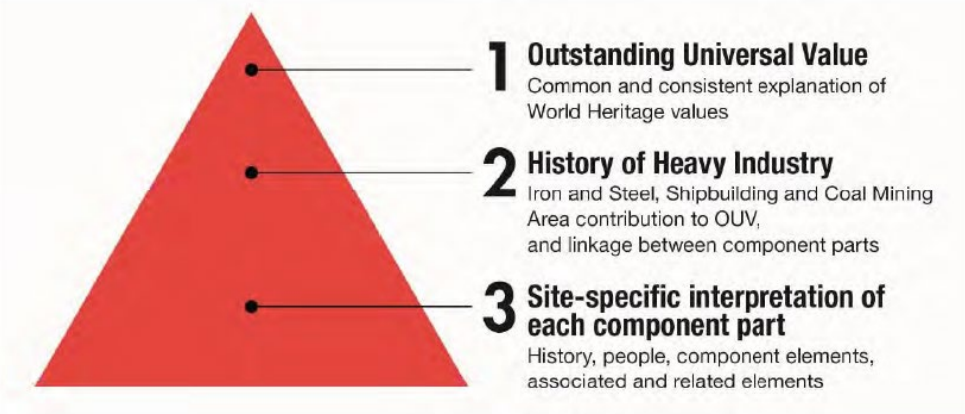
Interpretation in the Saga Area

Approach of the Interpretation Strategy

The Interpretation Strategy provides the following schematic in relation to concepts for interpretation and presentation.

Interpretation for the Saga area too will be approached in line with this in order to resolve the issues identified in interpretation audits.

**Interpretation and presentation of the Sites of Japan's Meiji Industrial Revolution: Hierarchy of value and themes**




OUV stands at the top of the interpretation pyramid at the Industrial Heritage Information Centre and the various regions' visitor centres and is therefore the top-priority theme over the interpretation and presentation of individual regions and industries, such as history specific to an area or component part. Addressing interpretation in the order of (1) OUV, (2) the history of heavy industry, and (3) site-specific interpretation of each component part, as shown above, will ensure consistent presentation across the property

**Interpretation flow at each local visitor centre**

Hierarchy of Interpretation

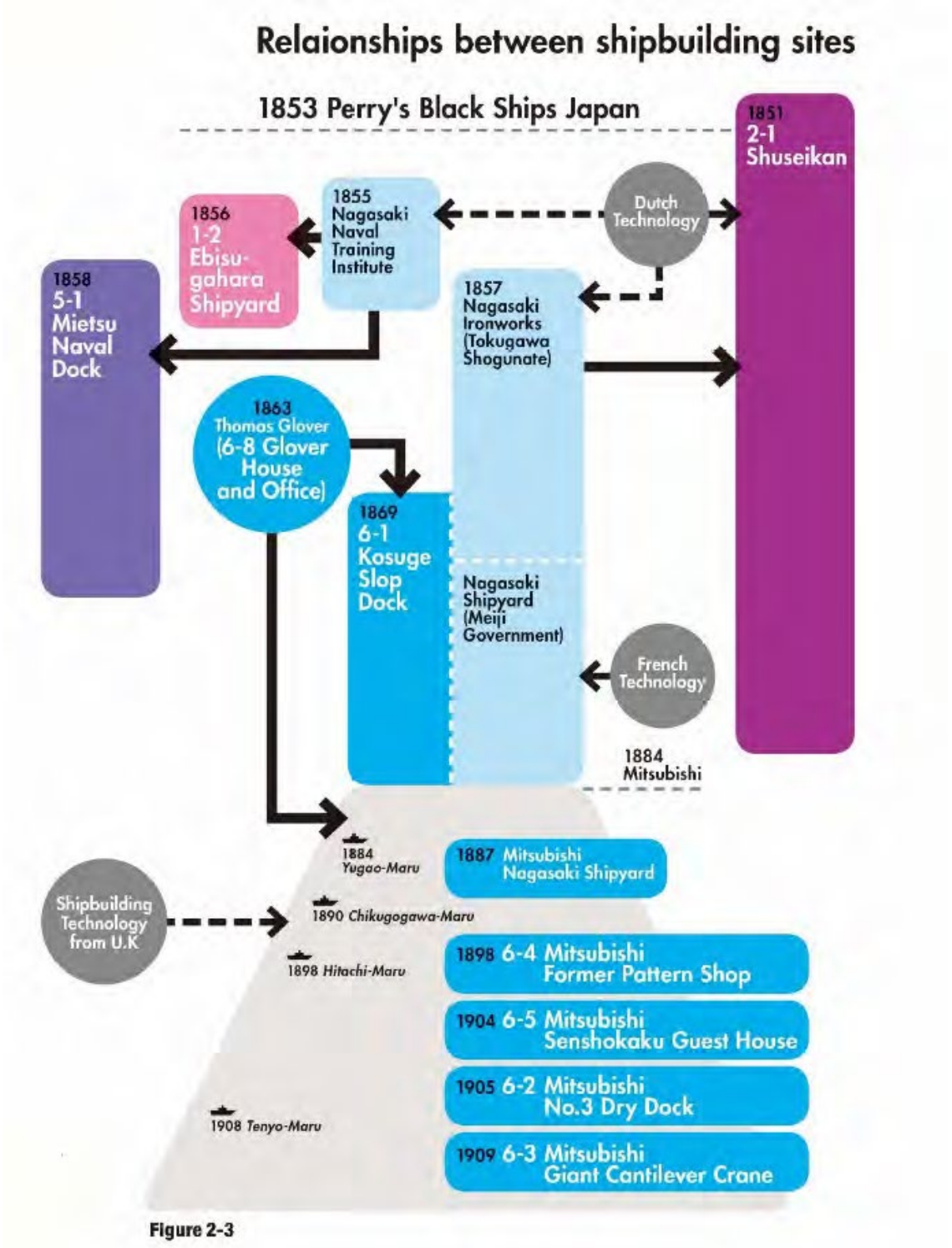

Relaionships between shipbuilding sites
1853 Perry's Black Ships Japan
1851
2-1
Shuseikan
1855
Nagasaki
Naval
Training
Institute
Dutch
Technology
1856
1-2
Ebisu-
gahara
Shipyard
1858
5-1
Mietsu
Naval
Dock
1857
Nagasaki
Ironworks
(Tokugawa
Shogunate)
1863
Thomas Glover
(6-8 Glover
House
and Office)
1869
6-1
Kosuge
Slop
Dock
Nagasaki
Shipyard
(Meiji
Government)
French
Technology
1884
Mitsubishi
1884
Yugao-Maru
1887 Mitsubishi
Nagasaki Shipyard
Shipbuilding
Technology
from U.K
1890 Chikugogawa-Maru
1898 Hitachi-Maru
1898 6-4 Mitsubishi
Former Pattern Shop
1904 6-5 Mitsubishi
Senshokaku Guest House
1905 6-2 Mitsubishi
No.3 Dry Dock
1908 Tenyo-Maru
1909 6-3 Mitsubishi
Giant Cantilever Crane

Figure 2-3

Presentation Using “Liquid Galaxy,” Etc.

The Industrial Heritage Information Centre, which was established in March 2020 pursuant to the Interpretation Strategy, uses an immersive video multi-display that draws on the World Heritage OUV period (1850s-1910), as well as the Consideration of the Full History of Sites schematic. It explains through images the history and transformation of component parts in the various areas, as well as the way that people lived, etc., presenting these in a way that enables visitors to experience in a very real way the evolution of the property, the contribution to OUV, and the full history.
This area will also establish a digital archive of documents gathered by the Industrial Heritage Information Centre and the visitor centre in the area, which will be gradually reflected into interpretation tools.

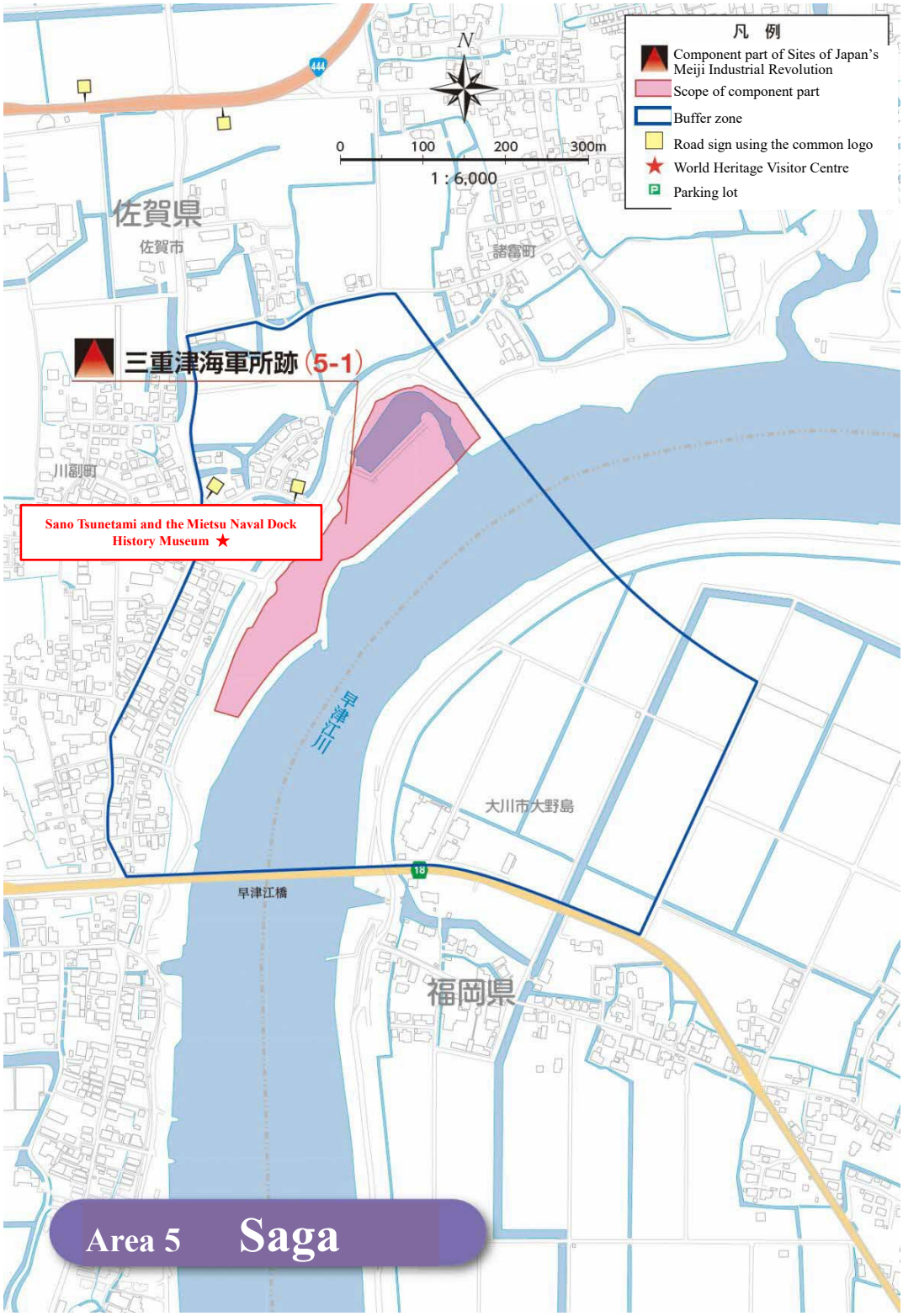
Saga Area Component Parts

| | |
|---|---|
| Relevant industries: Shipbuilding | |
| Name of component part: Mietsu Naval Dock | |
| (Overview of component part)<br>The Saga Domain, entrusted by the Shogunate with defending Nagasaki, sent samurai to the Nagasaki Naval Training Institute for training and built a dry dock based on the Western technological information gained there. The site was used to repair Western steamships purchased overseas and became the base for acquiring and practicing Western-style ship-related technology. |  |

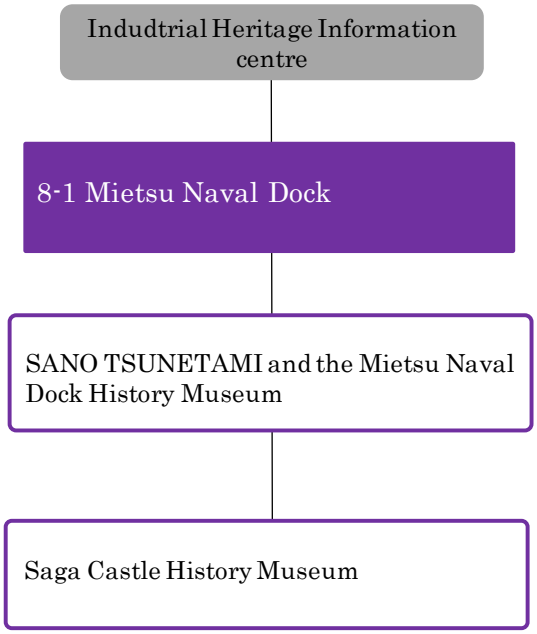
World Heritage Plaques

In line with the UNESCO Guidelines, World Heritage plaques have been installed at the various component parts to inform visitors properly about the OUV of the property.

Saga Area: Distribution of Interpretation Facilities



Saga Area: Hierarchy of Physical Interpretation and Presentation




Access Guide Maps

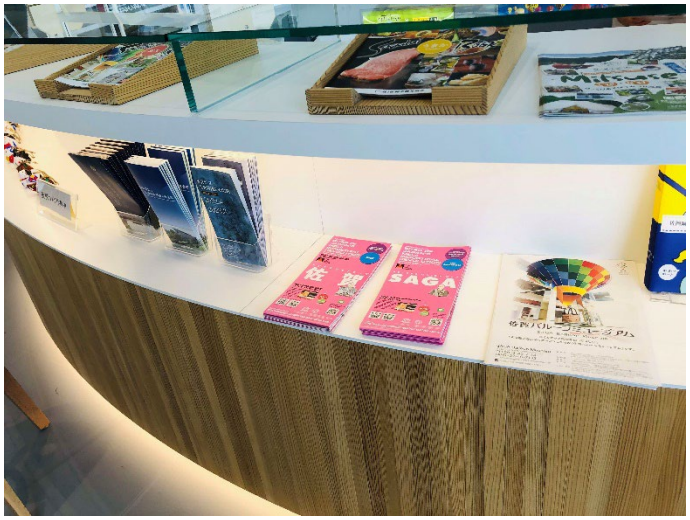
Access guide maps for the component parts in each area have been produced in both Japanese and English and are distributed free to visitors. The access maps are designed to help tourists orient themselves in relation to the component parts of the various areas and enable them to visit as many component parts as possible within each area.

By linking the maps to a smartphone app, information can be communicated about component parts not open to the public using augmented reality (AR) functions to show 3D models, videos, and 360-degree panorama views of inaccessible sites.

Information Counters

These are set up in administrative institutions and airports to distribute access guide maps and other information.


Saga City Hall




Kyushu-Saga International Airport

## Guide Map Distribution Points and Number of Maps Distributed

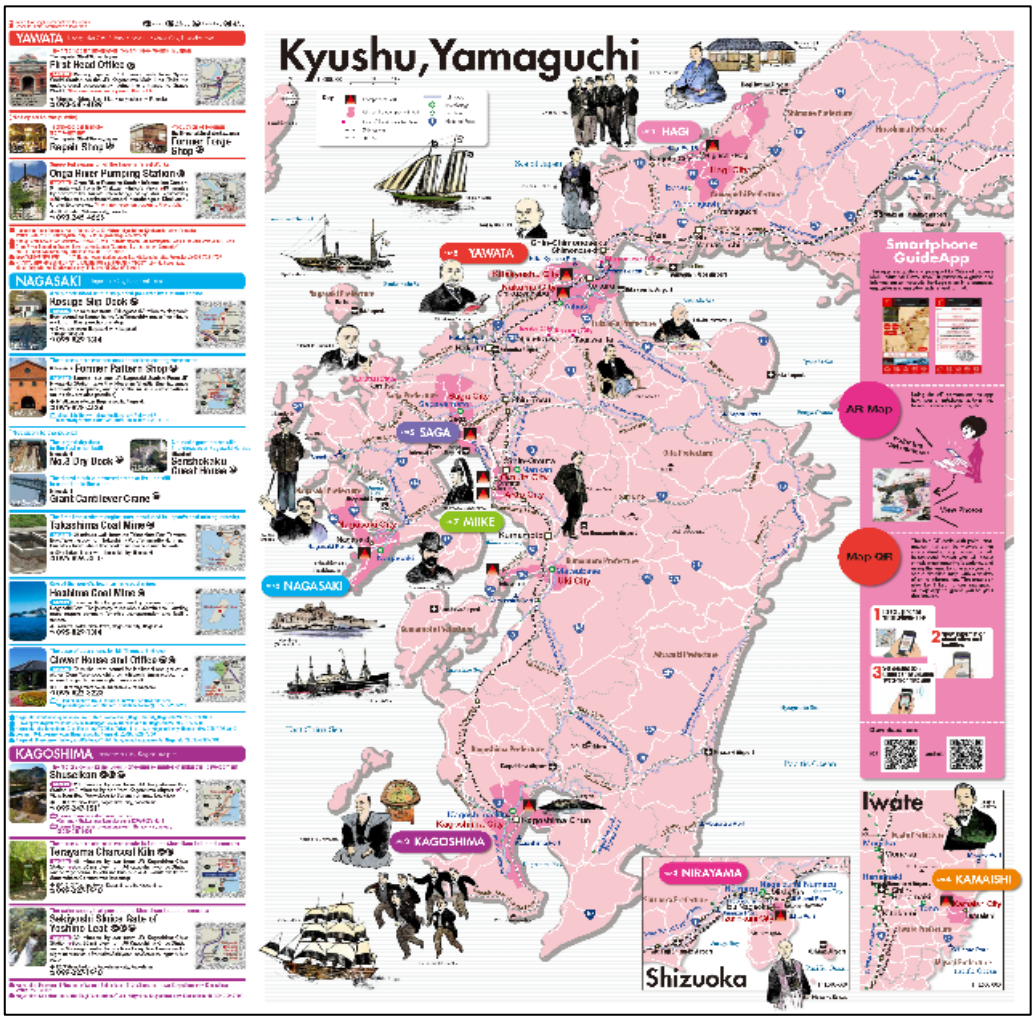
Guide map distribution points and the number of maps distributed are as follows.

| **Overall map** | | **Saga Map** | |
|---|---|---|---|
| **No. distributed** | **177,762** | **No. distributed** | **34,680** |
| Japanese & English | 177,762 | Japanese | 22,280 |
| **Main distribution point** | **No. distributed** | **Main distribution point** | **No. distributed** |
| Administrative organizations | 300 | Administrative organizations | 13,250 |
| Airports | 550 | Airports/ Airlines | 1,200 |
| Hotels | 50 | Hotels | 0 |
| Car rental agencies | 100 | Car rental agencies | 100 |
| JR (Railway) | 600 | JR (Railway) | 700 |
| Tourist information centers | 700 | Tourist information centers | 600 |
| Michi-no-eki roadside stations | 4,400 | Michi-no-eki roadside stations | 1,600 |
| NEXCO | 168,500 | NEXCO | 9,300 |
| Public interest corporation/foundation/ incorporated association | 550 | Public interest corporation/foundation/ incorporated association | 3,380 |
| | | | |
| Other | 2,012 | Other | 4,550 |
| JR Kyushu Hakata Station General Information | | Kitakyushu Museum of Natural History & Human History | |
| West Nippon Expressway Retail Co., Ltd. | | Nakama City Regional Exchange Center – Nakama gaido no kai (guide group) | |
| West Nippon Expressway Service Holdings Company Limited | | Fukuoka International Airport Co., Ltd. | |
| Fugetsu Foods Co., Ltd. | | Satoyama wo Kangaerukai Nonprofit Organisation (NPO Satoyama) | |
| Fukuoka International Airport Co., Ltd. | | Japan Automobile Federation (JAF) | |
| Nagasaki Airport | | Fukuoka City Tourist Information Center | |
| Kagoshima Prefectural Library | | Koransha Co., Ltd. | |
| JR Kagoshima Chuo Station Tourist Information Center | | The Cooperative of Arita Ceramics Wholesale Commercial Park | |
| Kitakyushu Convention & Visitors Association | | Fukuoka Airport | |
| Omura City Hall Industrial Promotion Dept. | | Saga Prefectural Tourism Federation | |
| JR Miyazaki Station Tourist Information Center | | Karatsu-Genkai Tourism Exchange | |
| | | | |

| Total no. distributed for the entire area |
|---|
| **464,025** |

World Heritage Route

In accordance with the Interpretation Strategy, and also as noted in pages 395–396 of the Nomination Document, the World Heritage Route Promotion Council was founded to provide guidance and tourism infrastructure for understanding World Heritage as a whole. The Council attracts visitors to all component parts and related sites by producing maps, apps, and GPS navigation and by installing road signs and other signage using the common logo to promote the Sites of Japan's Meiji Industrial Revolution so that visitors are able to understand the World Heritage value constituted by the 23 component parts.
Work will continue to be undertaken steadily pursuant to the Nomination Document and the Interpretation Plan.




Map on p. 396 of the Nomination Document


World Heritage Route Promotion Council meeting

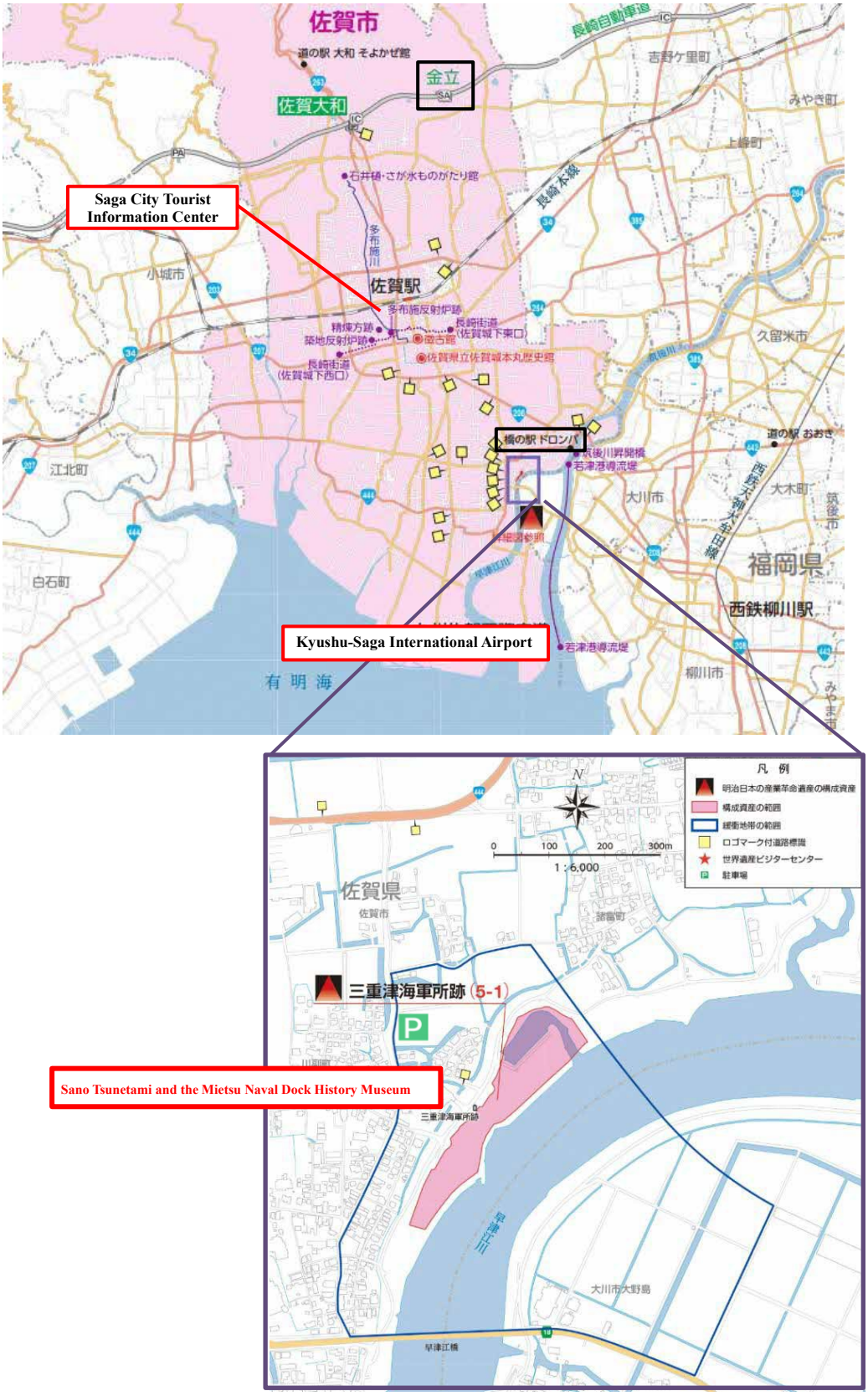
Installation of Road Signage, Etc., Using the Common Logo

Status of installation of road signage

| Place | No. of signs installed |
|---|---|
| Saga City | 26 |

Photos of road signage

Locations of Road Signs Using the Common Logo

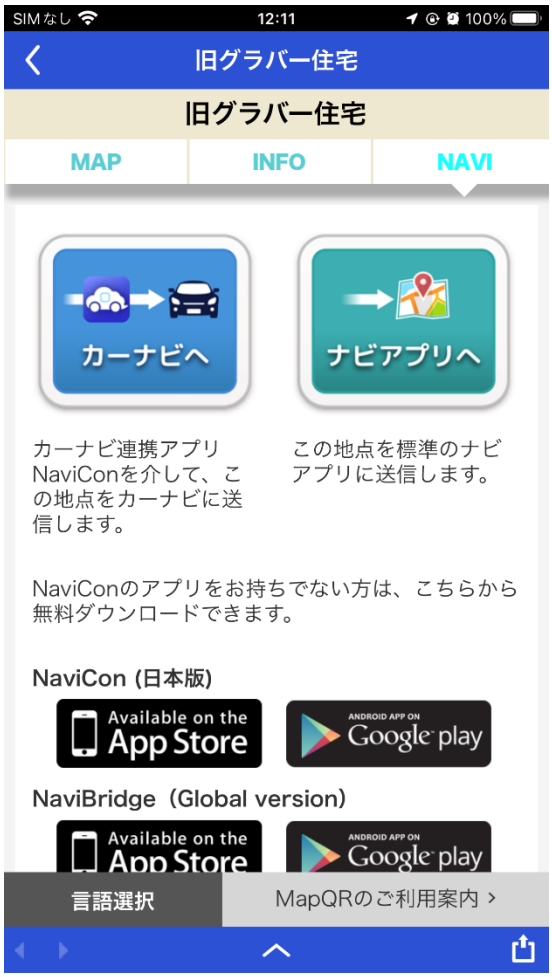


Linkage with Car Navigation (Denso Car Navigation)

Example of linkage with smartphone app so that the target destination can be sent to a car navigation system




The destination can be sent directly from a smartphone to the car navigation system.

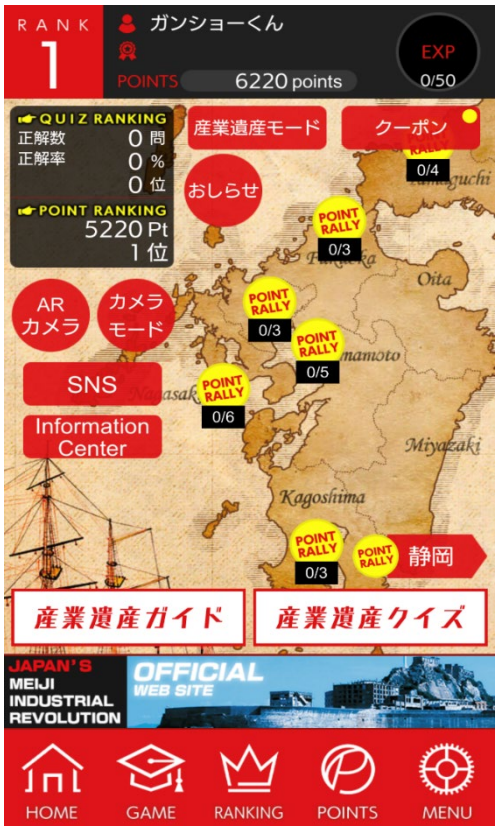




A video on how to use the application has been put up on YouTube.

App Utilization

The app introduces the Sites of Japan's Meiji Industrial Revolution, including detailed stories and explanations, as well as the historical background, using video and computer graphics, etc. Users can earn points by playing games and using the AR camera on the app and use them as coupons for souvenirs and other prizes. As such, it serves as a mechanism for both deepening understanding of World Heritage value and feeding back into World Heritage Route tours. The smartphone app is available in Japanese, English, Korean, simplified Chinese, traditional Chinese, and Vietnamese.




Use of Line App

Points acquired on the app can be exchanged for coupons.

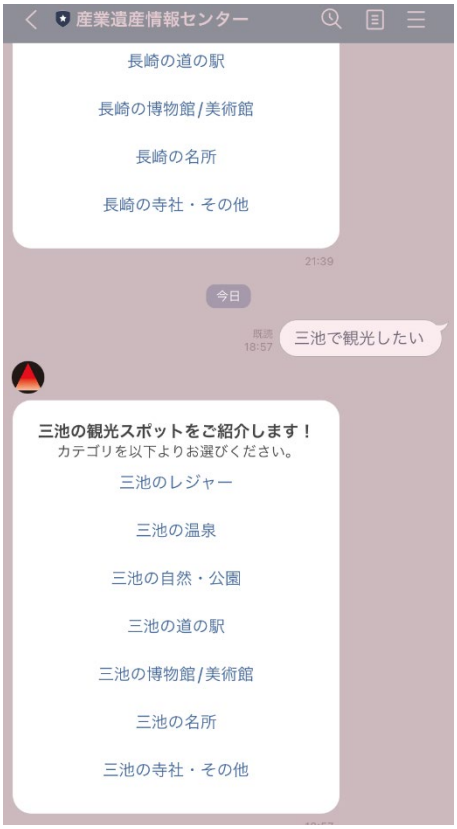

Point-of-purchase advertising has been created and placed in stations and information centres, etc., to encourage people to sign up to the LINE app.


LINE is used as a runway for achieving two-way communication geared to the circumstances of the user based on locational information, such as the use of existing guide apps and communication about coupons that can be used in shops at the area visited. The service is provided in multiple languages so as to support international visitors.

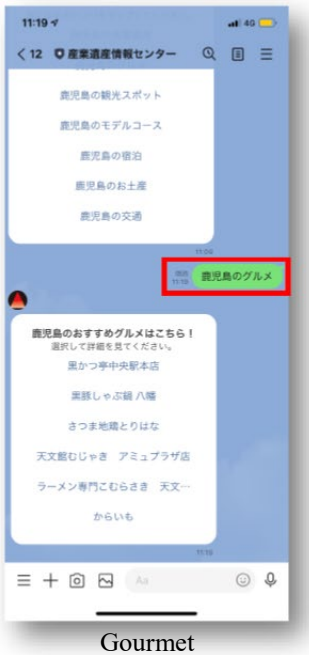
**Appendix 1-5**

LINE functions (examples)

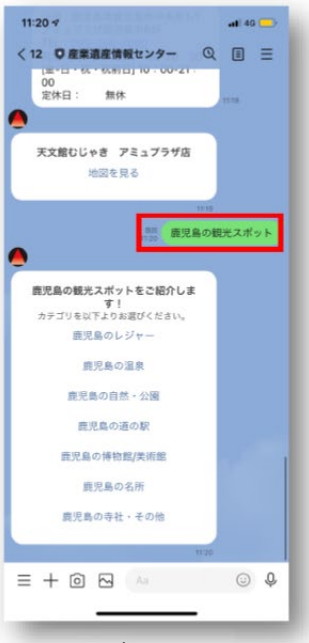

Introduction to model courses



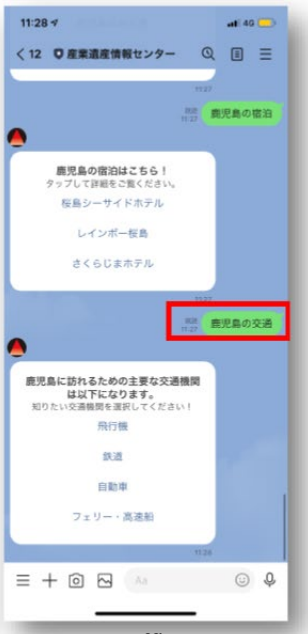

AI chatbot function



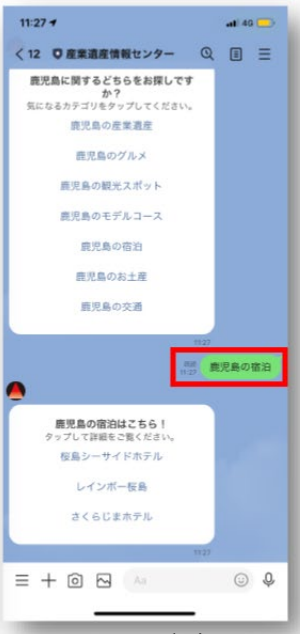

Gourmet information




Tourist spots




Traffic information




Accommodation information

Digital Signage Functions

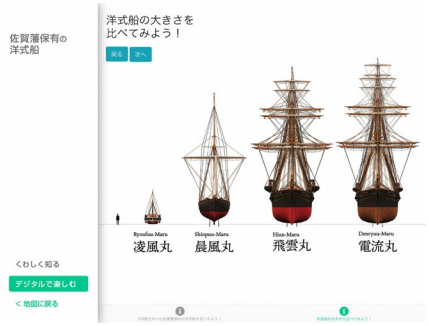
Digital signage has been installed in the Industrial Heritage Information Centre as a mechanism for encouraging multi-destination tourism by displaying local guide maps and information on multi-destination industrial heritage routes. AI chatbots have also been installed to respond to a wide range of multi-destination routes and tourism questions in real time.


**Appendix 1-5**

Enhancement of digital content

An official guide app, Reki Navi, which applies digital technology, is available at the visitor centre and on-site. The app provides detailed interpretations of the items on display with images, videos, 3D computer graphics, text, etc. and links the exhibits by providing complementary information at the visitor centre and onsite.

○Detailed interpretation function


○Digital content



○Linkage between the center and external locations



○Commemorative photo function


Visitor Centres

The Saga Area is equipped with one visitor centre and one auxiliary facility with exhibits of component parts and the industrial sector in line with the interpretation strategy. Each facility cooperates with the local community to prepare exhibits that best bring out the true World Heritage values in harmony with the historical and cultural values of the region. They aim to create exhibits that allow visitors to understand the value of the components easily.
Based on points raised in interpretation audits, local visitor centres will work with the Industrial Heritage Information Centre to digitize a huge volume of primary historic materials and use digital tools to enhance exhibits.

[Sano Tsunetami and the Mietsu Naval Dock History Museum]

This is the Mietsu Naval Dock guidance facility which reopened on September 25, 2021, after renovations. It is equipped with a common exhibition that provides an overview of the World Heritage as a whole, its values, and the Mietsu Naval Dock as a component part. The facility also recreates a full-scale model of a portion of the dry dock in the underground area of the Mietsu Naval Dock and a large screen that introduces the atmosphere back in the times.
(Official website) https://sano-mietsu-historymuseum.city.saga.lg.jp/


**Appendix 1-5**

[Saga Castle History Museum]
(Official website) https://saga-museum.jp/sagajou/

# Appendix 1-5

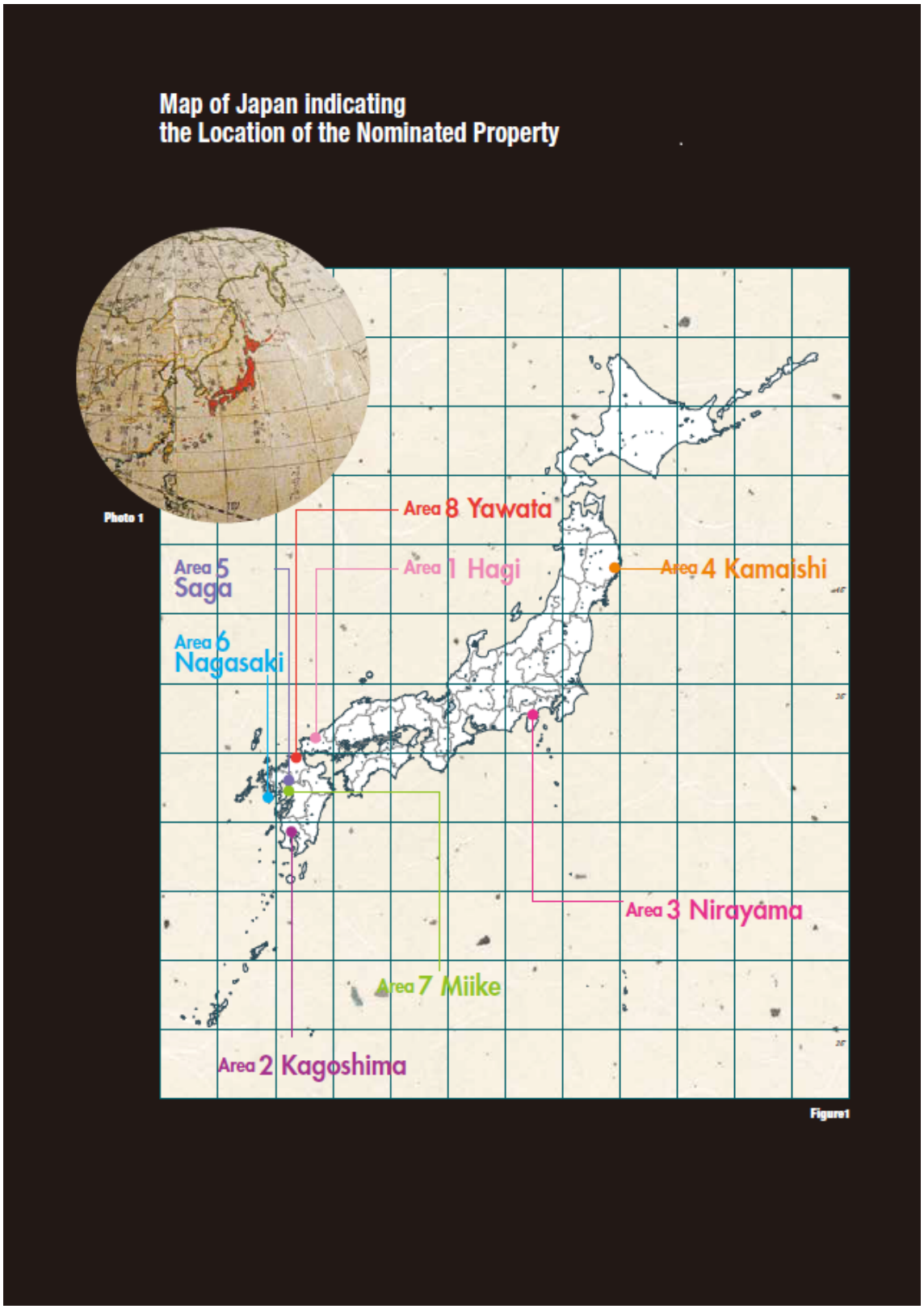
Area6 Nagasaki

Appendix 1-6

# AREA-SPECIFIC INTERPRETATION PLAN

Nagasaki Conservation Council

【Area List】


Map of Japan indicating
the Location of the Nominated Property
Photo 1
Area 8 Yawata
Area 1 Hagi
Area 4 Kamaishi
Area 5
Saga
Area 6
Nagasaki
Area 3 Nirayama
Area 7 Miike
Area 2 Kagoshima
Figure1

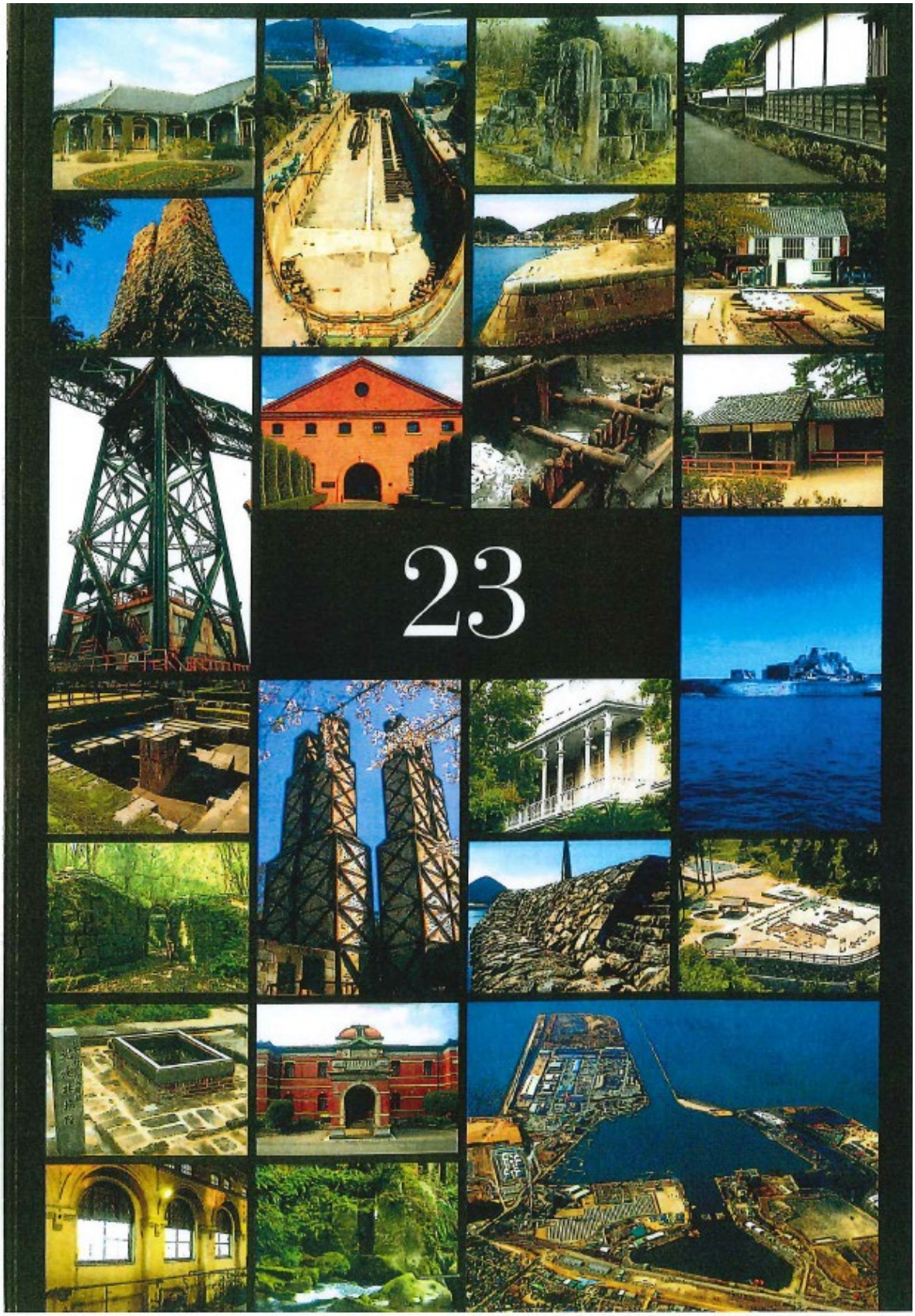
【Component Name】

## List of the Component Parts

| Area | Site | ID | Component Part |
|---|---|---|---|
| A1 Hagi | 1 Hagi Proto-industrial Heritage | 1-1 | Hagi Reverberatory Furnace |
| | | 1-2 | Ebisugahana Shipyard |
| | | 1-3 | Ohitayama Tatara Iron Works |
| | | 1-4 | Hagi Castle Town |
| | | 1-5 | Shokasonjuku Academy |
| A2 Kagoshima | 2 Shuseikan | 2-1 | Shuseikan |
| | | 2-2 | Terayama Charcoal Kiln |
| | | 2-3 | Sekiyoshi Sluice Gate of Yoshino Leat |
| A3 Nirayama | 3 Nirayama Reverberatory Furnaces | 3-1 | Nirayama Reverberatory Furnaces |
| A4 Kamaishi | 4 Hashino Iron Mining and Smelting Site | 4-1 | Hashino Iron Mining and Smelting Site |
| A5 Saga | 5 Mietsu Naval Dock | 5-1 | Mietsu Naval Dock |
| A6 Nagasaki | 6 Nagasaki Shipyard | 6-1 | Kosuge Slip Dock |
| | | 6-2 | Mitsubishi No.3 Dry Dock |
| | | 6-3 | Mitsubishi Giant Cantilever Crane |
| | | 6-4 | Mitsubishi Former Pattern Shop |
| | | 6-5 | Mitsubishi Senshokaku Guest House |
| | 7 Takashima Coal Mine | 6-6 | Takashima Coal Mine |
| | | 6-7 | Hashima Coal Mine |
| | 8 Glover House and Office | 6-8 | Glover House and Office |
| A7 Miike | 9 Miike Coal Mine and Miike Port | 7-1 | Miike Coal Mine and Miike Port |
| | 10 Misumi West Port | 7-2 | Misumi West Port |
| A8 Yawata | 11 The Imperial Steel Works, Japan | 8-1 | The Imperial Steel Works, Japan |
| | | 8-2 | Onga River Pumping Station |

Table1

3


23

SITES OF
JAPAN'S
MEIJI INDUSTRIAL
REVOLUTION
IRON & STEEL, SHIPBUILDING
AND COAL MINING

# Executive Summary

## Brief Synthesis

"Sites of Japan's Meiji Industrial Revolution: : Iron and Steel, Shipbuilding and Coal Mining" comprise a singular ensemble of industrial heritage sites that represent the first successful transfer of industrialization from the West to a non-Western nation.

From the middle of the 19th century to the early 20th century, Japan achieved rapid industrialization that was founded on the key industrial sectors of shipbuilding, iron and steel, and coal mining. The initial phase was one of trial and error experimentation in iron making and shipbuilding, based mostly on Western textbooks, and by copying examples of Western ships. This was followed by the more successful importation of Western technology and the expertise to operate it and, by the late Meiji period, full-blown industrialization through newly acquired domestic expertise and the active adaptation of Western technology to best suit Japanese needs and social traditions. This successful industrialization was achieved in just a little over 50 years without colonization, and on Japan's own terms. The property is testimony to this unique phase in world history.

# Justification for Criteria

**Criterion (ii)**

The property is a series of heritage sites that, together, uniquely illustrate the process by which feudal Japan sought technology transfer from Western Europe and America from the middle of the 19th century. This technology was adopted and progressively adapted to satisfy specific domestic needs and social traditions, thus enabling Japan to become a world-ranking industrial nation by the early 20th century.

**Criterion (iv)**

The technological ensemble of key industrial sites of shipbuilding, iron and steel, and coal mining is testimony to Japan's unique achievement in world history as the first non-Western country to successfully industrialize. Viewed as an Asian cultural response to Western industrial values, the ensemble had no counterpart elsewhere in the world.

# Statement of Integrity

The 23 component parts are the best, and often the only, surviving examples of the key attributes that represent shipbuilding, the iron and steel, and coal mining industries and that are necessary to express Outstanding Universal Value. In each case, the boundary of the component part has been drawn to include the essential features that, overall, contribute to Outstanding Universal Value.

Component parts are in good condition and have mechanisms in place to control deterioration and keep sites free from the adverse effects of development. They have been variously affected by continued use, re-use or lengthy periods of abandonment, and their physical integrity varies between well preserved and fragmentary, the latter being sufficiently intact to be able to represent the former whole. In some cases, where the evidence is primarily archaeological, sufficient investigation has been carried out to verify that a substantial archaeological site survives in good condition for further study and presentation. In other cases, in particular those that remain in operational industrial use, ongoing use and maintenance have resulted in an extraordinarily high level of integrity of working industrial elements.

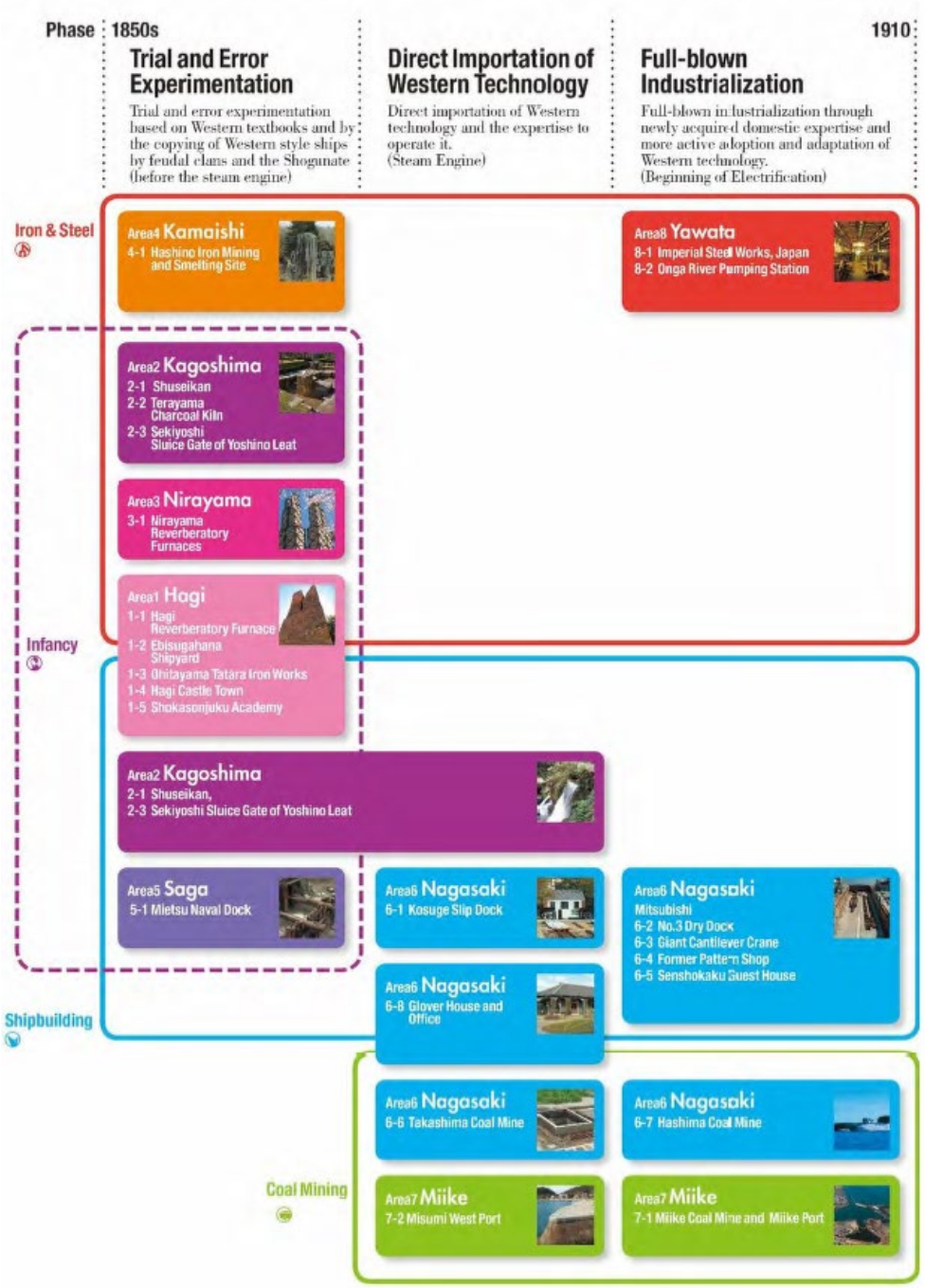
# Statement of Authenticity

The property as a whole as well as at the level of each component part meets the conditions of authenticity in relation to Outstanding Universal Value. It has a high degree of authenticity as the best surviving group of industrial remains that represent, and demonstrate, the first, and rapid, transfer of industrialization from the West to a non-Western nation.

With regard to 'form and design' and 'materials and substance', the component parts constitute the original forms and materials of the range of industrial components necessary to represent the transfer of heavy industry from the West to Japan. Some contain sites that range from fragmentary or archaeological, that are nonetheless authentic relics of important industrial components of the series, to those that comprise substantially intact authentic physical remains that have been managed for many years as historic sites which display these characteristics. Others possess an extremely complete survival not only of form, design and materials but also of continuing use and function.

Industrial History Related to the Nagasaki Area

The Nagasaki area contains multiple component parts chronicling the second and third phases (respectively, direct importation of western technology and full-blown industrialization) of the shipbuilding and coal mining aspects of the World Heritage Listed “Sites of Japan’s Meiji Industrial Revolution: Iron and Steel, Shipbuilding and Coal Mining.”



The Interpretation Strategy which the Cabinet Secretariat submitted to UNESCO on November 30, 2017, as an appendix to the State of Conservation Report noted the following:

**11. Interpretation Plan (extract)**

**(1) Consistent OUV rollout across all component parts**

Based on the Interpretation Strategy, the consistent interpretation of OUV should be presented across all component parts. This will be agreed by all stakeholders, and coordinated and implemented commonly in a branded World Heritage style.

**(2) and (3) Progress in dealing with the "full history" of each site, including information gathering related to workers**

Advice from international experts who are members of the Expert Committee on the Industrial Heritage including Operational Properties (Cabinet Secretariat of Japan), from the international heritage expert who was the ICOMOS technical evaluation field assessor of the World Heritage nomination of the "Sites of Japan's Meiji Industrial Revolution", and from the President of the ICOMOS International Scientific Committee on Interpretation and Presentation, comprises the following four key policies:

1) Focus on the interpretation of Outstanding Universal Value; in conformity with the primary purpose of the World Heritage, OUV of the inscribed property should be presented clearly at each site, not confusing with other, albeit related, issues. Based on this, Recommendation g)* should be implemented.

2) The scope of the "full history" of each site, except for the OUV period (from 1850s to 1910) as described on page 78, falls into two parts: prior to 1850s, and from 1910 to the present. The target of the full history should be narrowed down, considering the local values that supplement the understanding of the background of each component part. Where relevant, with regard to the interpretation of the full history on the location of each component part, high quality research such as collecting primary historical documents and recording oral testimonies should be carried out, and the result of this research should, at some stage, be made publicly available through appropriate media.

* Recommendation g)

> *"Preparing an interpretive strategy for the presentation of the nominated property, which gives particular emphasis to the way each of the sites contributes to OUV and reflects one or more of the phases of industrialisation; and also allows an understanding of the full history of each site."*

Based on the Interpretation Strategy, we have had multiple audits of the current status of interpretation at the component parts and visitor centres, etc., in the various areas undertaken by international experts familiar with industrial assets and the interpretation thereof in countries around the world.
As a result, auditor Barry Gamble identified the following issues in relation to the Nagasaki area.

- It is appropriate for the proposed 'Nagasaki Area Centre' to be located in the Former Mitsubishi No 2 Dock House in Glover Park to present the "common exhibition". This facility will optimize the existing catchment of over one million annual visitors. Together with other buildings and the spacious grounds in the park adjacent to Glover House, it is easily able to accommodate large numbers.
- An interpretation plan for the Glover House should be being developed in parallel with the current conservation works which are due to be completed within two years. We look forward to providing ongoing advice for the design and interpretive development of these two places.
- There is some merit in considering parallel planning with the proposed developments in Nagasaki and Saga as their content and timescales are to a degree overlapping.
- The Nagasaki Shipyard Museum clearly interprets and presents the history of the shipyard and its role as part of the overall WHS. There is the opportunity to increase the visitation to the facility. However, as the site is still operational, access will need to be managed by the company.
- The Takashima Coal Mining Museum should further embrace its association with the WHS by introducing greater visibility in branding, including further relevant interpretive content and raising its profile and visitor numbers through networking with other Component Parts in the Nagasaki Area. The World Cultural Heritage Division could provide advice to achieve this.

In the Nagasaki area, the Local Conservation Council has been discussing the Interpretation Plan.

Going forward, drawing also on those issues noted above, the council will work with the Industrial Heritage Information Centre to install the “common exhibition” in the former Mitsubishi No. 2 Dock House to ensure that the exhibition better reflects the value of the World Heritage while also aligning with the local historical and cultural values.

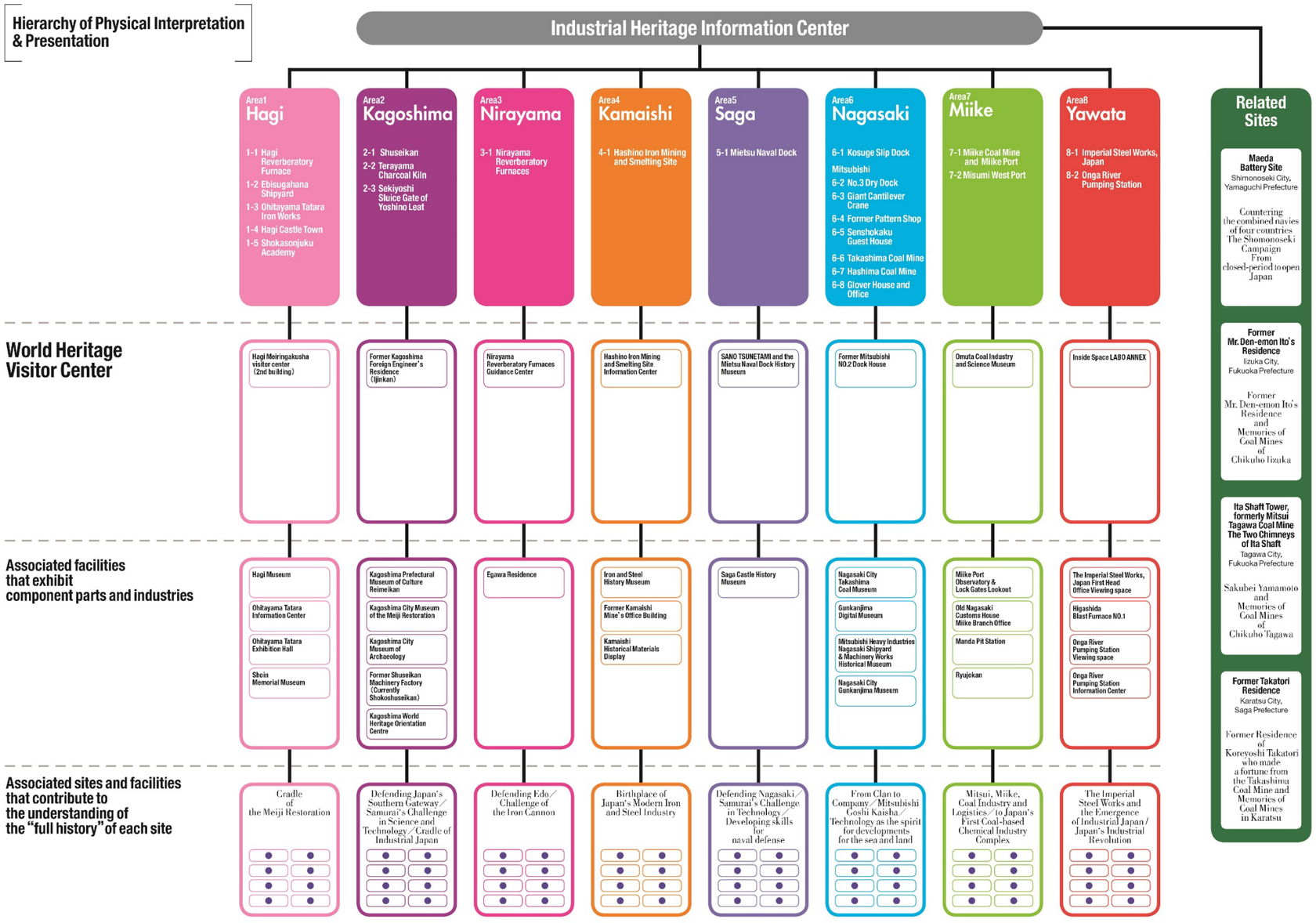
At the Glover House, conservation works have been completed and interpretation has been enhanced. In response to issues raised by international experts in relation to the Nagasaki Shipyard Museum and the Takashima Coal Mining Museum, interpretation will be approached based on an awareness of the relationship with other component parts.

The implementation status of the Interpretation Plan will be regularly checked by the Local Conservation Council, which will engage in considerations toward making improvements as necessary.

Local Conservation Council meeting

Hierarchy of Physical Interpretation and Presentation

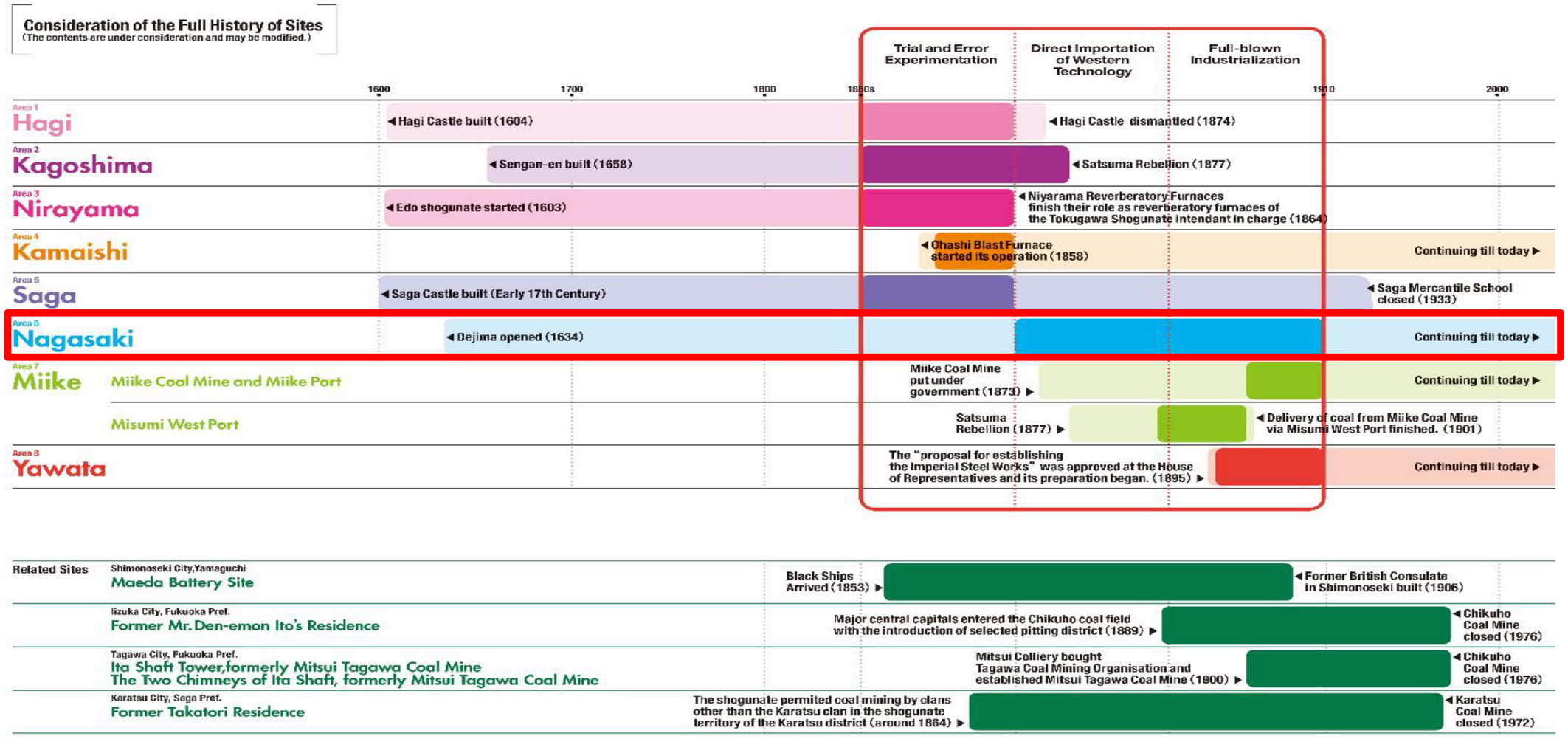
The Industrial Heritage Information Centre and the various local visitor centres will work together to build a system enabling the effective communication of the OUV of the Sites of Japan's Meiji Industrial Revolution.




Related sites: Sites that were component part candidates in the provisional UNESCO World Heritage listing on the January 5, 2009, and that comprise industrial heritage (valuable assets that provide insight into the historical background and social situation of the time) that will be utilized in an integrated manner with the World Heritage Listed "Sites of Japan's Meiji Industrial Revolution."

Consideration of the Full History of Sites

The Interpretation Strategy which the Cabinet Secretariat submitted to UNESCO in 2017, addressed consideration of the full history of sites as shown in the figure below.



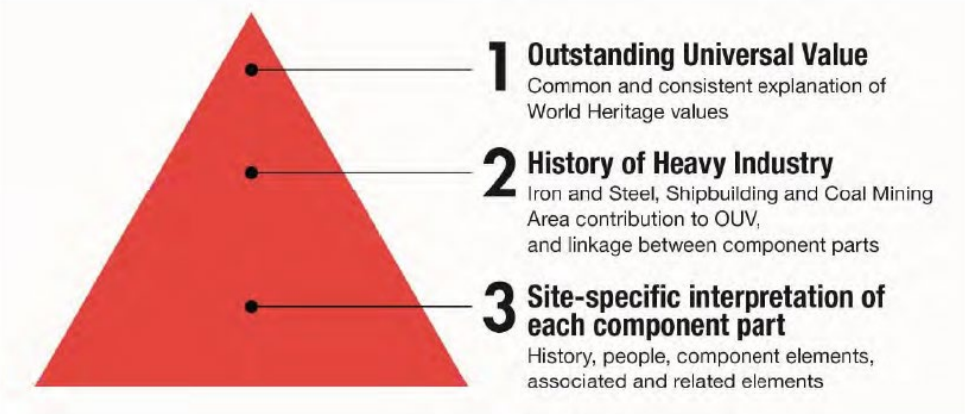
Interpretation in the Nagasaki Area

Approach of the Interpretation Strategy

The Interpretation Strategy provides the following schematic in relation to concepts for interpretation and presentation.

Interpretation for the Nagasaki area too will be approached in line with this in order to resolve the issues identified in interpretation audits.

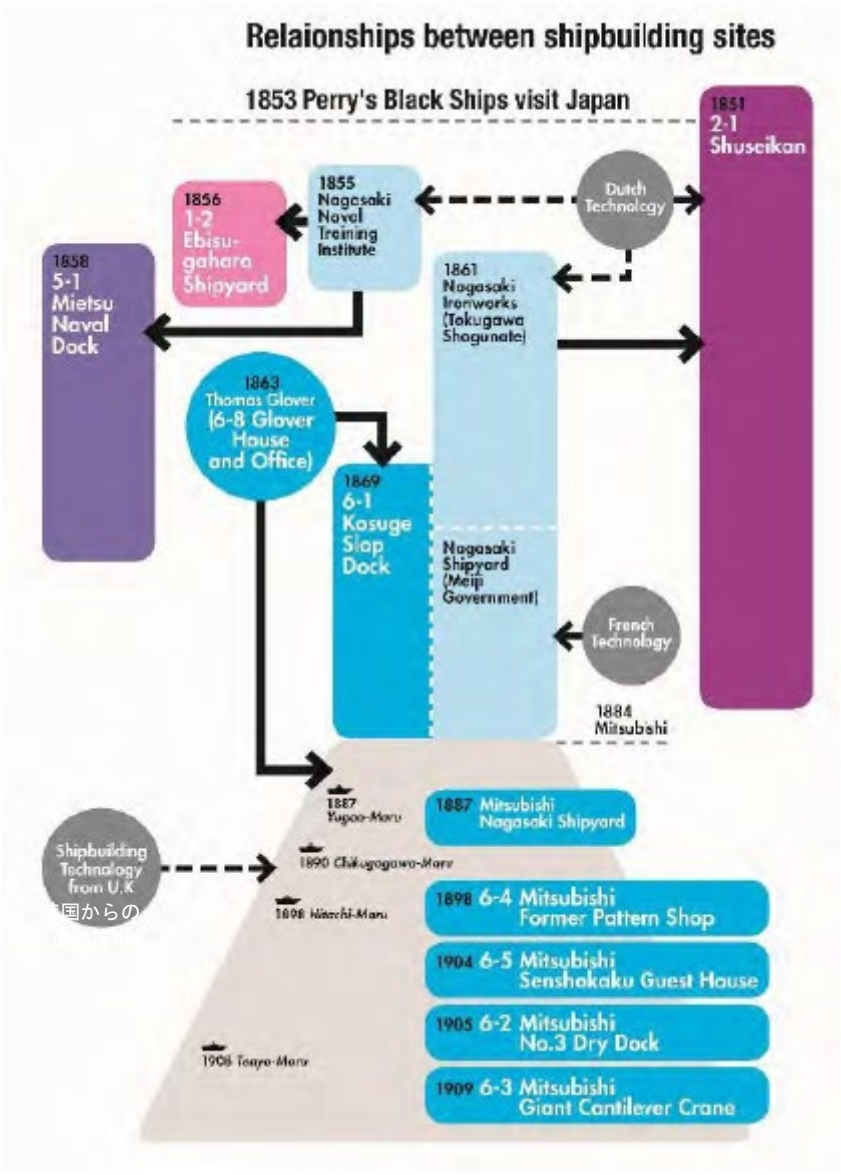
**Interpretation and presentation of the Sites of Japan's Meiji Industrial Revolution: Hierarchy of value and themes**

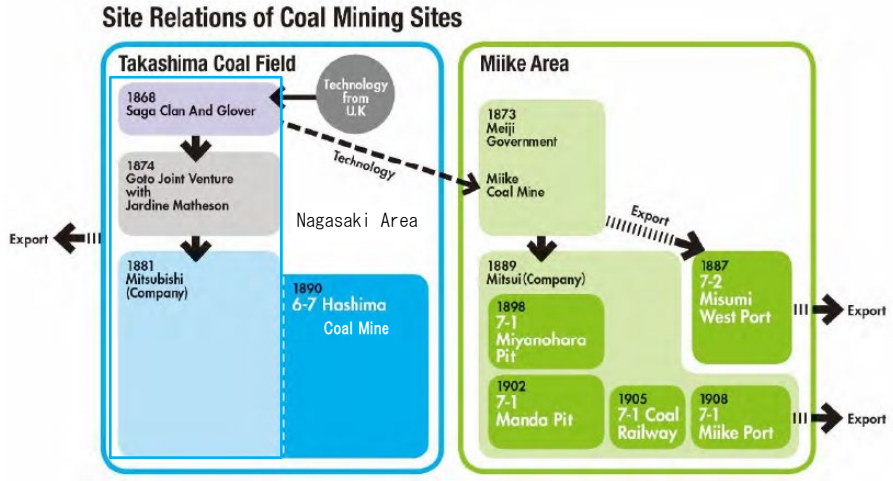



OUV stands at the top of the interpretation pyramid at the Industrial Heritage Information Centre and the various regions' visitor centres and is therefore the top-priority theme over the interpretation and presentation of individual regions and industries, such as history specific to an area or component part. Addressing interpretation in the order of (1) OUV, (2) the history of heavy industry, and (3) site-specific interpretation of each component part, as shown above, will ensure consistent presentation across the property

**Interpretation flow at each local visitor centre**

Hierarchy of Interpretation


Relaionships between shipbuilding sites
1853 Perry's Black Ships visit Japan
1851 2-1 Shuseikan
1855 Nagasaki Naval Training Institute
1856 1-2 Ebisu-gahara Shipyard
Dutch Technology
1858 5-1 Mietsu Naval Dock
1861 Nagasaki Ironworks (Tokugawa Shogunate)
1863 Thomas Glover (6-8 Glover House and Office)
1869 6-1 Kosuge Slop Dock
Nagasaki Shipyard (Meiji Government)
French Technology
1884 Mitsubishi
1887 Yugao-Maru
1887 Mitsubishi Nagasaki Shipyard
Shipbuilding Technology from U.K
1890 Chikugogawa-Maru
1898 Hitachi-Maru
1898 6-4 Mitsubishi Former Pattern Shop
1904 6-5 Mitsubishi Senshokaku Guest House
1905 6-2 Mitsubishi No.3 Dry Dock
1908 Toyo-Maru
1909 6-3 Mitsubishi Giant Cantilever Crane

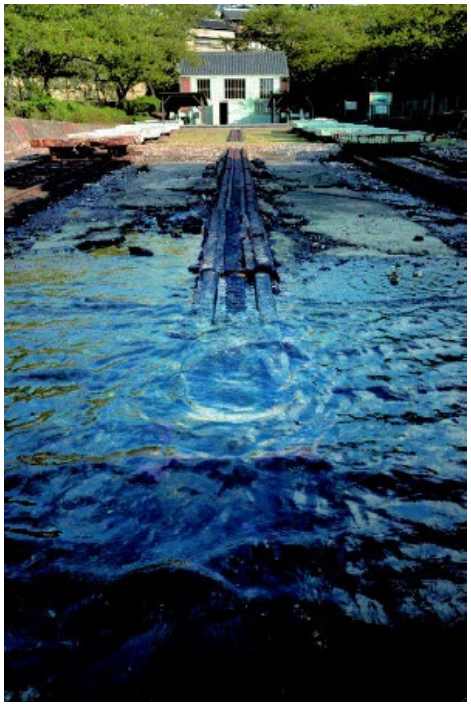

Site Relations of Coal Mining Sites
Takashima Coal Field
1868 Saga Clan And Glover
Technology from U.K
Technology
1874 Goto Joint Venture with Jardine Matheson
Nagasaki Area
Export
1881 Mitsubishi (Company)
1890 6-7 Hashima Coal Mine
Miike Area
1873 Meiji Government
Miike Coal Mine
Export
1889 Mitsui (Company)
1898 7-1 Miyanohara Pit
1887 7-2 Misumi West Port
Export
1902 7-1 Mando Pit
1905 7-1 Coal Railway
1908 7-1 Miike Port
Export

Presentation Using “Liquid Galaxy,” Etc.

The Industrial Heritage Information Centre, which was established in March 2020 pursuant to the Interpretation Strategy, uses an immersive video multi-display that draws on the World Heritage OUV period (1850s-1910), as well as the Consideration of the Full History of Sites schematic. It explains through images the history and transformation of component parts in the various areas, as well as the way that people lived, etc., presenting these in a way that enables visitors to experience in a very real way the evolution of the property, the contribution to OUV, and the full history.
The Nagasaki area too will work with the Industrial Heritage Information Centre to enhance interpretation by, for example, in future enabling a range of content to be viewed via an immersive multi-display. In addition, consideration will be given to creating a digital archive of materials gathered by the IHIC and the Nagasaki area visitor centres, with these materials progressively reflected in interpretation tools.

Nagasaki Area Component Parts

The Nagasaki area has a total of eight component parts, comprising sites related to shipbuilding and coal mining after the ban on the construction of large ships was lifted. They all have a connection to Thomas Glover and to Yataro Iwasaki, who worked in the Kaiseikan organization operated by the Tosa clan, which was extremely influential during the Meiji Restoration.

| | |
|---|---|
| Relevant industries: Shipbuilding<br>Name of component part: Kosuge Slip Dock<br>(Overview of component part)<br>Built in Nagasaki Port as a joint venture between Glover and the Satsuma clan, this was a Western-style slip dock equipped with a winch powered by Japan's oldest steam engine. The Slip Dock was bought up by the Meiji Government, and then acquired by Mitsubishi. The winch house was built using Japan's oldest existing "konnyaku" bricks (long, thin bricks). |  |
| Relevant industries: Shipbuilding<br>Name of component part: No. 3 Dry Dock<br>(Overview of component part)<br>A large-scale dry dock built during the Mitsubishi Goshi Kaisha years by cutting away the cliff behind the site and reclaiming the sea in front. The drain pump, powered by an electric motor from UK-based Siemens that was installed when the dock opened, is still in operation today. It is a precious asset that remains as it was in the Mitsubishi Goshi Kaisha days. |  |

| | |
|---|---|
| Relevant industries: Shipbuilding<br>Name of component part: Giant Cantilever Crane<br>(Overview of component part)<br>Japan's first electric crane of this type was produced by UK-based company Appleby for Mitsubishi Goshi Kaisha when the shipyard was electrified. Powered by an electric motor and able to lift fittings for large ships and other such heavy loads, the crane was then state of the art machinery. It is still used today to load products on to ships. |  |
| Relevant industries: Shipbuilding<br>Name of component part: Former Pattern Shop<br>(Overview of component part)<br>The Pattern Shop was built during the Mitsubishi Goshi Kaisha years in response to the increasing demand for cast products. A two-story brick building with a wooden roof truss, it made wooden molds for casting production. The building was reborn in 1985 as a museum showcasing the history of the Nagasaki Shipyard, and today it is the only facility in the shipyard that is open to the public. |  |
| Relevant industries: Shipbuilding<br>Name of component part: Senshokaku Guest House<br>(Overview of component part)<br>A wooden two-story Western-style building constructed on a hill overlooking the No. 3 Dry Dock during the Mitsubishi Goshi Kaisha years. Originally designed as a residence for Nagasaki Shipyard director Heigoro Shoda, it was turned into a guesthouse. The year after its completion, it was named "Senshokaku" (from the Japanese characters meaning "to command a view of picturesque natural scenery") in appreciation of the magnificent view. It is still used by the shipyard as a guesthouse. |  |

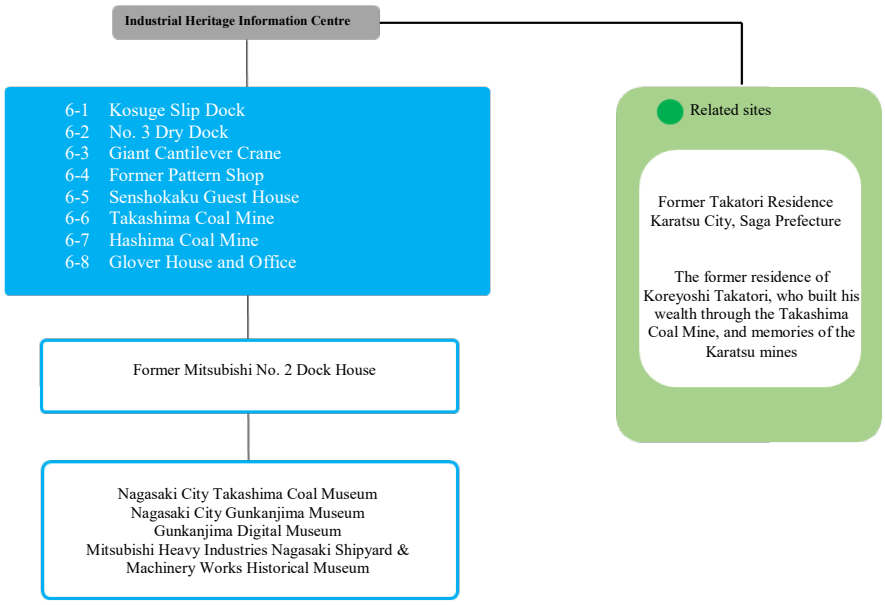
| | |
|---|---|
| Relevant industries: Coal mining<br>Name of component part: Takashima Coal Mine<br>(Overview of component part)<br>Thomas Glover developed the Takashima Coal Mine at the Nishisonogi coalfield as a joint venture with the Saga clan, introducing Japan's first steam engine. In 1881, the mine came under the control of Mitsubishi, which reemployed Glover and placed mine operations on a solid trajectory. |  |
| Relevant industries: Coal mining<br>Name of component part: Hashima Coal Mine<br>(Overview of component part)<br>Owned by Mitsubishi Goshi Kaisha, which covered coal demand with the Takashima Coal Mine as its main pit. All that is left today is the remains of the pit mouth and other production facilities, the old revetments revealing the multiple expansions of the coastline, and the ruins of the high-rise concrete apartment buildings which have value as cultural property. |  |
| Relevant industries: Shipbuilding, Coal mining<br>Name of component part: Glover House and Office<br>(Overview of component part)<br>The center of operations for Scottish-born merchant Thomas Glover, who associated with the leading spirits of the Meiji Restoration and became a catalyst for that movement. As a businessman too, he was a pioneer in Japan's modernization in the areas of coal mining and shipbuilding, turning the Kosuge Slip Dock and the Takashima Coal Mine into commercial operations and contributing to industrial development. |  |

World Heritage Plaques

In line with the UNESCO Guidelines, World Heritage plaques have been installed at the various component parts to inform visitors properly about the OUV of the property.

Nagasaki Area: Distribution of Interpretation Facilities

Nagasaki Area: Hierarchy of Physical Interpretation and Presentation




Access Guide Maps

Access guide maps for the component parts in each area have been produced in both Japanese and English and are distributed free to visitors. The Nagasaki area map will also be available in Chinese and Korean as of early December. The access maps are designed to help tourists orient themselves in relation to the component parts of the various areas and enable them to visit as many component parts as possible within each area.

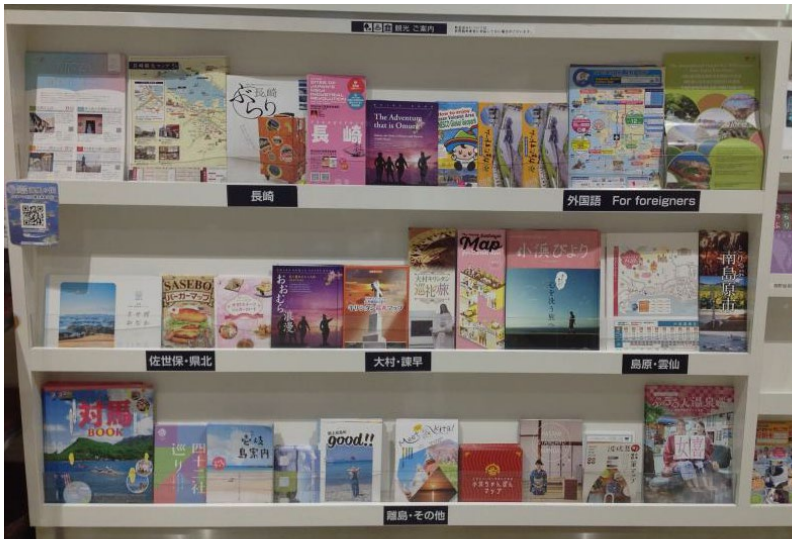
By linking the maps to a smartphone app, information can be communicated about component parts not open to the public using augmented reality (AR) functions to show 3D models, videos, and 360-degree panorama views of inaccessible sites.



Information Counters

These are set up in administrative institutions and airports to distribute access guide maps and other information.


Nagasaki City Hall




Nagasaki Airport

Guide Map Distribution Points and Number of Maps Distributed

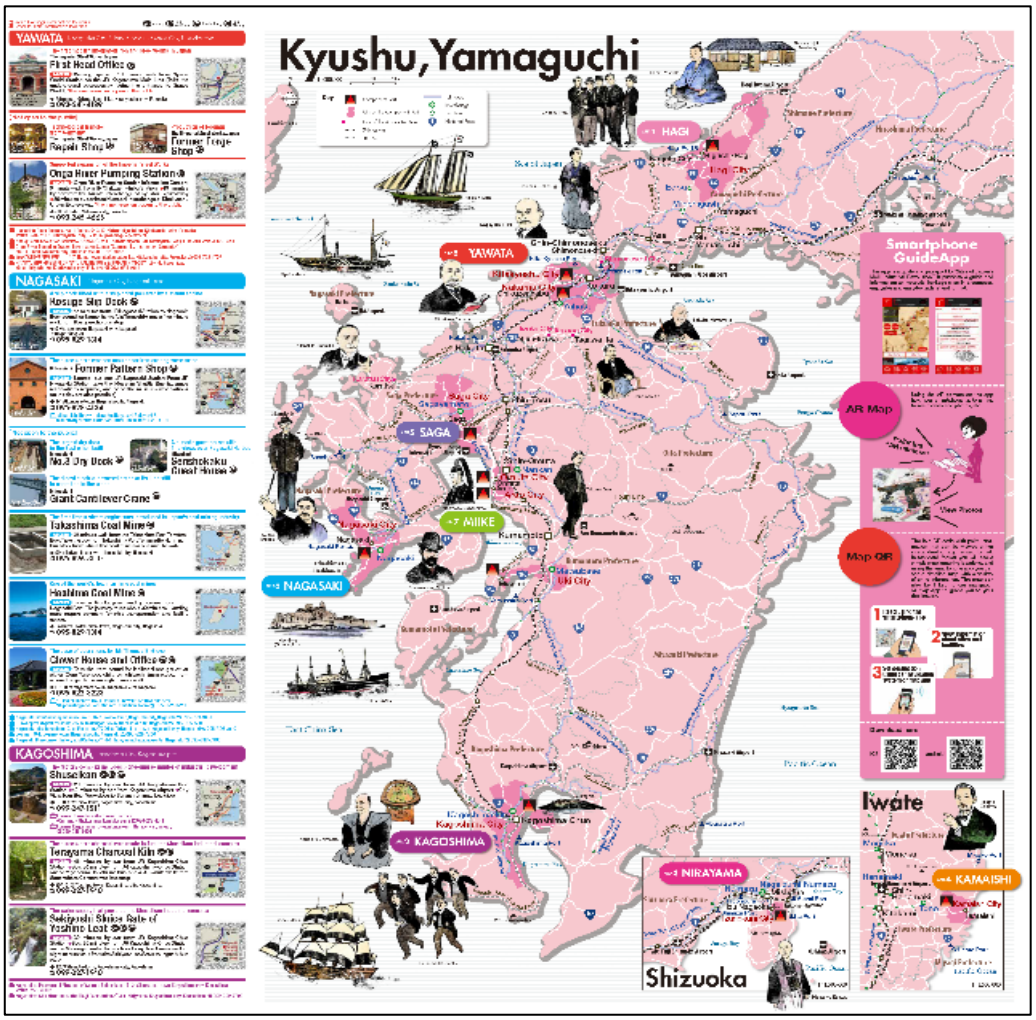
Guide map distribution points and the number of maps distributed are as follows.

| PROPERTY MAP | | NAGASAKI MAP | |
|---|---|---|---|
| **Total distributed** | **177,762** | **Total distributed** | **43,820** |
| Japanese & English | 177,762 | Japanese | 43,820 |
| **Main distribution points** | **No. distributed** | **Main distribution points** | **No. distributed** |
| Administrative institutions | 300 | Administrative institutions | 14,605 |
| Airports | 550 | Airports | 1,300 |
| Hotels | 50 | Hotels | 1,600 |
| Rental cars | 100 | Rental cars | 100 |
| JR (Rail) | 600 | JR (Rail) | 800 |
| Tourist information offices | 700 | Tourist information offices | 731 |
| Rest stops | 4,400 | Rest stops | 700 |
| NEXCO | 168,500 | NEXCO | 6,800 |
| Public interest corporations, foundations, incorporated associations | 550 | Public interest corporations, foundations, incorporated associations | 850 |
| | | | |
| Other | 2,012 | Other | 16,334 |
| JR Kyushu Hakata Station Information Center | | Glover Garden | |
| West Nippon Expressway retail Company Ltd. | | Yamasa Shipping Co., Ltd. | |
| West Nippon Expressway Service Holdings Co., Ltd. | | Gunkanjima Digital Museum | |
| Fugetsu Foods Co., Ltd. | | Mitsubishi Heavy Industries, Ltd. | |
| Fukuoka International Airport Co., Ltd. | | JTB Corporation | |
| Nagasaki Airport | | Nakama City Community Center “Nakama Gaido no Kai” | |
| Kagoshima Prefectural Library | | Seaman Company | |
| JR Kagoshima-Chuo Station Tourist Information Center | | Nagasaki Museum of History and Culture | |
| Kitakyushu Convention & Visitors Association | | Fukuoka City Tourist Information Center | |
| Industrial Promotion Department, Omura City Office | | Hakata Station Tourist Information Center | |
| JR Miyazaki Station Tourist Information Center | | Fukuoka Airport | |
| | | Nagasaki Airport | |

| Cumulative total distributed across all areas |
|---|
| **464,025** |

World Heritage Route

In accordance with the Interpretation Strategy, and also as noted in pages 395–396 of the Nomination Document, the World Heritage Route Promotion Council was founded to provide guidance and tourism infrastructure for understanding World Heritage as a whole. The Council attracts visitors to all component parts and related sites by producing maps, apps, and GPS navigation and by installing road signs and other signage using the common logo to promote the Sites of Japan's Meiji Industrial Revolution so that visitors are able to understand the World Heritage value constituted by the 23 component parts.
Work will continue to be undertaken steadily pursuant to the Nomination Document and the Interpretation Plan.




Map on p. 396 of the Nomination Document


World Heritage Route Promotion Council meeting

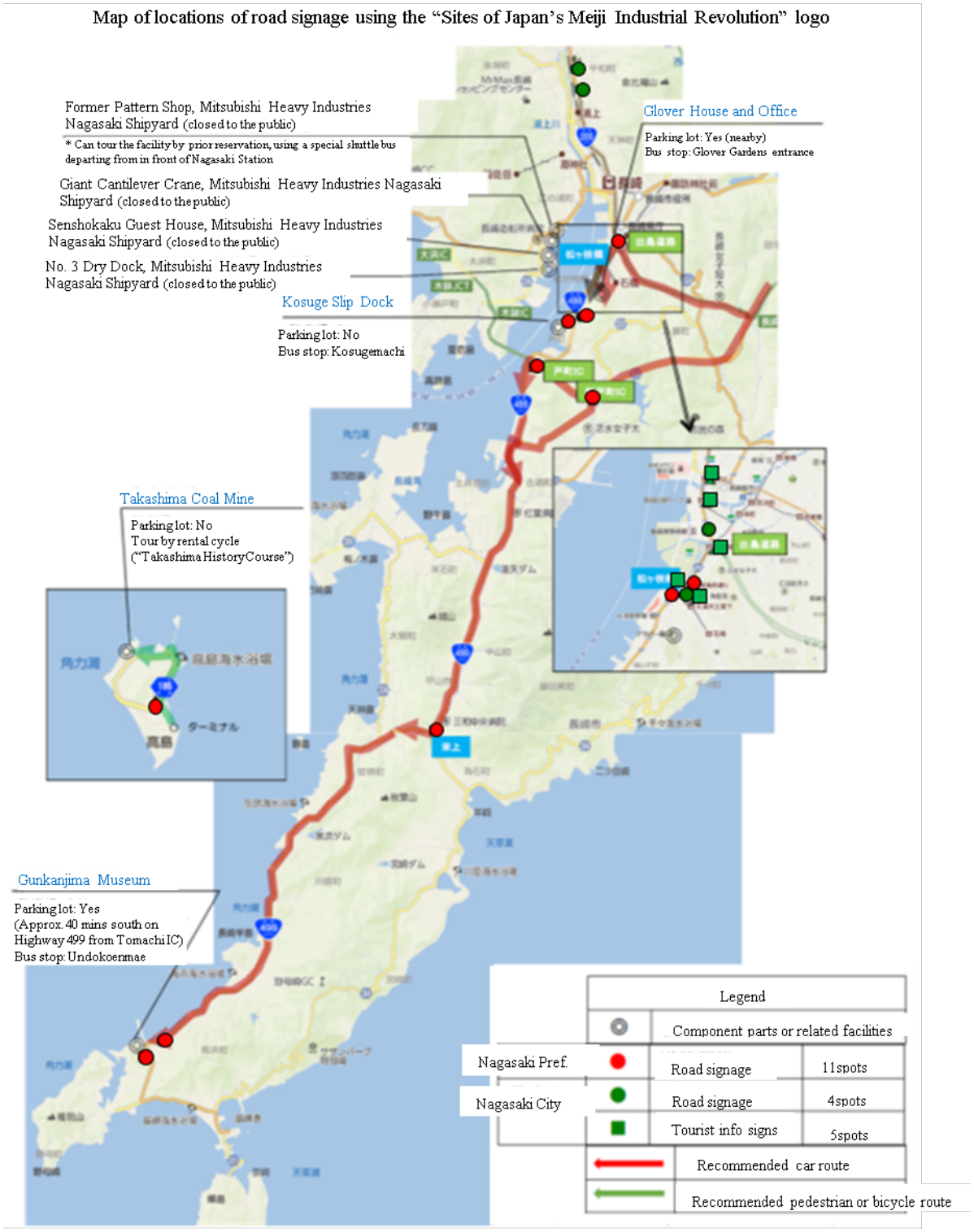
Installation of Road Signage, Etc., Using the Common Logo

Status of installation of road signage

| Place | No. of signs installed |
|---|---|
| Nagasaki City | 20 |

Photos of road signage


## Locations of Road Signs Using the Common Logo

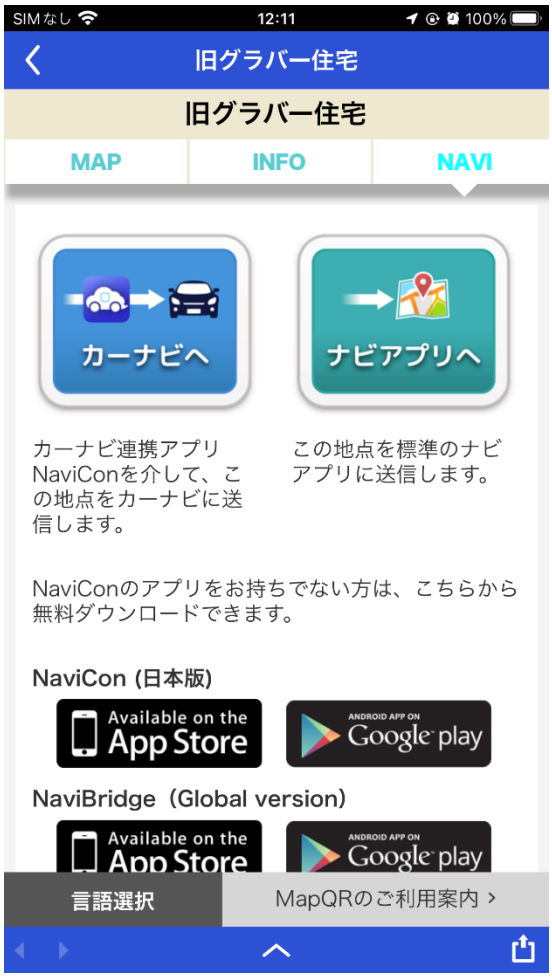


Linkage with Car Navigation (Denso Car Navigation)

Example of linkage with smartphone app so that the target destination can be sent to a car navigation system




The destination can be sent directly from a smartphone to the car navigation system.





A video on how to use the application has been put up on YouTube.

App Utilization

The app introduces the Sites of Japan's Meiji Industrial Revolution, including detailed stories and explanations, as well as the historical background, using video and computer graphics, etc. Users can earn points by playing games and using the AR camera on the app and use them as coupons for souvenirs and other prizes. As such, it serves as a mechanism for both deepening understanding of World Heritage value and feeding back into World Heritage Route tours. The smartphone app is available in Japanese, English, Korean, simplified Chinese, traditional Chinese, and Vietnamese.



Onsite camera (CG)

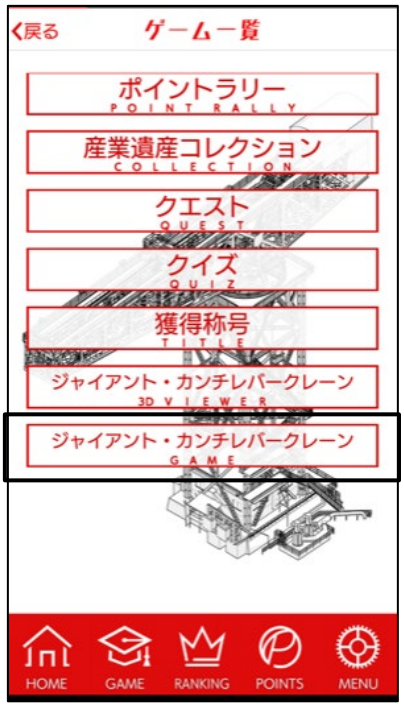
Nagasaki Shipyard Conservation and Management Plan

| |
|---|
| In addition to physical inspection of the Former Pattern Shop and via harbour cruises, MHI will, provided that there are no commercial issues, cooperate with a proposal presented by the Scottish Government and Japanese Government in a Joint Venture which will: 1) digitally document, using laser scanning technology, the Giant Cantilever Crane, producing a 3D model of the structure which can be used as an accurate baseline record; 2) through the production of the 3D model, enable the monitoring and analysis of the fabric of the crane as it continues to operate within the shipyard, thereby supporting its long-term conservation; 3) increase public awareness, interest and education through visual presentation, including the provision of virtual public access using the 3D model; and 4) build capacity through sharing experience and expertise in digital documentation and conservation technologies. |

While some component parts are not open to the public because they are working facilities, visitors can view them via the app. In the Nagasaki area too, while the Giant Cantilever Crane and No. 3 Dry Dock at the Mitsubishi Heavy Industries Nagasaki Shipyard are closed to the public, video created from scanned data enables visitors to deepen their understanding by examining the sites right down to the fine details. This app-based presentation strategy is being advanced based on the Conservation and Management Plan (CMP) submitted to UNESCO and could also be used to communicate information about other component parts which are similarly closed to the public.

Example of an Initiative to Increase Digital Access Noted in the CMP

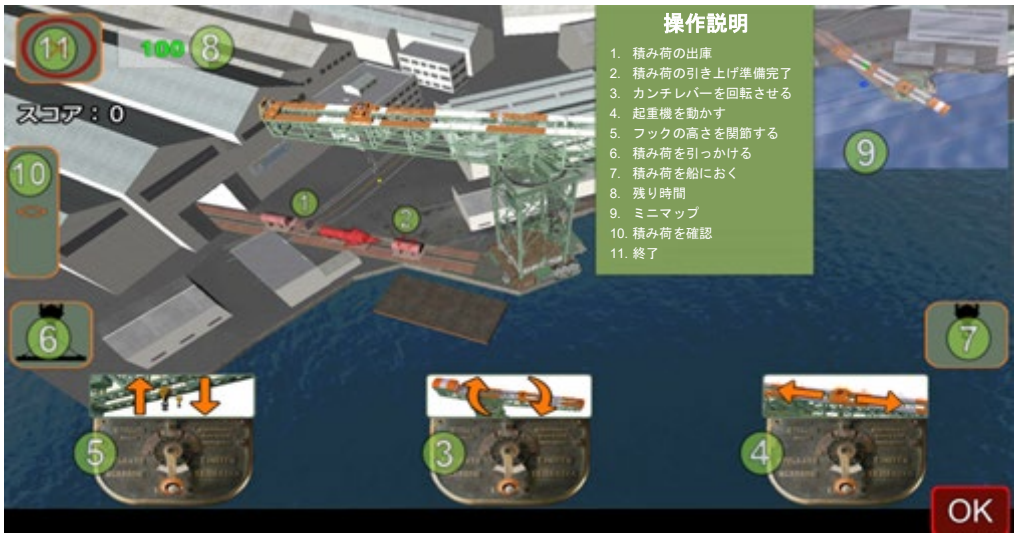
- Giant Cantilever Crane Simulation Game



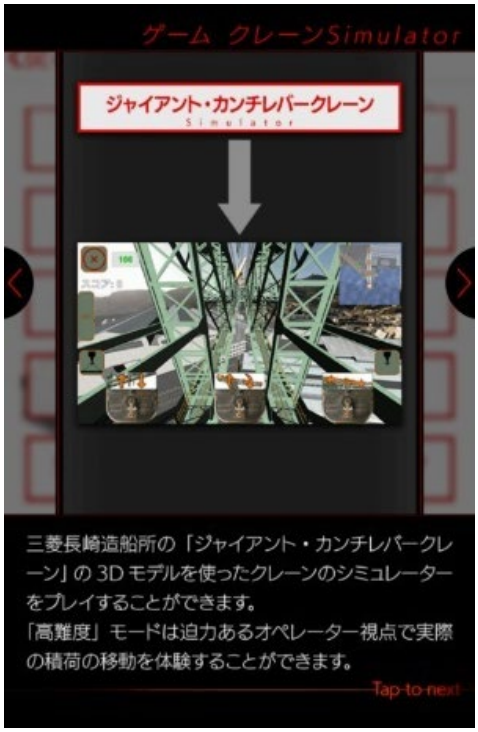


Choose from easy and difficult levels

Easy level



Difficult level

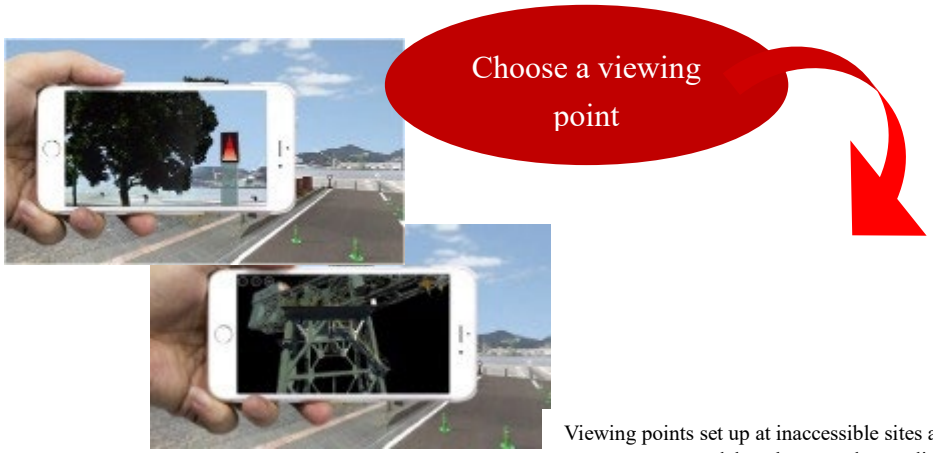




Visitors can look across at the Giant Cantilever Crane from the Nagasaki Seaside Park and watch a video by activating the AR camera while onsite.

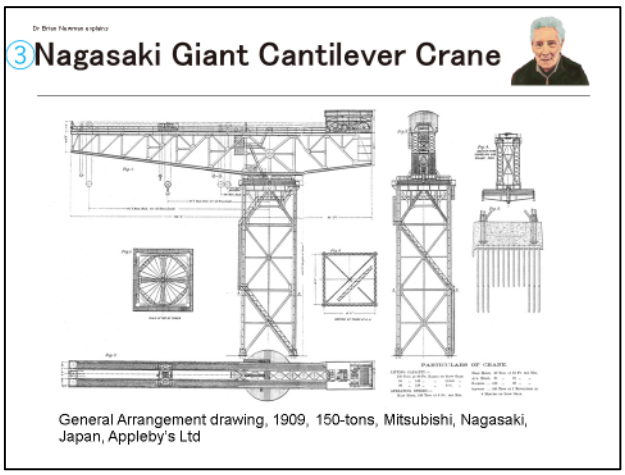

▪ Giant Cantilever Crane Simulator

The app uses 3D measurement data to provide visitors with a detailed and immersive experience of the crane's structure, etc. Linking the app to GPS encourages people to visit World Heritage sites by limiting simulation use to the vicinity of the component parts.




Viewing points set up at inaccessible sites and linked to 3D models to boost understanding

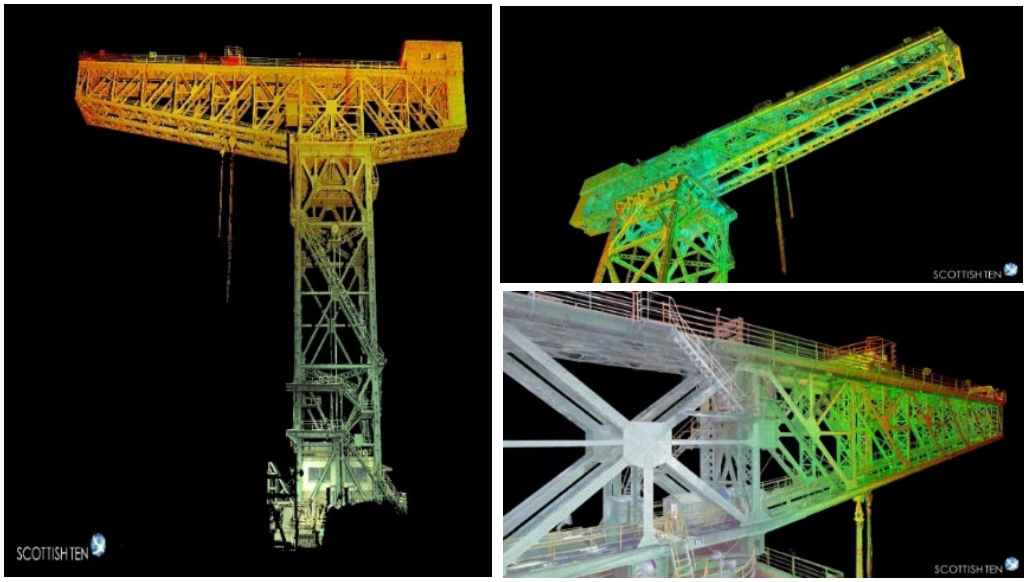
The Industrial Heritage Information Centre offers a commentary by Dr. Brian Newman on the Giant Cantilever Crane. This, together with the Giant Cantilever Crane exhibits in the Nagasaki area, is part of a comprehensive approach designed to realize interpretation that meets international best practices.




Use of Scottish Ten Laser Scan Data

This project set out in late 2009 to digitally document Scotland's then five World Heritage Sites and a further five international heritage sites to create accurate 3D data to help with their conservation and management, their interpretation and virtual access. As part of the Scottish Ten 3D digital documentation, laser scans were made of Nagasaki's Giant Cantilever Crane, the Nagasaki Shipyard No. 3 Dry Dock, the Kosuge Slip Dock, and Hashima Island. The data was uploaded as official World Heritage app content and is used to provide virtual site visits. The plan is also to use it for conservation, management, and repair work in future.

Laser scan images of the Giant Cantilever Crane

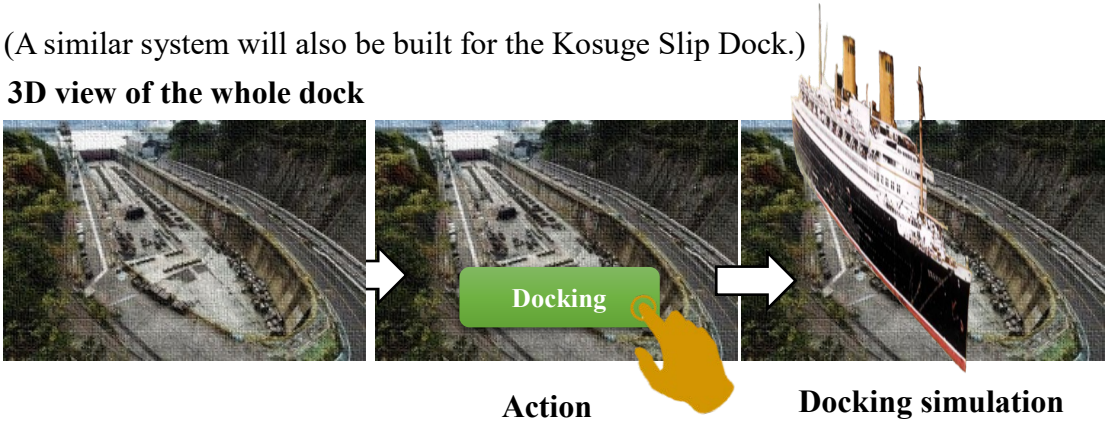



Laser scan image of Hashima Island

○ Use of a 3D model of the Nagasaki Shipyard No. 3 Dry Dock (planned)
Visitors will be able to use the app to experience a ship coming into dock at the No. 3 Dry Dock, which is closed to the public. The idea is to communicate information about the functions of this component part and promote understanding.

(A similar system will also be built for the Kosuge Slip Dock.)

**3D view of the whole dock**




Use of Line App

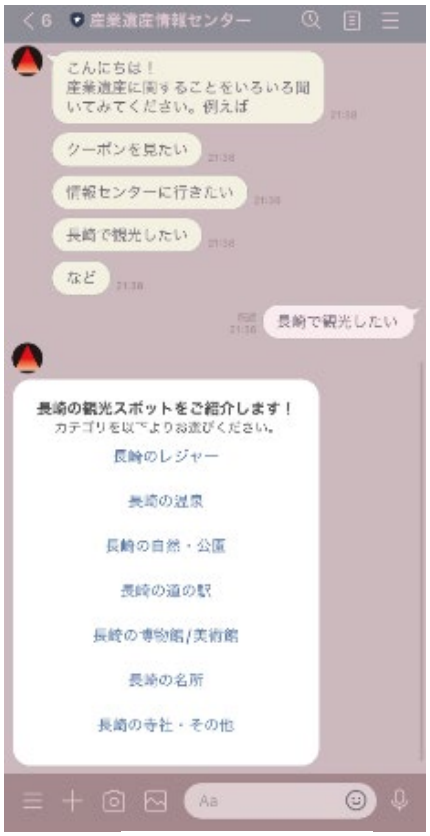
Points acquired on the app can be exchanged for coupons.


Point-of-purchase advertising has been created and placed in stations and information centres, etc., to encourage people to sign up to the LINE app.


LINE is used as a runway for achieving two-way communication geared to the circumstances of the user based on locational information, such as the use of existing guide apps and communication about coupons that can be used in shops at the area visited. The service is provided in multiple languages so as to support international visitors.

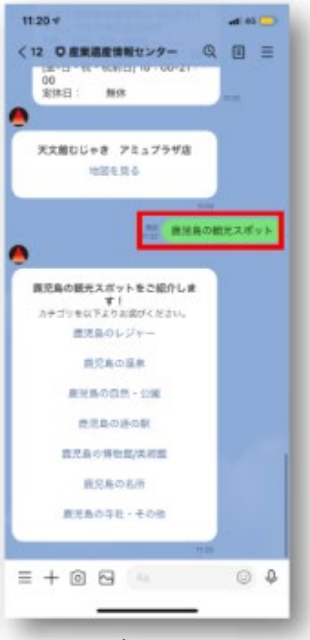
LINE functions (examples)


Introduction to model courses

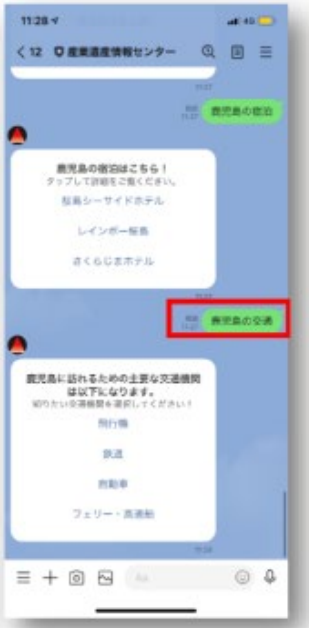



AI chatbot function

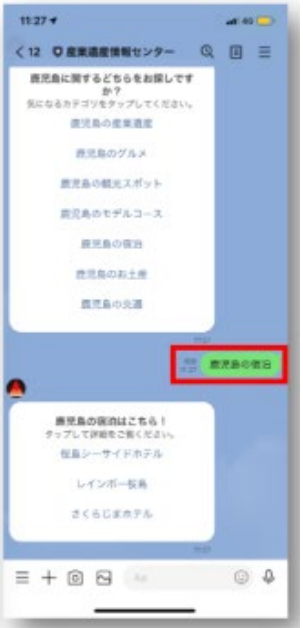
Gourmet information



Tourist spots



Traffic information



Accommodation information

Digital Signage Functions

Digital signage has been installed in the Industrial Heritage Information Centre as a mechanism for encouraging multi-destination tourism by displaying local guide maps and information on multi-destination industrial heritage routes. AI chatbots have also been installed to respond to a wide range of multi-destination routes and tourism questions in real time.


Visitor Centres

In line with the Interpretation Strategy, the Nagasaki area has created five interpretation facilities, one of which is a visitor centre located in the former Mitsubishi No. 2 Dock House. Each centre aims to work with the local community to provide exhibits that facilitate visitor understanding of the value of the property, foregrounding the presentation of the intrinsic value of the World Heritage while also ensuring alignment with local historical and cultural values. Based on points raised in interpretation audits, local visitor centres will work with the Industrial Heritage Information Centre to digitize a huge volume of primary historic materials and use digital tools to enhance exhibits.

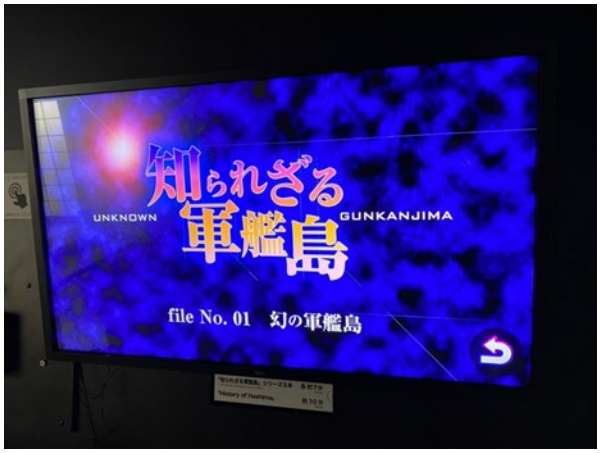
Reference: Projection mapping at Hashima Island at the time of World Heritage listing

[Gunkanjima Digital Museum]

This facility offers a range of exhibits that use projection mapping on giant screens and VR based on the latest digital technologies, etc., to provide an experience of parts of the island closed to island tours, as well as the lifestyles of long-ago island residents.

Projection mapping on giant screens

Video content by theme (“Unknown Gunkanjima” series)

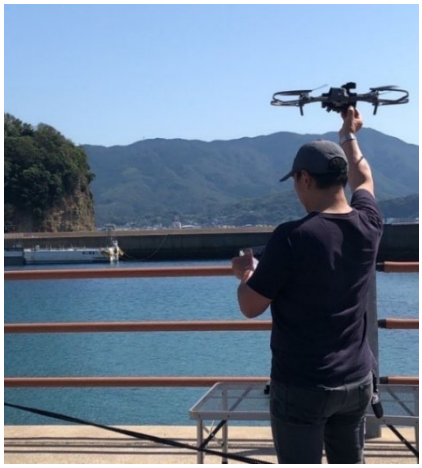




Working with the local community to use digital data from photographs of Hashima Island primary materials and present it as digital content that can only be viewed at the museum

VR videos

Drone footage of the apartment blocks and other off-limit areas goes right inside buildings, providing viewers with a VR experience of those areas.



Aerial photo

Photo of Building No.30 interior

Digital Museum website

[Former Mitsubishi No. 2 Dock House]

This facility is a visitor centre for the Nagasaki area, and is located in Glover Garden, where Glover House and Office are located, which is one of the components of the Nagasaki area that is easily accessible to tourists. The content of the exhibits will be reviewed in FY2022, and the facility will be developed in phases from FY2023 onward, including exhibits on the entire history of the area.

[Nagasaki City Takashima Coal Museum]
Displays trams, coal tubs, and mining machinery used inside and outside the mine back when the Takashima Coal Mine was operational

[Nagasaki City Gunkanjima Museum]
Panels and videos, etc., depict the history and culture of “Hashima Coal Mine (also known as Gunkanjima),” as well as its contribution to Japan’s modernization.

[Mitsubishi Heavy Industries Nagasaki Shipyard and Machinery Works Historical Museum]
The museum was established in October 1985 so as to leave a permanent record for later generations of the role played by the Nagasaki Shipyard in Japan's modernization. The historical evolution of the shipyard is depicted via photos, etc., along with numerous rare items telling the tale of technological advance, including Japan's oldest machine tools, a diving bell (a submersible for seafloor surveying), and the first domestically-produced steam turbine.

Monitor tour

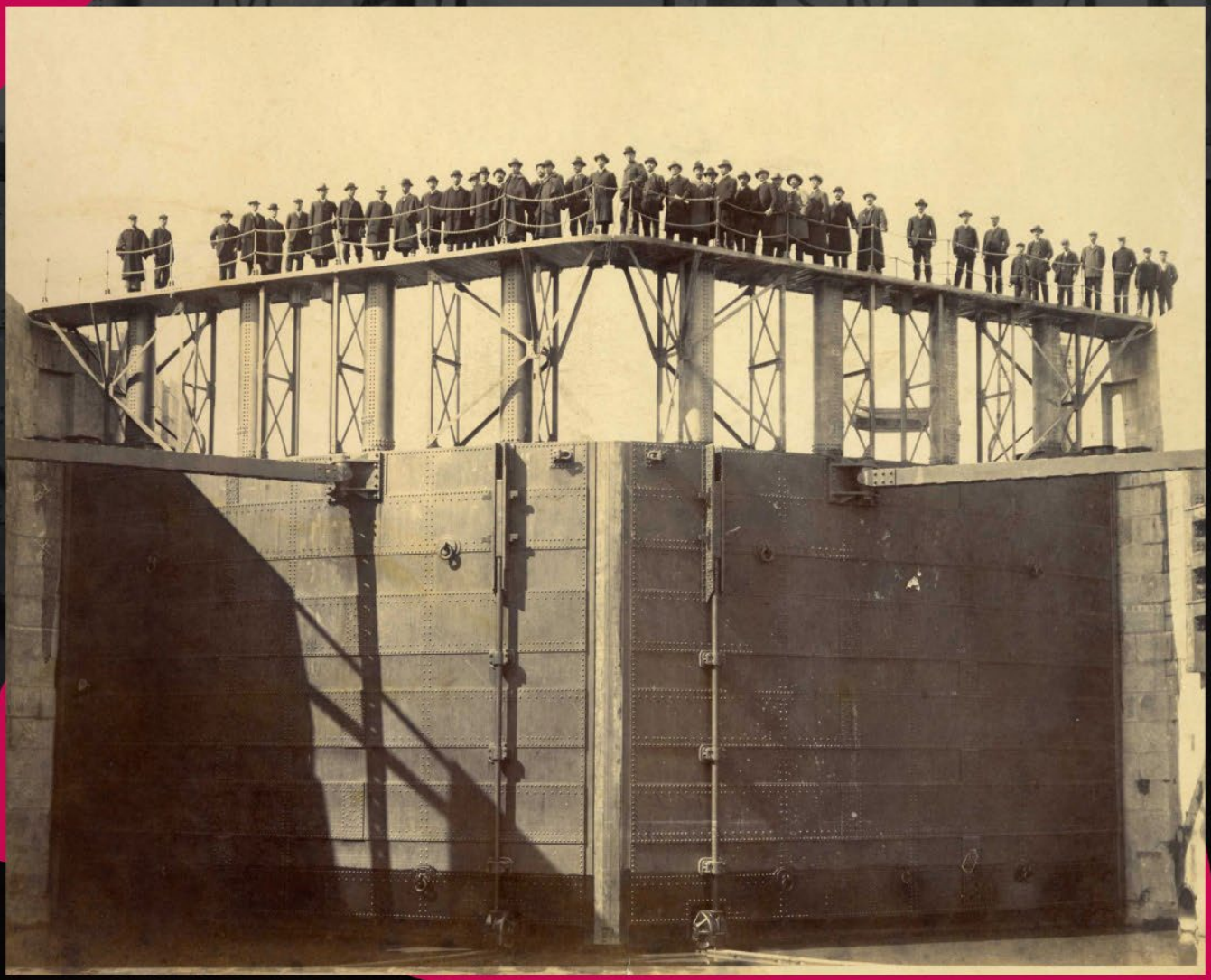
Learning Program for Children

Kosuge Slip Dock

Appendix 1-7

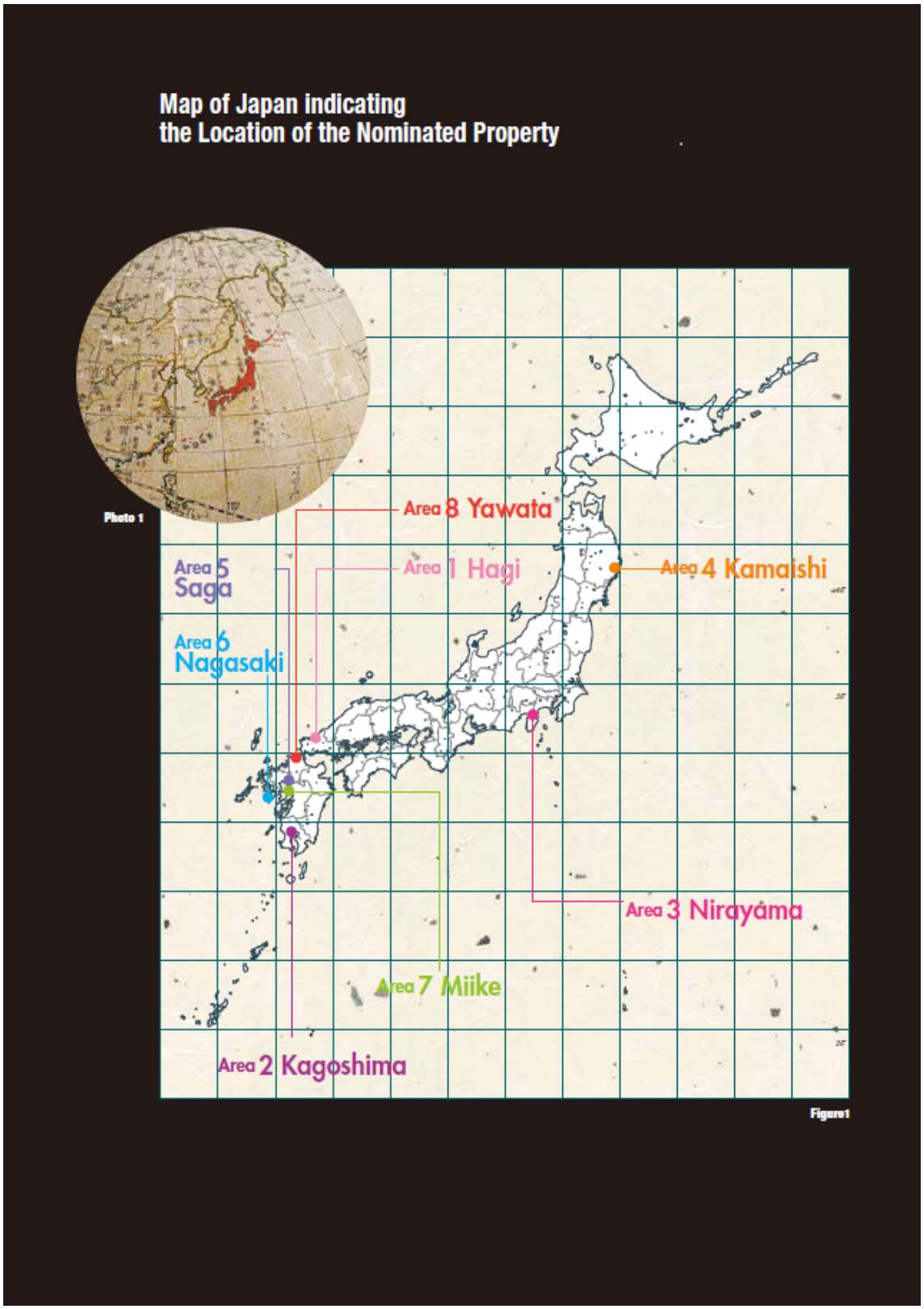
# Area7 Miike

# AREA-SPECIFIC INTERPRETATION PLAN



Miike Conservation Council

【Area List】


Map of Japan indicating
the Location of the Nominated Property
Photo 1
Area 8 Yawata
Area 5 Saga
Area 1 Hagi
Area 4 Kamaishi
Area 6 Nagasaki
Area 3 Nirayama
Area 7 Miike
Area 2 Kagoshima
Figure1

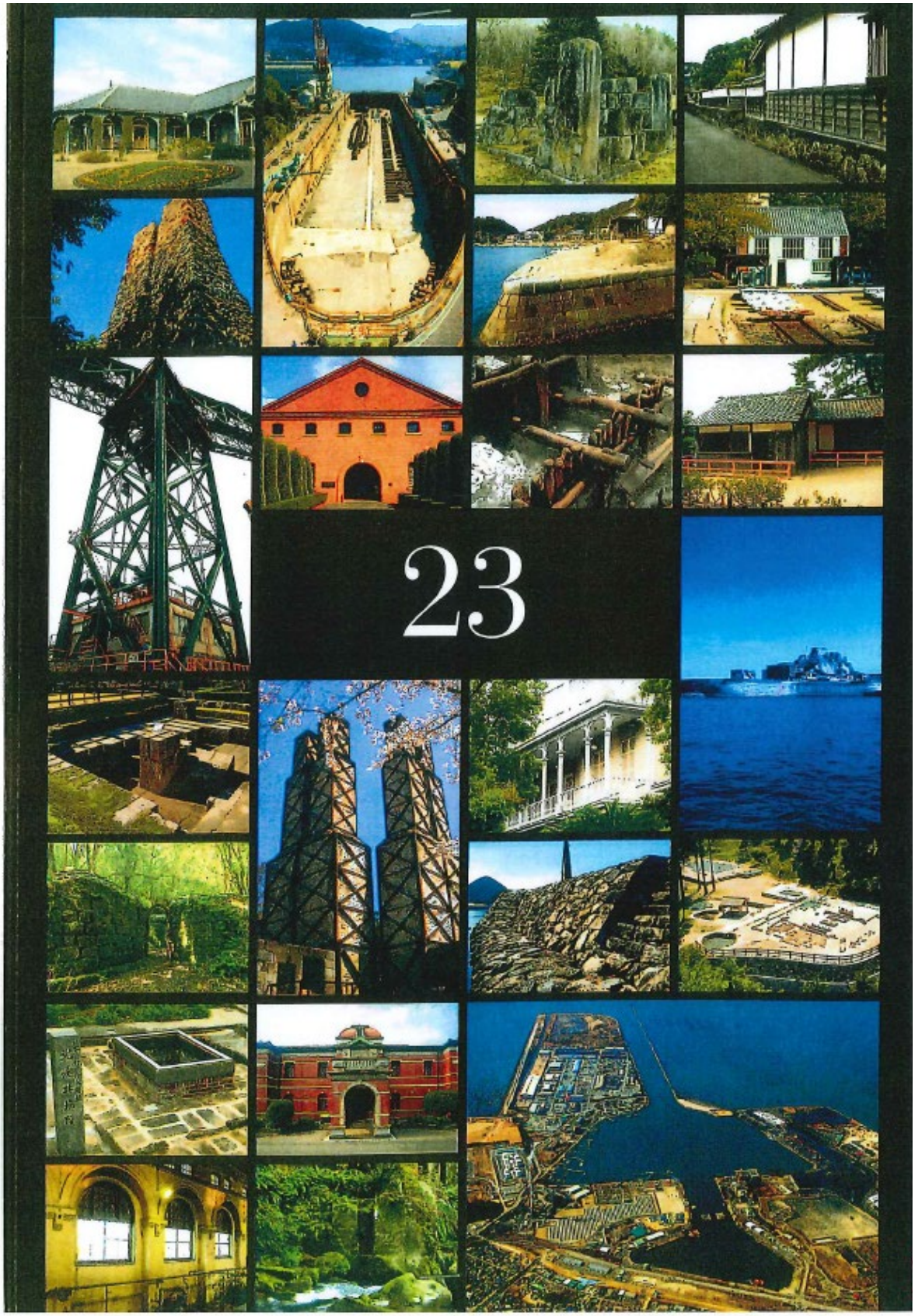
【Component Name】

## List of the Component Parts

| Area | Site | ID | Component Part |
|---|---|---|---|
| A1 Hagi | 1 Hagi Proto-industrial Heritage | 1-1 | Hagi Reverberatory Furnace |
| | | 1-2 | Ebisugahana Shipyard |
| | | 1-3 | Ohitayama Tatara Iron Works |
| | | 1-4 | Hagi Castle Town |
| | | 1-5 | Shokasonjuku Academy |
| A2 Kagoshima | 2 Shuseikan | 2-1 | Shuseikan |
| | | 2-2 | Terayama Charcoal Kiln |
| | | 2-3 | Sekiyoshi Sluice Gate of Yoshino Leat |
| A3 Nirayama | 3 Nirayama Reverberatory Furnaces | 3-1 | Nirayama Reverberatory Furnaces |
| A4 Kamaishi | 4 Hashino Iron Mining and Smelting Site | 4-1 | Hashino Iron Mining and Smelting Site |
| A5 Saga | 5 Mietsu Naval Dock | 5-1 | Mietsu Naval Dock |
| A6 Nagasaki | 6 Nagasaki Shipyard | 6-1 | Kosuge Slip Dock |
| | | 6-2 | Mitsubishi No.3 Dry Dock |
| | | 6-3 | Mitsubishi Giant Cantilever Crane |
| | | 6-4 | Mitsubishi Former Pattern Shop |
| | | 6-5 | Mitsubishi Senshokaku Guest House |
| | 7 Takashima Coal Mine | 6-6 | Takashima Coal Mine |
| | | 6-7 | Hashima Coal Mine |
| | 8 Glover House and Office | 6-8 | Glover House and Office |
| A7 Miike | 9 Miike Coal Mine and Miike Port | 7-1 | Miike Coal Mine and Miike Port |
| | 10 Misumi West Port | 7-2 | Misumi West Port |
| A8 Yawata | 11 The Imperial Steel Works, Japan | 8-1 | The Imperial Steel Works, Japan |
| | | 8-2 | Onga River Pumping Station |

Table1

3


23

SITES OF
JAPAN'S
MEIJI INDUSTRIAL
REVOLUTION
IRON & STEEL, SHIPBUILDING
AND COAL MINING

# Executive Summary

## Brief Synthesis

"Sites of Japan's Meiji Industrial Revolution: : Iron and Steel, Shipbuilding and Coal Mining" comprise a singular ensemble of industrial heritage sites that represent the first successful transfer of industrialization from the West to a non-Western nation.

From the middle of the 19th century to the early 20th century, Japan achieved rapid industrialization that was founded on the key industrial sectors of shipbuilding, iron and steel, and coal mining. The initial phase was one of trial and error experimentation in iron making and shipbuilding, based mostly on Western textbooks, and by copying examples of Western ships. This was followed by the more successful importation of Western technology and the expertise to operate it and, by the late Meiji period, full-blown industrialization through newly acquired domestic expertise and the active adaptation of Western technology to best suit Japanese needs and social traditions. This successful industrialization was achieved in just a little over 50 years without colonization, and on Japan's own terms. The property is testimony to this unique phase in world history.

# Justification for Criteria

**Criterion (ii)**

The property is a series of heritage sites that, together, uniquely illustrate the process by which feudal Japan sought technology transfer from Western Europe and America from the middle of the 19th century. This technology was adopted and progressively adapted to satisfy specific domestic needs and social traditions, thus enabling Japan to become a world-ranking industrial nation by the early 20th century.

**Criterion (iv)**

The technological ensemble of key industrial sites of shipbuilding, iron and steel, and coal mining is testimony to Japan's unique achievement in world history as the first non-Western country to successfully industrialize. Viewed as an Asian cultural response to Western industrial values, the ensemble had no counterpart elsewhere in the world.

# Statement of Integrity

The 23 component parts are the best, and often the only, surviving examples of the key attributes that represent shipbuilding, the iron and steel, and coal mining industries and that are necessary to express Outstanding Universal Value. In each case, the boundary of the component part has been drawn to include the essential features that, overall, contribute to Outstanding Universal Value.

Component parts are in good condition and have mechanisms in place to control deterioration and keep sites free from the adverse effects of development. They have been variously affected by continued use, re-use or lengthy periods of abandonment, and their physical integrity varies between well preserved and fragmentary, the latter being sufficiently intact to be able to represent the former whole. In some cases, where the evidence is primarily archaeological, sufficient investigation has been carried out to verify that a substantial archaeological site survives in good condition for further study and presentation. In other cases, in particular those that remain in operational industrial use, ongoing use and maintenance have resulted in an extraordinarily high level of integrity of working industrial elements.

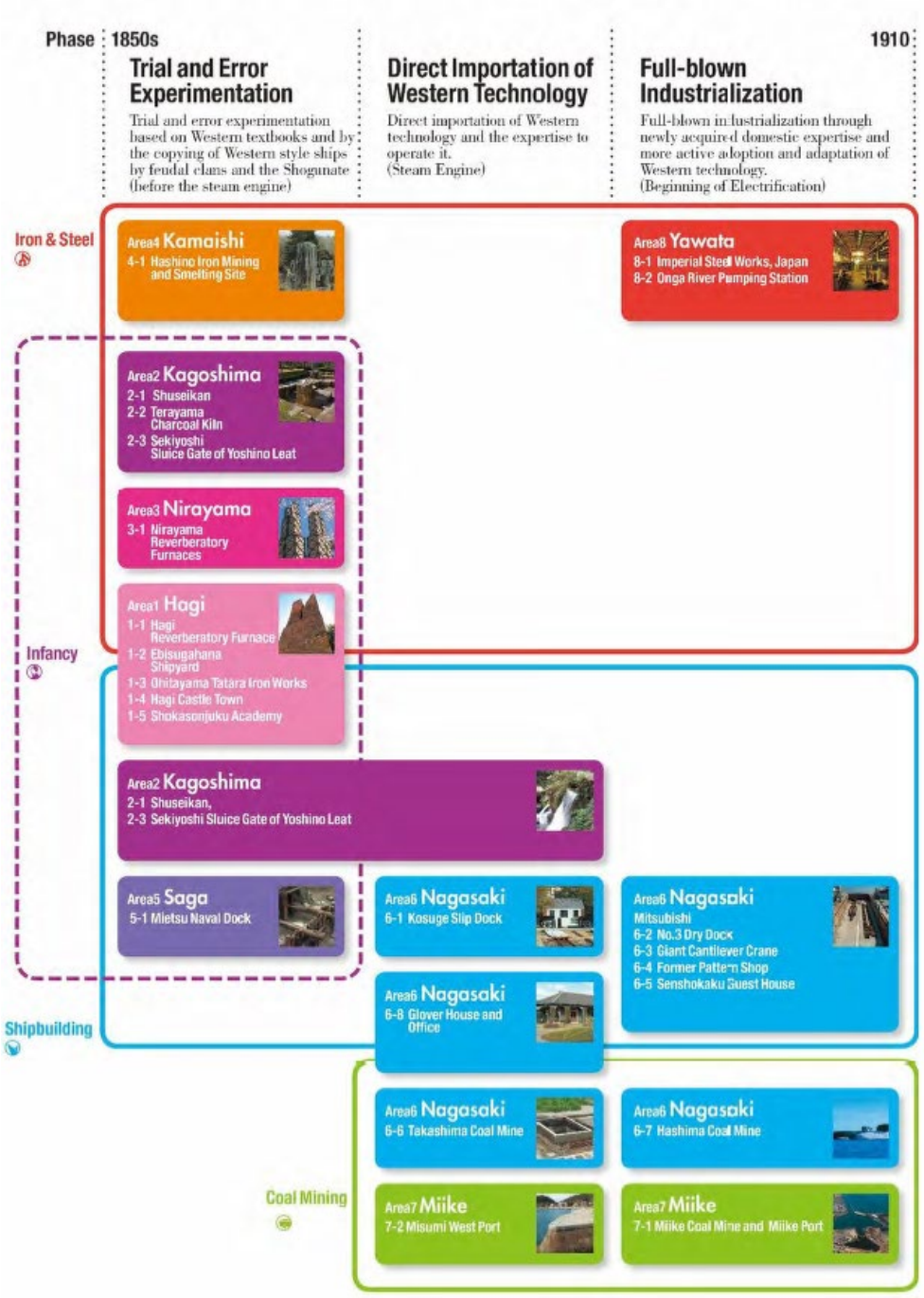
# Statement of Authenticity

The property as a whole as well as at the level of each component part meets the conditions of authenticity in relation to Outstanding Universal Value. It has a high degree of authenticity as the best surviving group of industrial remains that represent, and demonstrate, the first, and rapid, transfer of industrialization from the West to a non-Western nation.

With regard to 'form and design' and 'materials and substance', the component parts constitute the original forms and materials of the range of industrial components necessary to represent the transfer of heavy industry from the West to Japan. Some contain sites that range from fragmentary or archaeological, that are nonetheless authentic relics of important industrial components of the series, to those that comprise substantially intact authentic physical remains that have been managed for many years as historic sites which display these characteristics. Others possess an extremely complete survival not only of form, design and materials but also of continuing use and function.

Industrial History Related to the Miike Area

The Miike Area encompasses component parts that retain records related to coal mining in the second phase, Direct Importation of Western Technology, and the third phase, Full-blown Industrialization, in the World Cultural Heritage “Sites of Japan’s Meiji Industrial Revolution: Iron and Steel, Shipbuilding and Coal Mining,” a World Heritage site.



The Interpretation Strategy which the Cabinet Secretariat submitted to UNESCO on November 30, 2017, as an appendix to the State of Conservation Report noted the following:

**11. Interpretation Plan (extract)**

**(1) Consistent OUV rollout across all component parts**

Based on the Interpretation Strategy, the consistent interpretation of OUV should be presented across all component parts. This will be agreed by all stakeholders, and coordinated and implemented commonly in a branded World Heritage style.

**(2) and (3) Progress in dealing with the "full history" of each site, including information gathering related to workers**

Advice from international experts who are members of the Expert Committee on the Industrial Heritage including Operational Properties (Cabinet Secretariat of Japan), from the international heritage expert who was the ICOMOS technical evaluation field assessor of the World Heritage nomination of the "Sites of Japan's Meiji Industrial Revolution", and from the President of the ICOMOS International Scientific Committee on Interpretation and Presentation, comprises the following four key policies:

1) Focus on the interpretation of Outstanding Universal Value; in conformity with the primary purpose of the World Heritage, OUV of the inscribed property should be presented clearly at each site, not confusing with other, albeit related, issues. Based on this, Recommendation g)* should be implemented.

2) The scope of the "full history" of each site, except for the OUV period (from 1850s to 1910) as described on page 78, falls into two parts: prior to 1850s, and from 1910 to the present. The target of the full history should be narrowed down, considering the local values that supplement the understanding of the background of each component part. Where relevant, with regard to the interpretation of the full history on the location of each component part, high quality research such as collecting primary historical documents and recording oral testimonies should be carried out, and the result of this research should, at some stage, be made publicly available through appropriate media.

* Recommendation g)

> *"Preparing an interpretive strategy for the presentation of the nominated property, which gives particular emphasis to the way each of the sites contributes to OUV and reflects one or more of the phases of industrialisation; and also allows an understanding of the full history of each site."*

Based on the Interpretation Strategy, we have had multiple audits of the current status of interpretation at the component parts and visitor centres, etc., in the various areas undertaken by international experts familiar with industrial assets and the interpretation thereof in countries around the world.
As a result, auditor Barry Gamble identified the following issues in relation to the Nagasaki area.

- The principal interpretation centre, Omuta Coal industry and Science Museum, is currently redeveloping its exhibitions. The proposed location for the "common exhibition" within the entrance area is appropriate. From here, it will be a straightforward task of interpretation planning to reorganize and re-present the first section of the galleries to introduce Miike's contribution to OUV, and that of its Component Parts and various elements. There are already good exhibits on a number of these that will require little modification.
- The museum has the opportunity to become a world class coal mining interpretive centre as, not only is it located next to a key coal mining Component Part of a WHS, it contains innovatively displayed and highly impressive working exhibits of large-scale coal mining equipment (albeit more recent technology). To achieve this goal, it is recommended that a study tour is undertaken of some European coal mines such as the recently inscribed World Heritage sites in France and Belgium, Big Pit in Wales (part of Blaenavon WHS in the UK), and the German Mining Museum in Bochum (Germany) that has just had a major redevelopment of its galleries.
- The Nagasaki Customs House is awaiting further interpretive developments. A word of advice given on site was that the installation of facilities or structures close to the building should be given greater consideration as to their location (e.g. new visitor toilet).
- Mikawa Pit is the last production section to exploit the Miike Coalfield (from 1945), even mining under the Ariake Sea. Presentation of this associated site enhances the 'full history' of the Component Part by its focus on the social theme with the labour strike, coalmine disaster, and labour issues including prisoners of war working in the mine. Along with the Mitsui Manato Club (dating from 1907; contemporary with Miike Port) with which it is connected by a short pathway, it provides the opportunity to enhance the visitor offering within the area and to create positive social and economic impacts.
- The opportunity to open up the railway line to connect the Pits to the Port offers both economic potential and the ability to fulfil a critical interpretive aspect on the how the Area functioned and why it is significant. It could also provide a critical attraction to

draw visitors to Miike and link its key elements in a single visitor experience that would further encourage perhaps an overnight stay.

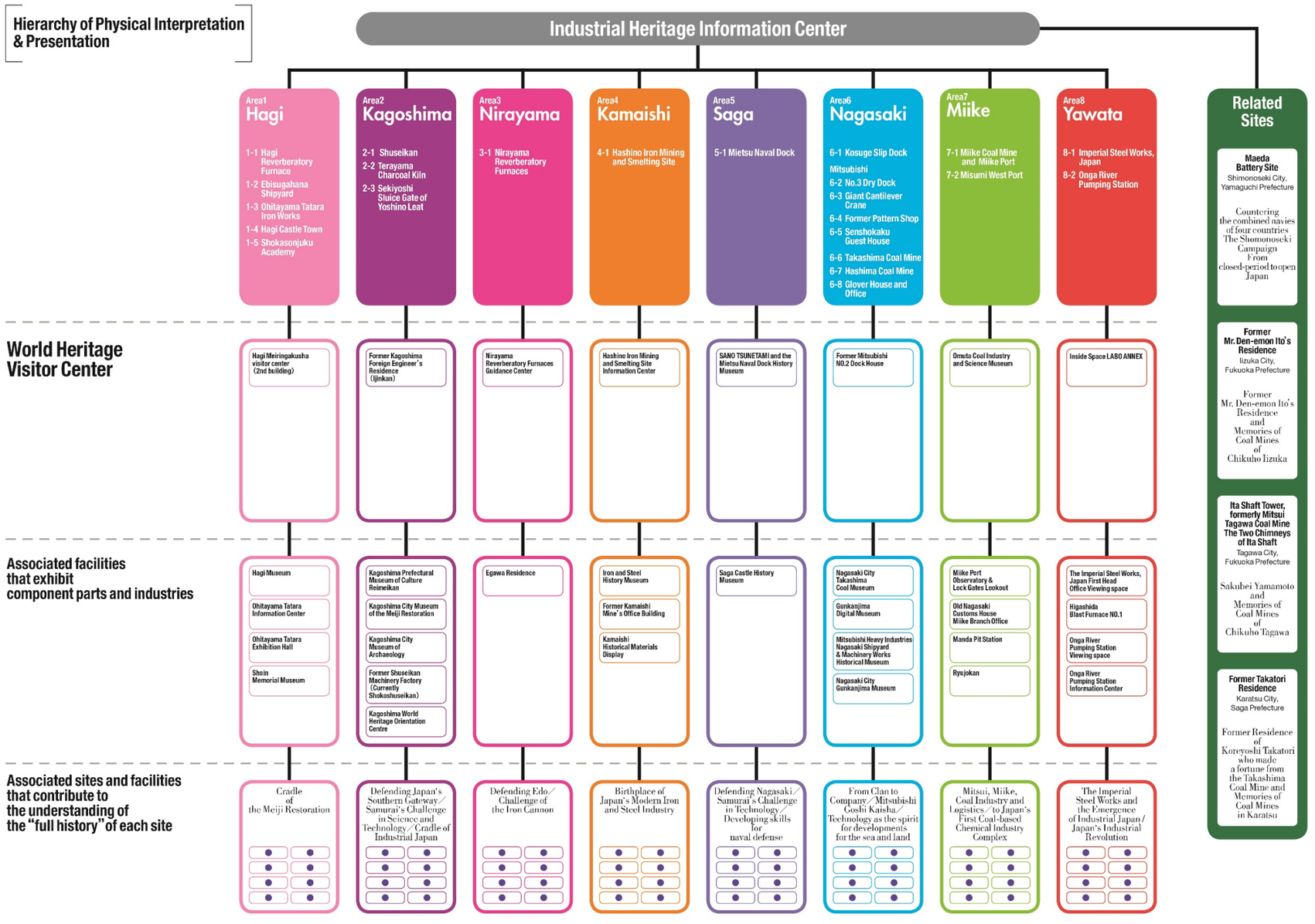
- Misumi West Port is currently presenting out of date and poor quality interpretation and needs to address its presentation and exhibitions in relation to the WHS as soon as possible. There has been no significant change to this infrastructure since the 2017 audit. The exterior interpretation panels pre-date the WHS inscription and some of Ryujokan's exhibitions are in poor condition and quality and are presented with an unacceptable "temporary" appearance. The site visit discussed the WHS responsibility to engage with and to reveal to the community and visitors the OUV of the WHS and the contribution of Miike and Misumi West Port to this. There was an assurance that a permanent exhibition is currently being designed and developed, due to open in four years following earthquake strengthening of the building. However, there was also a financial commitment to update the exterior panels and to install a temporary exhibition within the Ryijokan of a more appropriate standard (both in content and design) within the next year.

Discussions have been held regarding this interpretation plan for the Miike Area thus far by the Local Conservation Council.
The Omuta Coal Industry and Science Museum mentioned in the evaluation above has completed redevelopment of its exhibits, has installed the common exhibition, and provides various other exhibits that help visitors better understand the component parts.
Ryujokan in Misumi West Port renewed its interpretive panels in 2018, as had been pointed out in the audit. As of this time, renewed portions in Ryujokan have not been made multilingual, but the common exhibition installed at each of the visitor centres is scheduled to become so after 2024, and exhibits are undergoing systematic development.
Additionally, in cooperation with the Industrial Heritage Information Centre, exhibits are planned to be steadily implemented in this area that better reflect the World Heritage values in harmony with the historical and cultural values of the region, keeping in mind improvements to the interpretation of the Old Nagasaki Customs House and matters pointed out regarding utilization of Mikawa Pit and the Coal Railway.
The local conservation council will review the implementation progress of this plan and consider ways to make improvements as appropriate.

Local Conservation Council meeting

Hierarchy of Physical Interpretation and Presentation

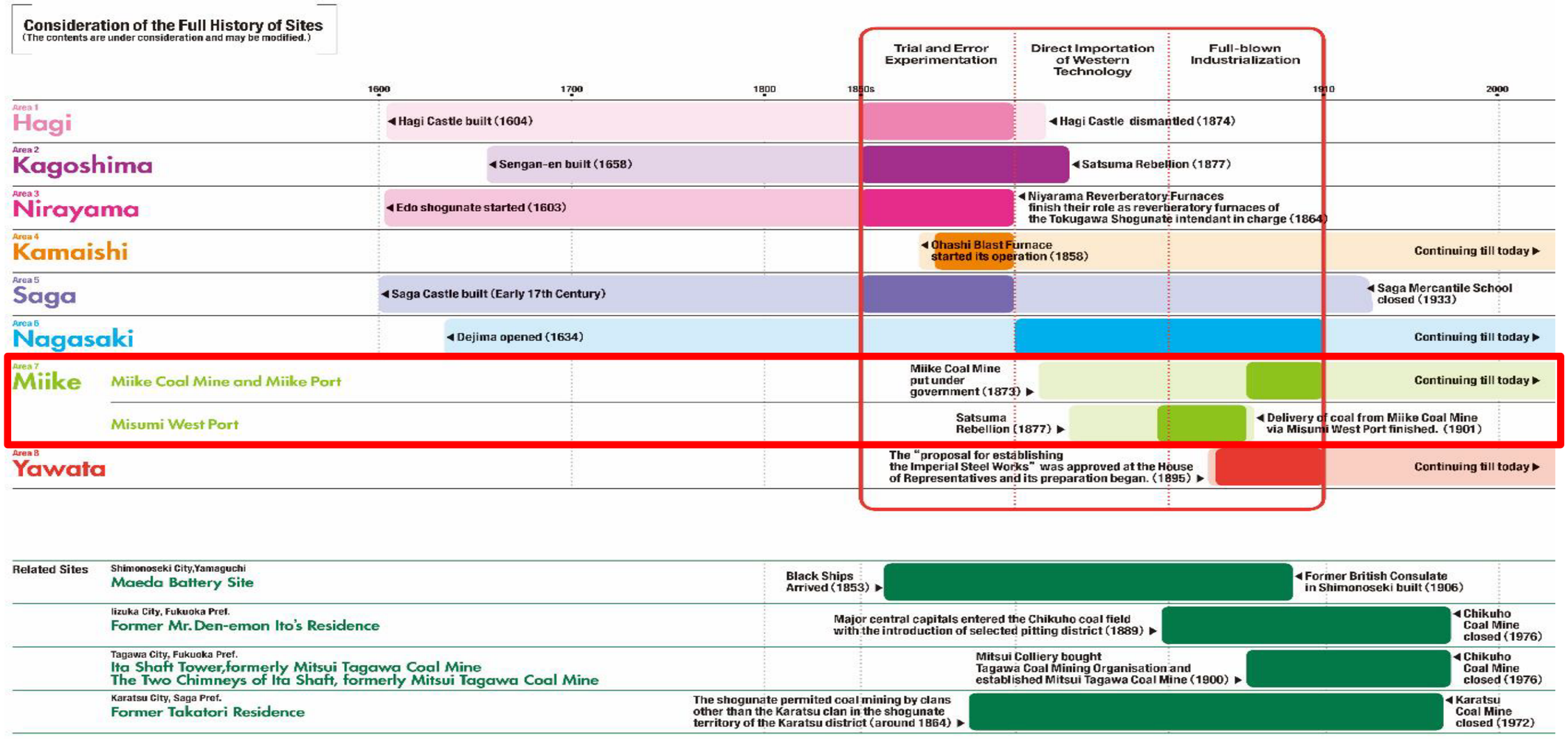
The Industrial Heritage Information Centre and the various local visitor centres will work together to build a system enabling the effective communication of the OUV of the Sites of Japan's Meiji Industrial Revolution.




Related sites: Sites that were component part candidates in the provisional UNESCO World Heritage listing on the January 5, 2009, and that comprise industrial heritage (valuable assets that provide insight into the historical background and social situation of the time) that will be utilized in an integrated manner with the World Heritage Listed "Sites of Japan's Meiji Industrial Revolution."

Consideration of the Full History of Sites

The Interpretation Strategy which the Cabinet Secretariat submitted to UNESCO in 2017, addressed consideration of the full history of sites as shown in the figure below.



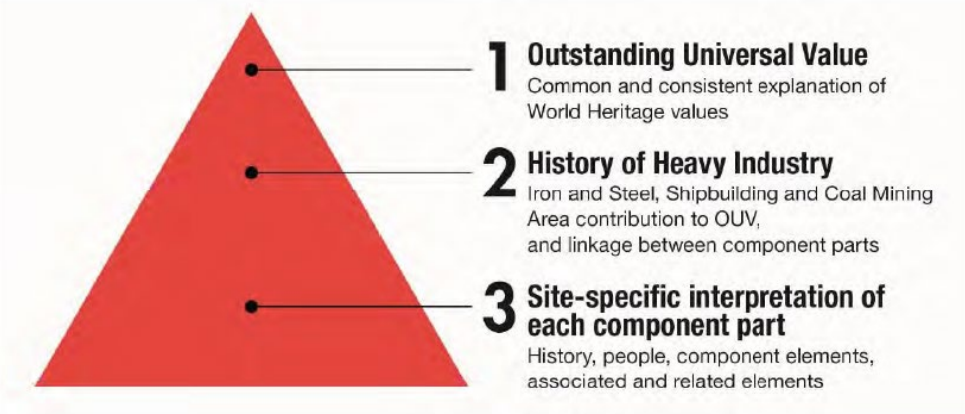
Interpretation in the Miike Area

Approach of the Interpretation Strategy

The Interpretation Strategy provides the following schematic in relation to concepts for interpretation and presentation.

Interpretation for the Miike area too will be approached in line with this in order to resolve the issues identified in interpretation audits.

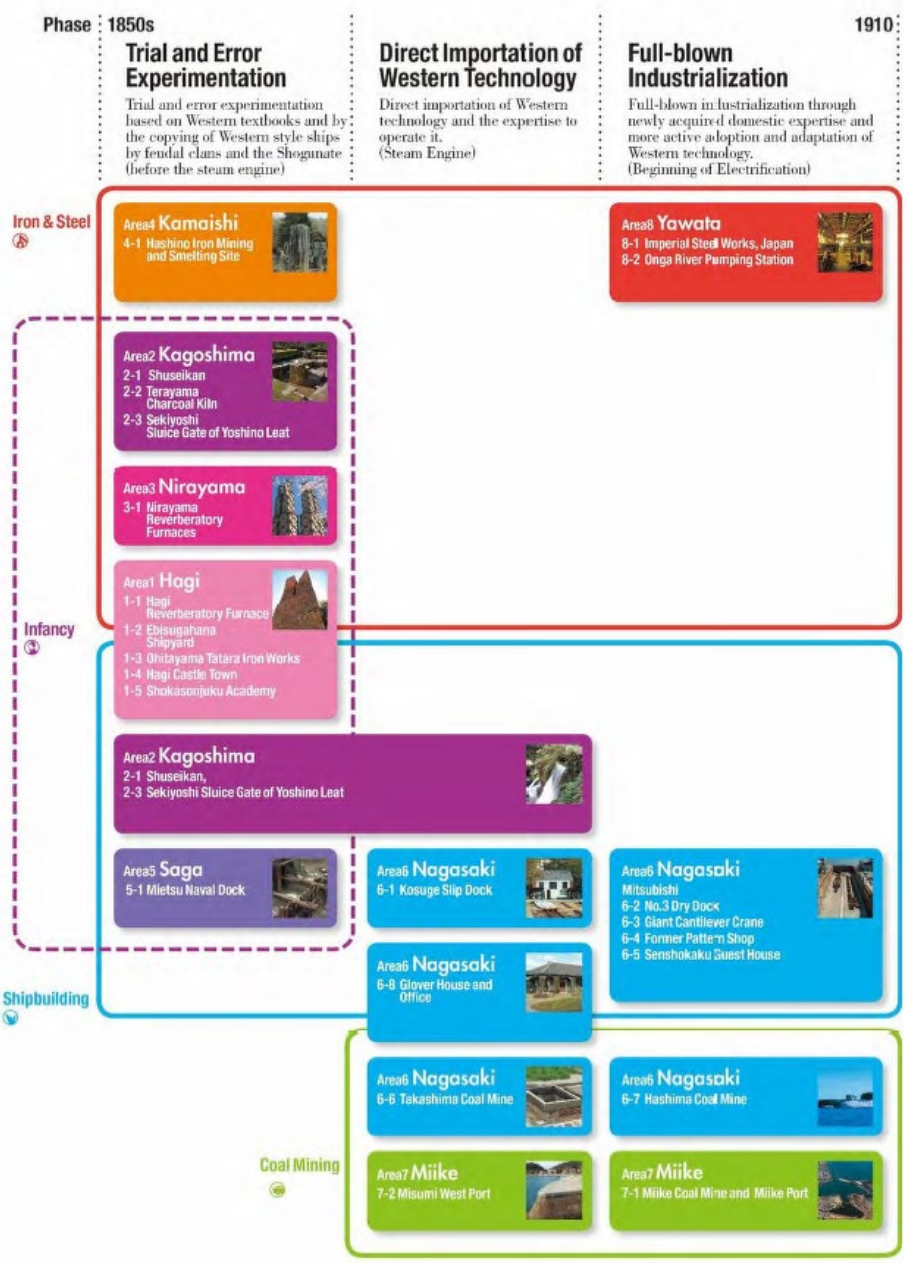
**Interpretation and presentation of the Sites of Japan's Meiji Industrial Revolution: Hierarchy of value and themes**



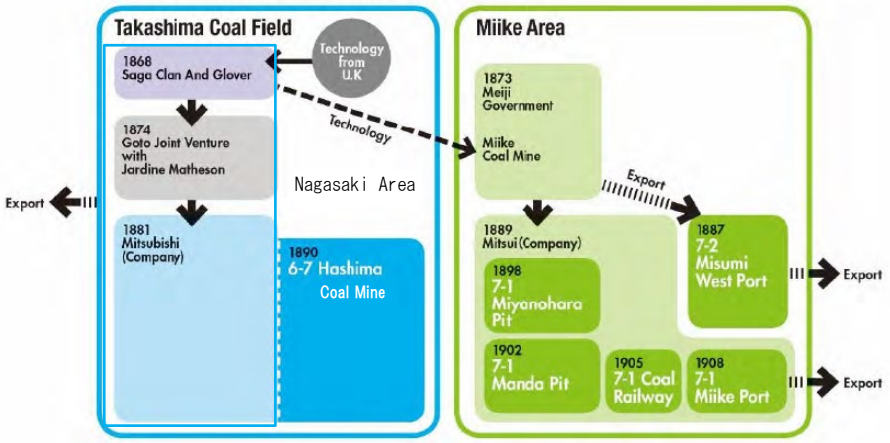

OUV stands at the top of the interpretation pyramid at the Industrial Heritage Information Centre and the various regions' visitor centres and is therefore the top-priority theme over the interpretation and presentation of individual regions and industries, such as history specific to an area or component part. Addressing interpretation in the order of (1) OUV, (2) the history of heavy industry, and (3) site-specific interpretation of each component part, as shown above, will ensure consistent presentation across the property

**Interpretation flow at each local visitor centre**

Hierarchy of Interpretation




## Site Relations of Coal Mining Sites



Presentation Using “Liquid Galaxy,” Etc.

The Industrial Heritage Information Centre, which was established in March 2020 pursuant to the Interpretation Strategy, uses an immersive video multi-display that draws on the World Heritage OUV period (1850s-1910), as well as the Consideration of the Full History of Sites schematic. It explains through images the history and transformation of component parts in the various areas, as well as the way that people lived, etc., presenting these in a way that enables visitors to experience in a very real way the evolution of the property, the contribution to OUV, and the full history.
This area will also establish a digital archive of documents gathered by the Industrial Heritage Information Centre and the visitor centres in the area, which will be gradually reflected in the interpretation tools.

Miike Area Component Parts

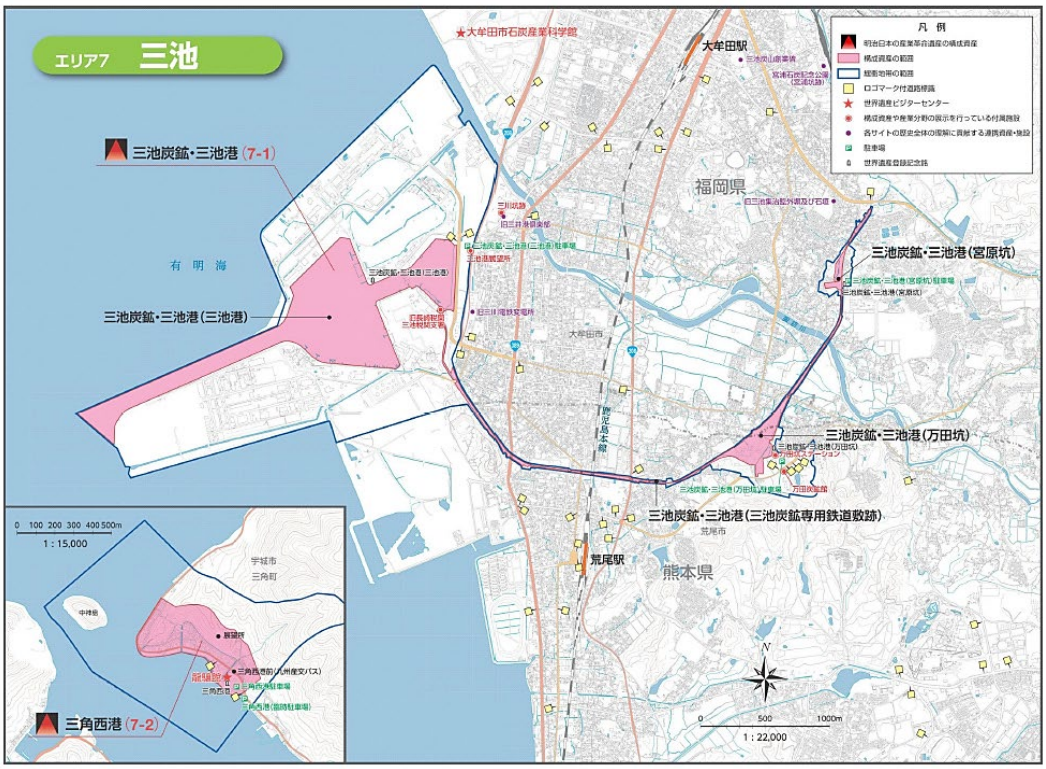
| | |
|---|---|
| Relevant industry: Coal industry<br>Name of component part: Miyanohara Pit (1898) of Miike Coal Mine/ Miike Port<br>(Overview of component part)<br>First excavated after acquisition by Mitsui, it became a major mine shaft of Miike Coal Mine from the Meiji era to the beginning of the Showa era. The mine has closed, and no industrial activity is taking place. Structures including the second shaft tower and hoisting gear remain. |  |
| Relevant industry: Coal industry<br>Name of component part: Manda Pit (1902) of Miike Coal Mine/ Miike Port<br>(Overview of component part)<br>A major mine shaft, along with Miyanohara Pit, of the Miike Coal Mine from the Meiji era to the middle of the Showa era. Facilities of the coal industry of the Meiji era, including the second shaft tower, its hoisting gear room, and former fan room, remain to this day in good condition. |  |
| Relevant industry: Coal industry<br>Name of component part: Coal Railway (1905) of Miike Coal Mine/ Miike Port<br>(Overview of component part)<br>After ownership of the property was transferred to the Mitsui *zaibatsu*, railroad tracks dedicated to connecting Miike Coal Mine and Miike Port were built, allowing transport of Miike coal and industrial material. Miike Coal Mine is already closed, but ruins remain of the cut and fill from the railroad construction. Historical space with reminiscence of railroads in action lingers. |  |

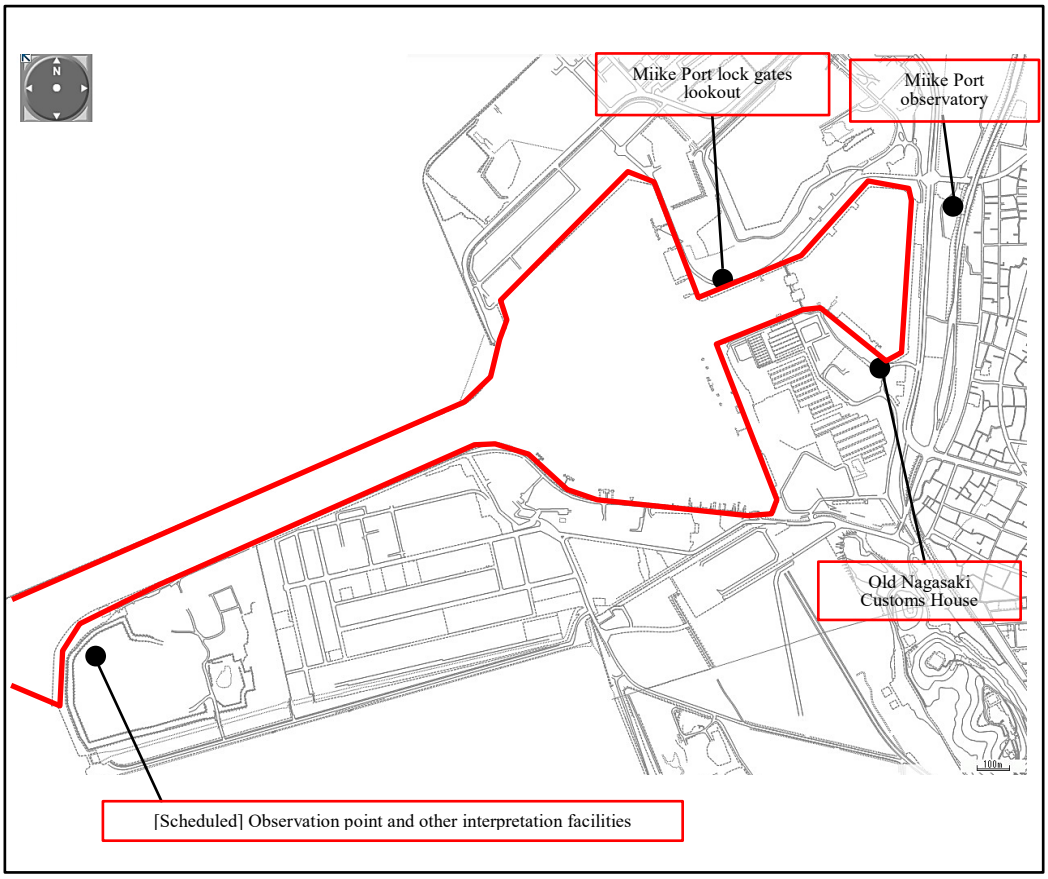
| | |
|---|---|
| Relevant industry: Coal industry<br>Name of component part: Miike Port (1908) of Miike Coal Mine/ Miike Port<br>(Overview of component part)<br>Designed in the shape of a hummingbird as a loading port for exporting Miike coal efficiently, it is adjacent to the shore for docking large vessels in the Ariake Sea in shallow waters when the tidal range greatly varies. Port facilities such as breakwater groins as measures against sand and mud, docks for waiting out tides, and lock gates for adjustments in tidal differences testify to logistical infrastructure at the time of port creation. It still serves as an industrial port. |  |
| Relevant industry: Coal industry<br>Name of component part: Misumi West Port (1887)<br>(Overview of component part)<br>One of three major ports constructed during the Meiji era as a state government-run project under the policy to promote new industries. Designed by Dutch hydraulic engineer Mulder. Until the opening of Miike Port, Miike coal was exported overseas passing through Misumi West Port that was operating as an auxiliary port for Kuchinotsu Port. |  |

World Heritage Plaques

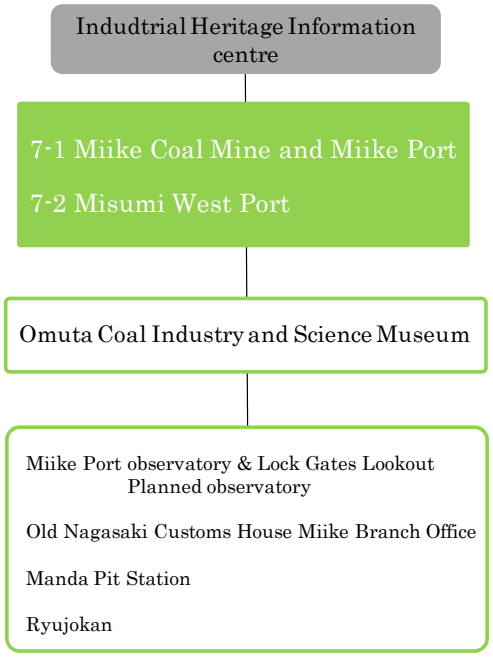
In line with the UNESCO Guidelines, World Heritage plaques have been installed at the various component parts to inform visitors properly about the OUV of the property.

Miike Area: Distribution of Interpretation Facilities



Miike Area: Hierarchy of Physical Interpretation and Presentation




Access Guide Maps

An English-version access map to guide visitors to component parts in each area has been created in addition to the Japanese version and is distributed free to visitors. This map gives an introduction to all component parts in the area and is structured to help visitors reach as many of them as possible.

By linking the maps to a smartphone app, information can be communicated about component parts not open to the public using augmented reality (AR) functions to show 3D models, videos, and 360-degree panorama views of inaccessible sites.

Information Counters

These are set up in administrative institutions and airports to distribute access guide maps and other information.


Omuta Coal Industry and Science Museum


Nagasaki Airport

Ryujokan, Miike West Port

## Guide Map Distribution Points and Number of Maps Distributed

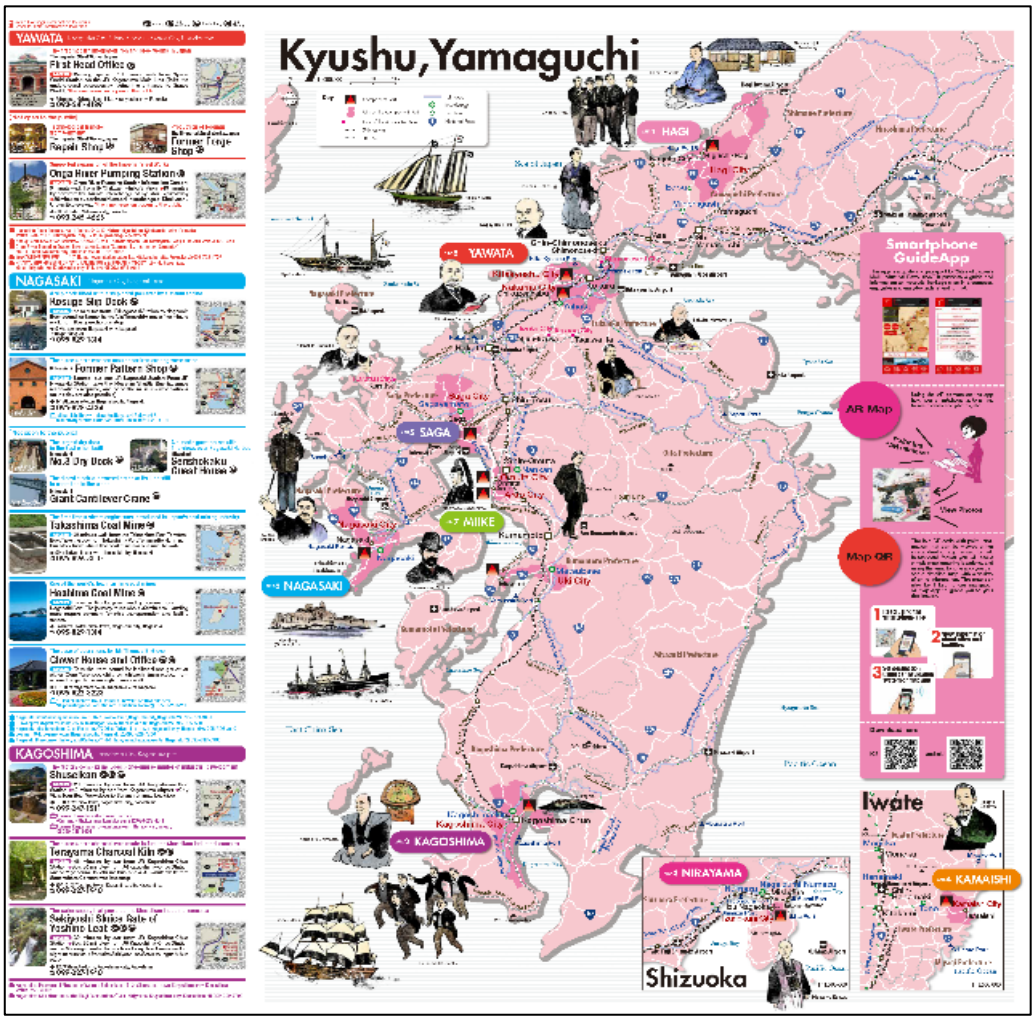
Guide map distribution points and the number of maps distributed are as follows.

| Overall map | | Miike Map | |
|---|---|---|---|
| **No. distributed** | **177,762** | **No. distributed** | **57,341** |
| Japanese & English | 177,762 | Japanese | 55,881 |
| **Main distribution point** | **No. distributed** | **Main distribution point** | **No. distributed** |
| Administrative organizations | 300 | Administrative organizations | 14,870 |
| Airports | 550 | Airports/ Airlines | 1,250 |
| Hotels | 50 | Hotels | 2,800 |
| Car rental agencies | 100 | Car rental agencies | 1,300 |
| JR (Railway) | 600 | JR (Railway) | 400 |
| Tourist information centers | 700 | Tourist information centers | 3,800 |
| Michi-no-eki roadside stations | 4,400 | Michi-no-eki roadside stations | 5,600 |
| NEXCO (Expressway) | 168,500 | NEXCO (Expressway) | 17,750 |
| Public interest corporation/foundation/ incorporated association | 550 | Public interest corporation/foundation/ incorporated association | 1,484 |
| | | | |
| Other | 2,012 | Other | 8,087 |
| JR Kyushu Hakata Station General Information | | Omuta & Arao Coal Mine Town Fan Club | |
| West Nippon Expressway Retail Co., Ltd. | | Nogata Municipal Coal Memorial Museum | |
| West Nippon Expressway Service Holdings Company Limited | | Fukuoka International Airport Co., Ltd. | |
| Fugetsu Foods Co., Ltd. | | Tagawa City Coal Mining Historical Museum | |
| Fukuoka International Airport Co., Ltd. | | Kitakyushu Museum of Natural History & Human History | |
| Nagasaki Airport | | Ryujokan, Misumi West Port | |
| Kagoshima Prefectural Library | | Miyanohara Pit | |
| JR Kagoshima Chuo Station Tourist Information Center | | Mitsui Minato Club | |
| Kitakyushu Convention & Visitors Association | | Omuta Coal Industry and Science Museum | |
| Omura City Hall Industrial Promotion Dept. | | Manda Pit Station | |
| JR Miyazaki Station Tourist Information Center | | | |
| | | | |

| Total no. distributed for the entire area |
|---|
| **464,025** |

World Heritage Route

In accordance with the Interpretation Strategy, and also as noted in pages 395–396 of the Nomination Document, the World Heritage Route Promotion Council was founded to provide guidance and tourism infrastructure for understanding World Heritage as a whole. The Council attracts visitors to all component parts and related sites by producing maps, apps, and GPS navigation and by installing road signs and other signage using the common logo to promote the Sites of Japan's Meiji Industrial Revolution so that visitors are able to understand the World Heritage value constituted by the 23 component parts.
Work will continue to be undertaken steadily pursuant to the Nomination Document and the Interpretation Plan.




Map on p. 396 of the Nomination Document


World Heritage Route Promotion Council meeting

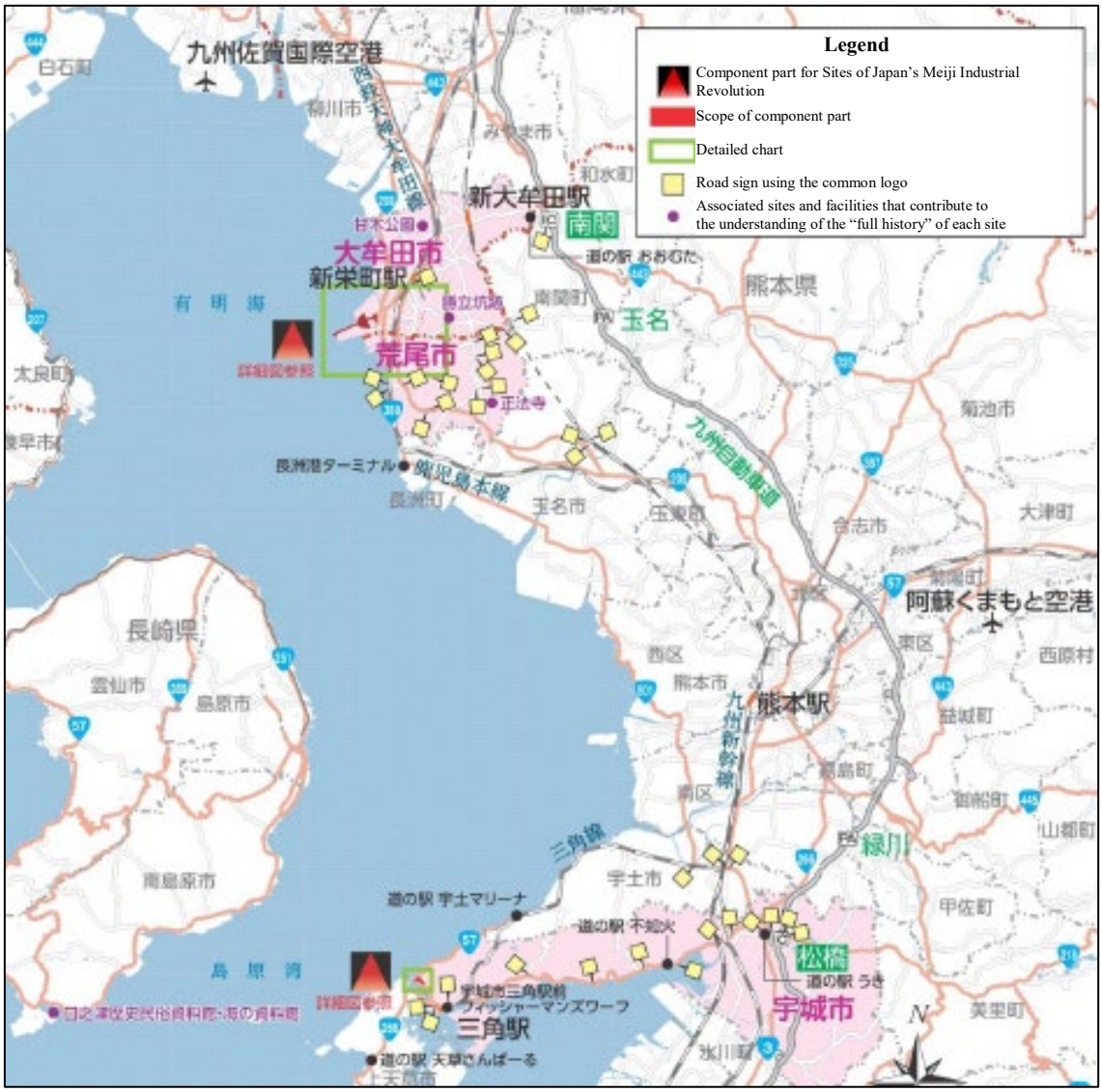
Installation of Road Signage, Etc., Using the Common Logo

Status of installation of road signage

| Place | No. of signs installed |
|---|---|
| Omuta City | 20 |
| Arao City | 41 |
| Uki City | 18 |

Photos of road signage

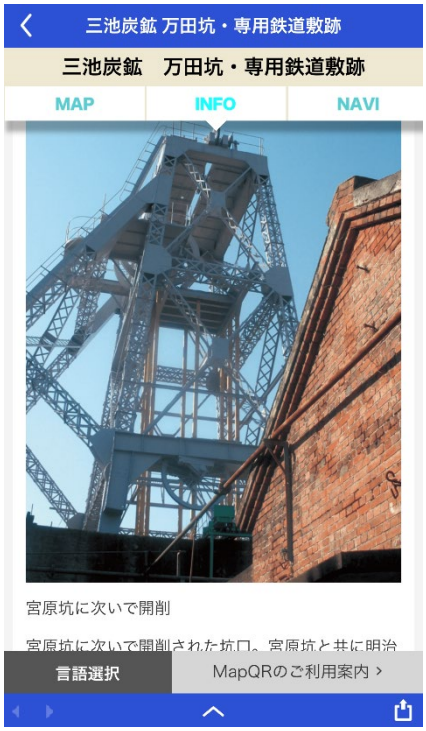

Locations of Road Signs Using the Common Logo



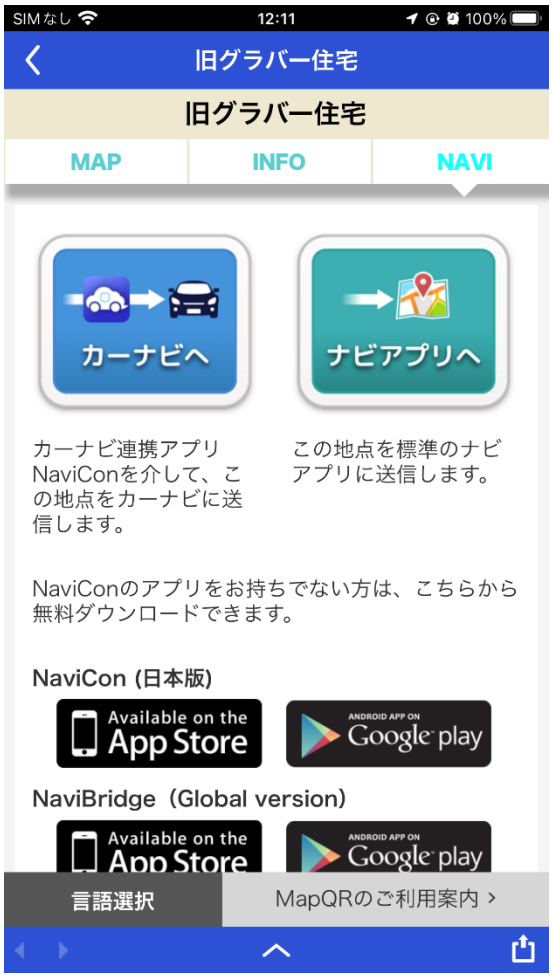
Linkage with Car Navigation (Denso Car Navigation)

Example of linkage with smartphone app so that the target destination can be sent to a car navigation system



The destination can be sent directly from a smartphone to the car navigation system.

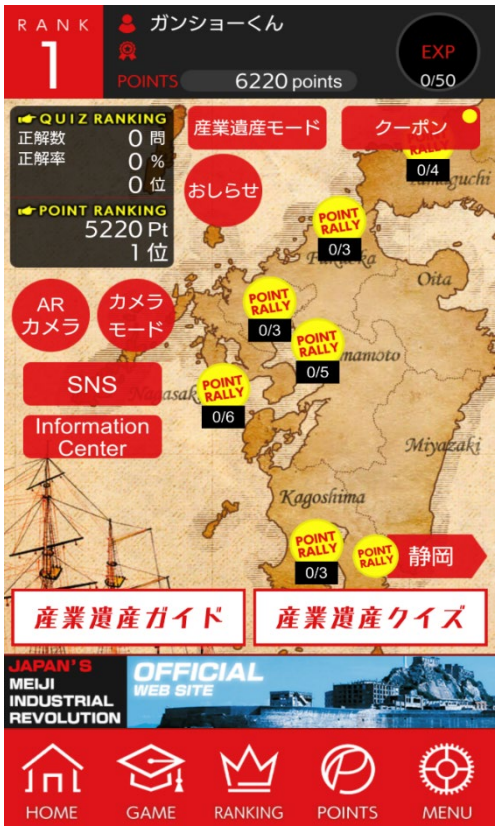




A video on how to use the application has been put up on YouTube.

App Utilization

The app introduces the Sites of Japan's Meiji Industrial Revolution, including detailed stories and explanations, as well as the historical background, using video and computer graphics, etc. Users can earn points by playing games and using the AR camera on the app and use them as coupons for souvenirs and other prizes. As such, it serves as a mechanism for both deepening understanding of World Heritage value and feeding back into World Heritage Route tours. The smartphone app is available in Japanese, English, Korean, simplified Chinese, traditional Chinese, and Vietnamese.



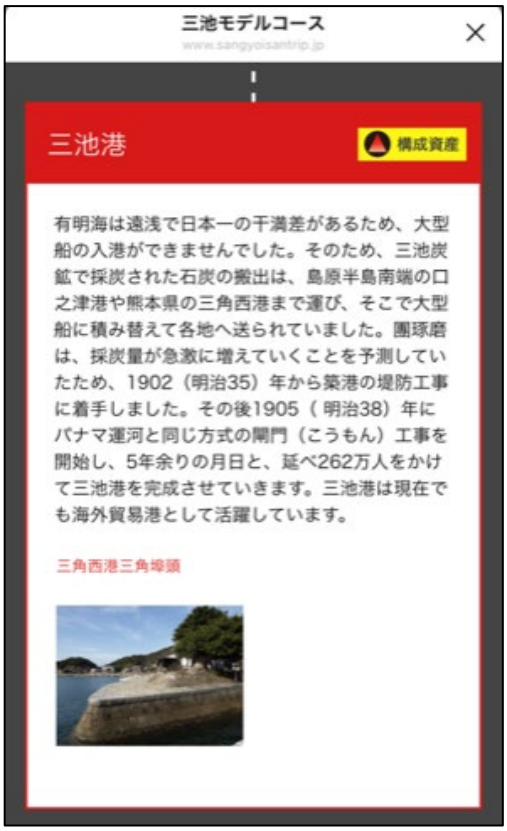

Use of Line App

Points acquired on the app can be exchanged for coupons.

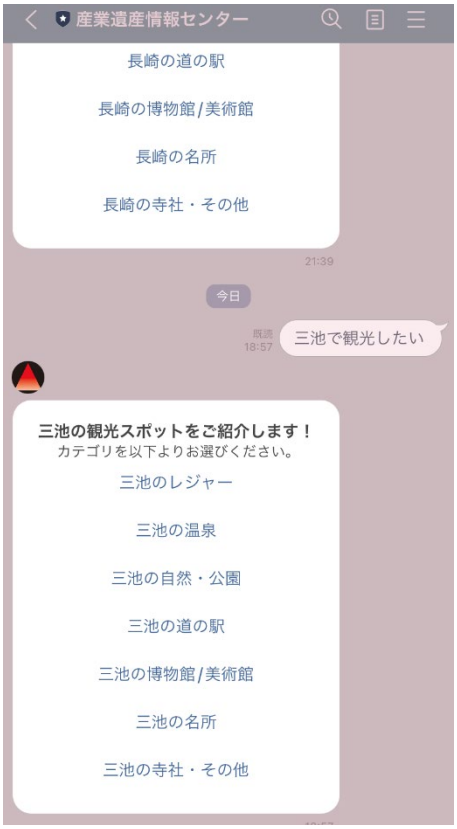

Point-of-purchase advertising has been created and placed in stations and information centres, etc., to encourage people to sign up to the LINE app.


LINE is used as a runway for achieving two-way communication geared to the circumstances of the user based on locational information, such as the use of existing guide apps and communication about coupons that can be used in shops at the area visited. The service is provided in multiple languages so as to support international visitors.

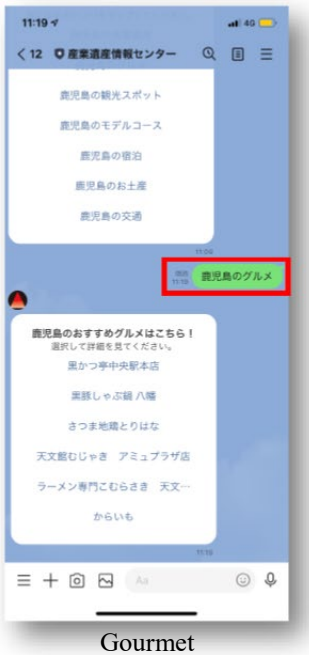
LINE functions (examples)



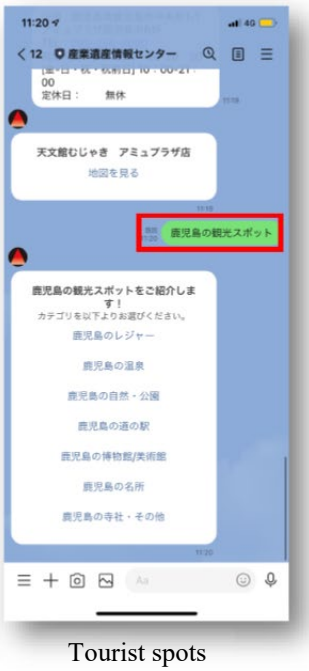

Introduction to model courses



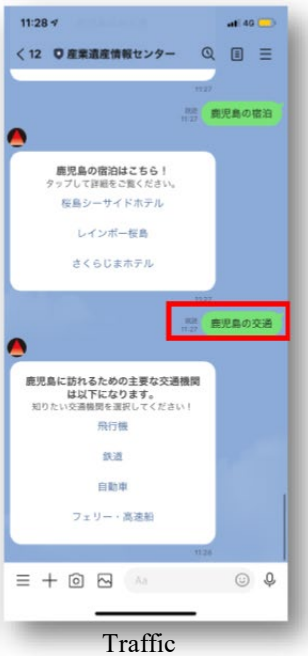

AI chatbot function



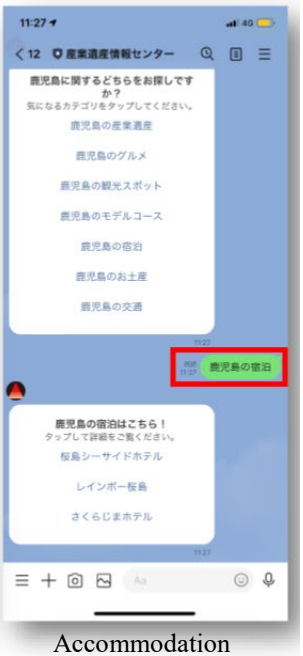

Gourmet information




Tourist spots




Traffic information




Accommodation information

Digital Signage Functions

Digital signage has been installed in the Industrial Heritage Information Centre as a mechanism for encouraging multi-destination tourism by displaying local guide maps and information on multi-destination industrial heritage routes. AI chatbots have also been installed to respond to a wide range of multi-destination routes and tourism questions in real time.


Enhancement of digital content

World Heritage values and other information regarding the Sites of Japan's Meiji Industrial Revolution is being centrally disseminated through the official website and smartphone application.

In addition, an information network utilizing four of the latest technologies (*) is used as "lin-KK-age" (linkage) to promote visits to neighboring component parts and to provide local travel support.

Interpretation will be performed with consideration given to initiatives that make use of the above with collaboration among areas.

Digital technology is being used to mainly undergo initiatives mentioned below through relevant websites and applications for the area.

(*) Refers to digital signage (electronic boards), smartphone application, LINE and maps equipped with AR/ MapQR.

Initiatives

| Relevant Component(s) | Initiative Details | Schedule | Entity in Charge |
|---|---|---|---|
| Miike Coal Mine, Miike Port, Misumi West Port | Regional guide map equipped with AR functions and information provided on components through MapQR function | Completed | National Congress of Industrial Heritage |
| Miyanohara Pit | iPad app Miike Tanbou (Miike History Walk)<br>The app enables users to view scenes of Miyanohara Pit around 1907 through AR as well as take quizzes and read descriptive information | Completed | Omuta City |
| | Miike Coal Mine Navigation using AirSignage<br>Description of the component in four languages | Completed | Omuta City |
| Coal Railway | iPad app Miike Tanbou (Miike History Walk)<br>The app enables users to view computer graphics of steam locomotives running along the Coal Railway as well as take quizzes and read descriptive information | Completed | Omuta City |
| | Miike Coal Mine Navigation using AirSignage<br>Description of the component in four languages | Completed | Omuta City |

| | | | |
|---|---|---|---|
| Miike Port | iPad app Miike Tanbou (Miike History Walk)<br>App users are able to watch computer graphics of Miike Port lock gates opening and vessels entering, as well as trying quizzes and reading descriptive information | Completed | Omuta City |
| | Miike Coal Mine Navigation using AirSignage<br>Explanation of the component in four languages | Completed | Omuta City |
| Manda Pit | Miike Coal Mine Navigation using AirSignage<br>Explanation of the components in four languages | Completed | Arao City |
| Manda Pit | The Manda Pit VR enables users to see inside the pit. Experience in four languages | Completed | Arao City |
| Manda Pit | Digital archives<br>Display in four languages | Completed | Arao City |
| Manda Pit | Manda Pit VR app | Completed | Private entity |
| Misumi West Port | VR app for the former Misumi shipping warehouse<br>Display in three languages | Completed March 2022 | Private entity |
| Misumi West Port | Animation app for descriptions of Misumi West Port-related facilities.<br>Display in five languages | Completed March 2022 | Uki City Tourism and Industry Association |

* ‘Completed’ indicates initiatives completed as of February 1, 2022

Miike Coal Mine Navigation (AirSignage)



[Reference material 1]

(Name) Animation Book (digital content with descriptions of cultural assets)
Information boards and pamphlets with QR codes, and interpretive panels inside the former Misumi Summary Court

(Entity in charge) Uki City Tourism and Industry Association

(Locations) Ryujokan, former Uto County Office, main building/ attorney antechamber/ archives of the former Misumi Summary Court


Multilingual description pages (Japanese/ English/ French/ Korean/ Chinese) and animation book (stories approx. two minutes long) appear on-screen when a QR code on information boards and pamphlets available in facilities within Misumi West Port is scanned with a smartphone or tablet.

*Interpretive panels inside the former Misumi Summary Court main building


*Information panel with QR code

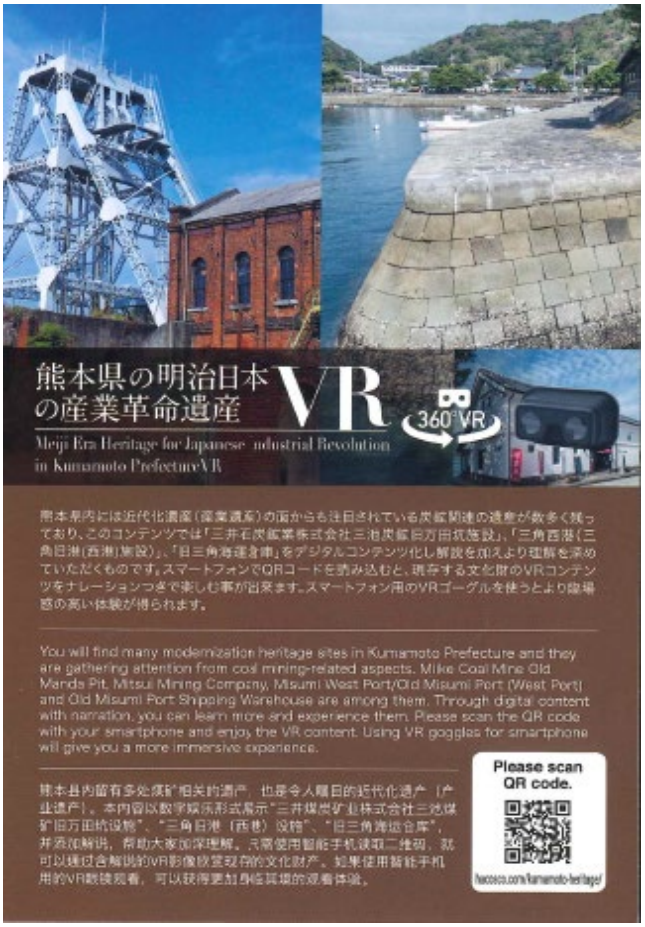
[Reference material 2]

(Name) Meiji Era Heritage for Japanese Industrial Revolution in Kumamoto Prefecture VR (Descriptive digital content)

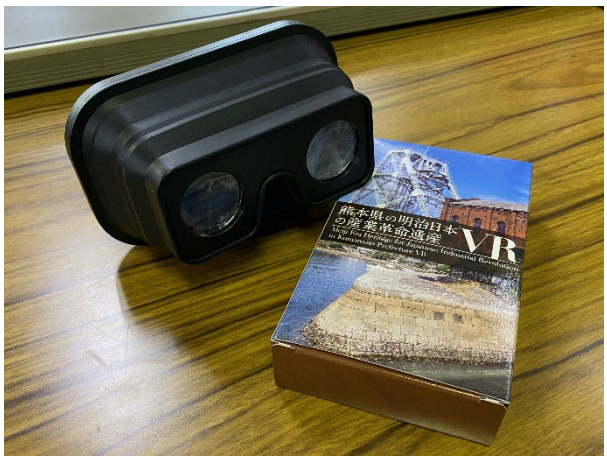
VR goggles, information board, flyer

(Entity in charge) Taiyo Kikaku (NPO J-heritage)

(Relevant facilities) Manda Pit, Misumi West Port stone masonry wharf, former Misumi Marine Transportation Warehouse, Ryujokan




*Information board with QR code



*Set with VR goggles

[Reference material 3]
(Name) The Manda Pit VR
(Entity in charge) Arao City
(Location) Manda Pit Station

Visitor Centres

The Miike Area is equipped with one visitor centre and four auxiliary facilities with exhibits of component parts and the industrial sector in line with the interpretation strategy. Each facility cooperates with the local community to prepare exhibits that best bring out the true World Heritage values in harmony with the historical and cultural values of the region. They aim to create exhibits that allow visitors to easily understand the value of the components. Based on points raised in interpretation audits, local visitor centres will work with the Industrial Heritage Information Centre to digitize a huge volume of primary historic materials and use digital tools to enhance exhibits.

[Omuta Coal Industry and Science Museum]
Panels, footage, models, and a dynamic tunnel (mock tunnel) are used to exhibit and explain the history of the Miike Coal Mine.
The common exhibition is also available at the visitor centre of the Miike Area to explain the 23 components overall, and visitors can learn about Area 7's coal industry and the town in which various modernized industrial heritage live on to this day.

[Miike Port]
The hummingbird shape can be seen from the observation deck. Interpretation facilities such as an observation point are currently being planned in a location approximately 3 km away from this observation deck to supplement the current location.

[Old Nagasaki Customs House Miike Branch Office]
Construction and history of Miike Port are on exhibit using panels and footage on Miike Port, which is still an operating port today. A separate corner with panels on Sites of Japan's Meiji Industrial Revolution has also been set up.

[Manda Pit Station]

URL:https://www.city.arao.lg.jp/kurashi/shisetsu/mandakou/

A facility with models recreating the overall facility of the time, old photos on display of Manda Pit on panel boards, and a VR experience of the pit.

[Ryujokan]

Using this century-old facility in Misumi West Port, the construction and history of Misumi West Port are on display using panels and other tools. A separate corner with panels and footage used to describe the Sites of Japan's Meiji Industrial Revolution has also been set up, and plans are underway beyond 2024 to incorporate the same common exhibition being used at each of the visitor centres.

Children's education programs

The following children's education programs are being held in the Miike Area.

[World Heritage kids academy]

Online seminars are offered to elementary school students in Kitakyushu City, Nakama City (Yawata Area), and Omuta City (Miike Area) in Fukuoka where component parts are situated. Students take classes taught by lecturers on the history and value of the components, schools individually sort through what they have learned, and results are presented amongst each other as a means for exchange.

[Children volunteer guides]

At elementary schools in the school districts where the Miike Coal Mine, Manda Pit and Miyanohara Pit are situated, sixth graders become guides as part of their classes and explain the history and appeal of the Miike Coal Mine and the coal industry to visitors. This endeavor instills in children a love for their hometown.

[Sites of industrial modernization bus tour]

Sixth graders in Omuta City tour sites of industrial modernization by bus and learn the contemporary history of Omuta, which progressed alongside the development of the Miike Coal Mine. Students can touch the actual remains such as hoisting gear or a brick building to actually experience their sizes and other senses such as the smell of oil, to learn about the coal industry in a dynamic way.

[Marine education]
At elementary schools in regions of the Ariake Sea and rivers connected to it, marine education is provided with Miike Port as the theme each year as part of SDG initiatives. Marine life, marine pollution, the history of Miike Port and World Heritage values are taught as students ponder what action they can take now and in the future.

[Regional studies]
At elementary schools in Uki City, Misumi West Port and Sites of Japan's Meiji Industrial Revolution overall are incorporated into the curriculum. As a learning outcome, students act as guides, create promotional pamphlets and posters, and take various other initiatives. On-site learning includes not only experiencing the structure and role of Misumi West Port but also participating in programs exploring waterways that are normally off-limits.

[School lunch service]
Around the date commemorating World Heritage site inscription, elementary schools in the Miike Area serve school lunch having a conceptual connection with coal. Students watch videos related to the Sites of Japan's Meiji Industrial Revolution and are given an opportunity to learn about World Heritage values.

# Appendix 1-7

Cover photo by Omuta Coal Industry and Science Museum

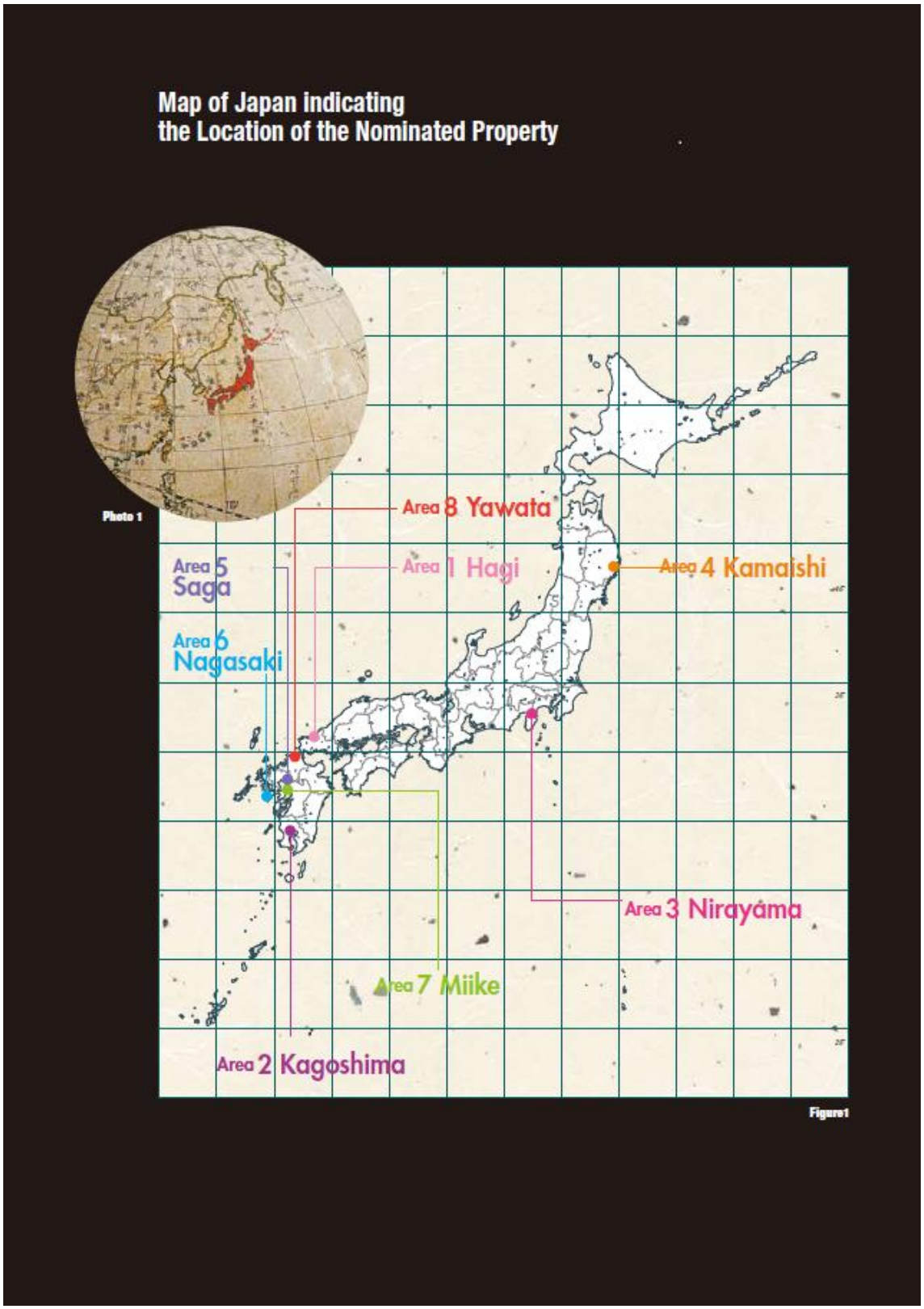
Appendix 1-8

Area8 Yawata

# AREA-SPECIFIC INTERPRETATION PLAN


Yawata Conservation Council

【Area List】


Map of Japan indicating
the Location of the Nominated Property
Photo 1
Area 8 Yawata
Area 1 Hagi
Area 4 Kamaishi
Area 5
Saga
Area 6
Nagasaki
Area 3 Nirayama
Area 7 Miike
Area 2 Kagoshima
Figure1

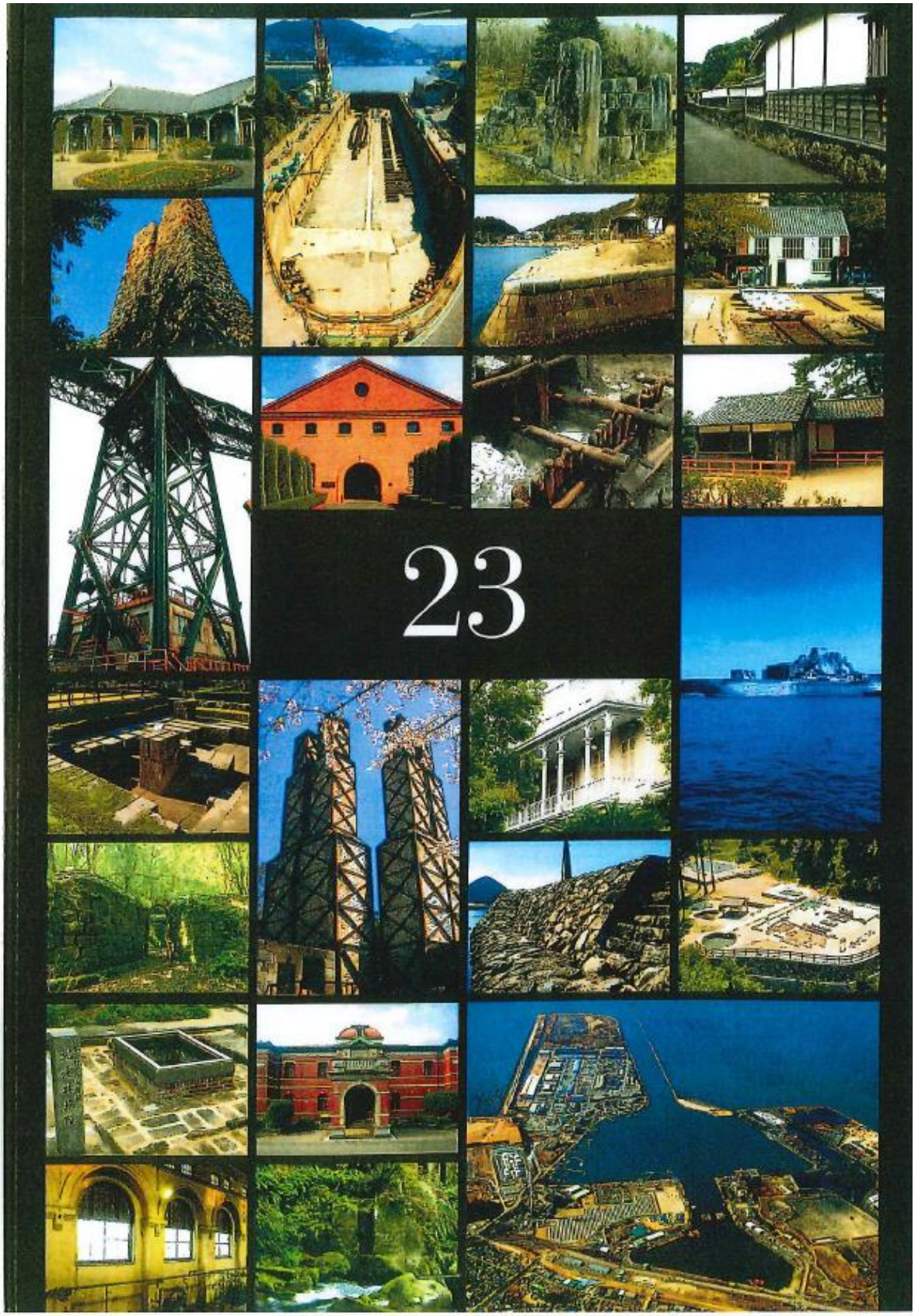
【Component Name】

## List of the Component Parts

| Area | Site | ID | Component Part |
|---|---|---|---|
| A1 Hagi | 1 Hagi Proto-industrial Heritage | 1-1 | Hagi Reverberatory Furnace |
| | | 1-2 | Ebisugahana Shipyard |
| | | 1-3 | Ohitayama Tatara Iron Works |
| | | 1-4 | Hagi Castle Town |
| | | 1-5 | Shokasonjuku Academy |
| A2 Kagoshima | 2 Shuseikan | 2-1 | Shuseikan |
| | | 2-2 | Terayama Charcoal Kiln |
| | | 2-3 | Sekiyoshi Sluice Gate of Yoshino Leat |
| A3 Nirayama | 3 Nirayama Reverberatory Furnaces | 3-1 | Nirayama Reverberatory Furnaces |
| A4 Kamaishi | 4 Hashino Iron Mining and Smelting Site | 4-1 | Hashino Iron Mining and Smelting Site |
| A5 Saga | 5 Mietsu Naval Dock | 5-1 | Mietsu Naval Dock |
| A6 Nagasaki | 6 Nagasaki Shipyard | 6-1 | Kosuge Slip Dock |
| | | 6-2 | Mitsubishi No.3 Dry Dock |
| | | 6-3 | Mitsubishi Giant Cantilever Crane |
| | | 6-4 | Mitsubishi Former Pattern Shop |
| | | 6-5 | Mitsubishi Senshokaku Guest House |
| | 7 Takashima Coal Mine | 6-6 | Takashima Coal Mine |
| | | 6-7 | Hashima Coal Mine |
| | 8 Glover House and Office | 6-8 | Glover House and Office |
| A7 Miike | 9 Miike Coal Mine and Miike Port | 7-1 | Miike Coal Mine and Miike Port |
| | 10 Misumi West Port | 7-2 | Misumi West Port |
| A8 Yawata | 11 The Imperial Steel Works, Japan | 8-1 | The Imperial Steel Works, Japan |
| | | 8-2 | Onga River Pumping Station |

Table1

3


23

SITES OF
JAPAN'S
MEIJI INDUSTRIAL
REVOLUTION
IRON & STEEL, SHIPBUILDING
AND COAL MINING

# Executive Summary

## Brief Synthesis

"Sites of Japan's Meiji Industrial Revolution: : Iron and Steel, Shipbuilding and Coal Mining" comprise a singular ensemble of industrial heritage sites that represent the first successful transfer of industrialization from the West to a non-Western nation.

From the middle of the 19th century to the early 20th century, Japan achieved rapid industrialization that was founded on the key industrial sectors of shipbuilding, iron and steel, and coal mining. The initial phase was one of trial and error experimentation in iron making and shipbuilding, based mostly on Western textbooks, and by copying examples of Western ships. This was followed by the more successful importation of Western technology and the expertise to operate it and, by the late Meiji period, full-blown industrialization through newly acquired domestic expertise and the active adaptation of Western technology to best suit Japanese needs and social traditions. This successful industrialization was achieved in just a little over 50 years without colonization, and on Japan's own terms. The property is testimony to this unique phase in world history.

# Justification for Criteria

**Criterion (ii)**

The property is a series of heritage sites that, together, uniquely illustrate the process by which feudal Japan sought technology transfer from Western Europe and America from the middle of the 19th century. This technology was adopted and progressively adapted to satisfy specific domestic needs and social traditions, thus enabling Japan to become a world-ranking industrial nation by the early 20th century.

**Criterion (iv)**

The technological ensemble of key industrial sites of shipbuilding, iron and steel, and coal mining is testimony to Japan's unique achievement in world history as the first non-Western country to successfully industrialize. Viewed as an Asian cultural response to Western industrial values, the ensemble had no counterpart elsewhere in the world.

# Statement of Integrity

The 23 component parts are the best, and often the only, surviving examples of the key attributes that represent shipbuilding, the iron and steel, and coal mining industries and that are necessary to express Outstanding Universal Value. In each case, the boundary of the component part has been drawn to include the essential features that, overall, contribute to Outstanding Universal Value.

Component parts are in good condition and have mechanisms in place to control deterioration and keep sites free from the adverse effects of development. They have been variously affected by continued use, re-use or lengthy periods of abandonment, and their physical integrity varies between well preserved and fragmentary, the latter being sufficiently intact to be able to represent the former whole. In some cases, where the evidence is primarily archaeological, sufficient investigation has been carried out to verify that a substantial archaeological site survives in good condition for further study and presentation. In other cases, in particular those that remain in operational industrial use, ongoing use and maintenance have resulted in an extraordinarily high level of integrity of working industrial elements.

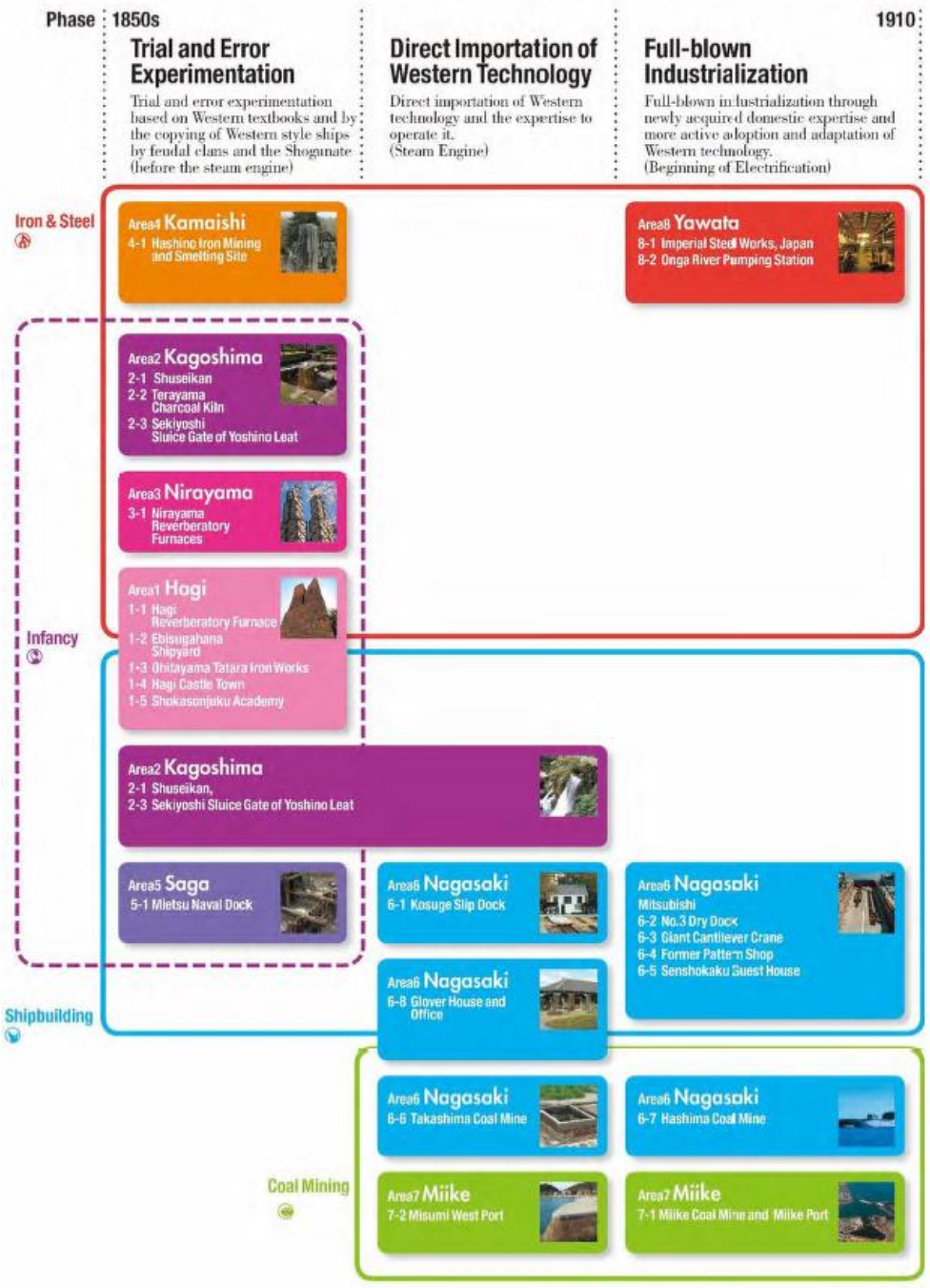
# Statement of Authenticity

The property as a whole as well as at the level of each component part meets the conditions of authenticity in relation to Outstanding Universal Value. It has a high degree of authenticity as the best surviving group of industrial remains that represent, and demonstrate, the first, and rapid, transfer of industrialization from the West to a non-Western nation.

With regard to 'form and design' and 'materials and substance', the component parts constitute the original forms and materials of the range of industrial components necessary to represent the transfer of heavy industry from the West to Japan. Some contain sites that range from fragmentary or archaeological, that are nonetheless authentic relics of important industrial components of the series, to those that comprise substantially intact authentic physical remains that have been managed for many years as historic sites which display these characteristics. Others possess an extremely complete survival not only of form, design and materials but also of continuing use and function.

Industrial History Related to the Yawata Area

The Yawata Area encompasses component parts that retain records related to the iron and steel industry in the third phase, Full-blown Industrialization, in the World Cultural Heritage “Sites of Japan’s Meiji Industrial Revolution: Iron and Steel, Shipbuilding and Coal Mining.”



The Interpretation Strategy which the Cabinet Secretariat submitted to UNESCO on November 30, 2017, as an appendix to the State of Conservation Report noted the following:

**11. Interpretation Plan (extract)**

**(1) Consistent OUV rollout across all component parts**

Based on the Interpretation Strategy, the consistent interpretation of OUV should be presented across all component parts. This will be agreed by all stakeholders, and coordinated and implemented commonly in a branded World Heritage style.

**(2) and (3) Progress in dealing with the "full history" of each site, including information gathering related to workers**

Advice from international experts who are members of the Expert Committee on the Industrial Heritage including Operational Properties (Cabinet Secretariat of Japan), from the international heritage expert who was the ICOMOS technical evaluation field assessor of the World Heritage nomination of the "Sites of Japan's Meiji Industrial Revolution", and from the President of the ICOMOS International Scientific Committee on Interpretation and Presentation, comprises the following four key policies:

1) Focus on the interpretation of Outstanding Universal Value; in conformity with the primary purpose of the World Heritage, OUV of the inscribed property should be presented clearly at each site, not confusing with other, albeit related, issues. Based on this, Recommendation g)* should be implemented.

2) The scope of the "full history" of each site, except for the OUV period (from 1850s to 1910) as described on page 78, falls into two parts: prior to 1850s, and from 1910 to the present. The target of the full history should be narrowed down, considering the local values that supplement the understanding of the background of each component part. Where relevant, with regard to the interpretation of the full history on the location of each component part, high quality research such as collecting primary historical documents and recording oral testimonies should be carried out, and the result of this research should, at some stage, be made publicly available through appropriate media.

* Recommendation g)

> *"Preparing an interpretive strategy for the presentation of the nominated property, which gives particular emphasis to the way each of the sites contributes to OUV and reflects one or more of the phases of industrialisation; and also allows an understanding of the full history of each site."*

Based on the Interpretation Strategy, we have had multiple audits of the current status of interpretation at the component parts and visitor centres, etc., in the various areas undertaken by international experts familiar with industrial assets and the interpretation thereof in countries around the world.
As a result, auditor Barry Gamble identified the following issues in relation to the Yawata area.

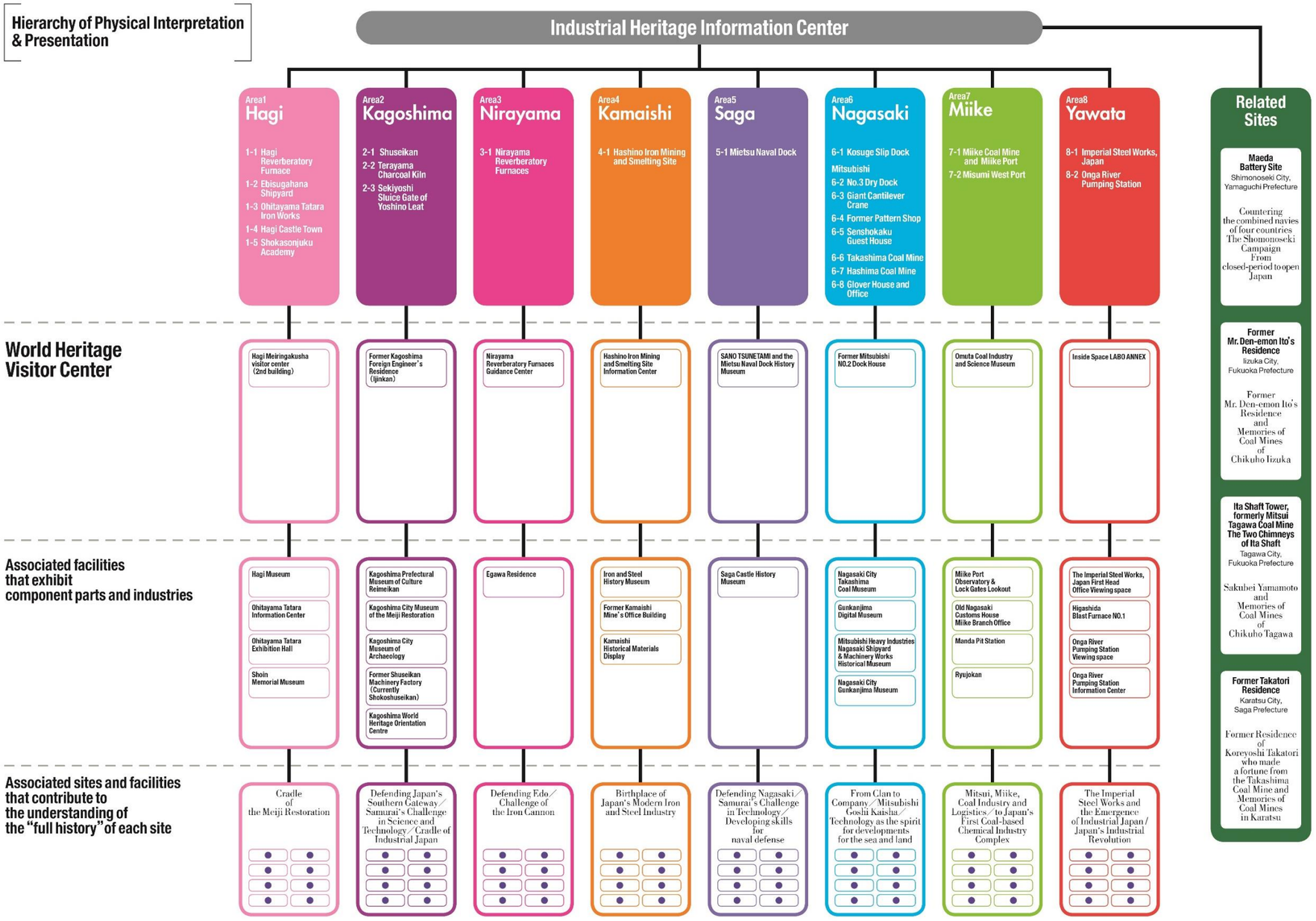
- The First Head Office's conservation works are to be commended. When they are completed in 2020, it will provide a fitting facility to present its contribution to the WHS and that of the Component Part - even though access will (at least for the time being) be limited due to its location within the operational site.
- The First Head Office observatory space has enhanced its visitor experience with the introduction of a virtual reality experience that provides interpretation of the WHS and also the history of this Component Part. There is an early stage proposal to develop a tunnel from the observatory to the First Head Office which would provide safe and controlled physical access to a secured area within this operational site which has necessary restricted access.
- The Innovation Gallery is an appropriate publicly accessible cultural facility that serves as a visitor centre to accommodate the future "common exhibition".
- The Onga River Pumping Station interpretation is to be commended. It clearly states the significance of the Component Part and its contributions and relationships to other Component Parts and the overall OUV of the WHS.

Discussions have been held regarding this interpretation plan for the Yawata Area thus far by the local conservation council.
As pointed out above, conservation work on the First Head Office has been completed according to schedule. With regard to establishing roads leading directly to the facility, discussions are currently underway with experts both in Japan and abroad to determine a plan that will ensure public access without any damage to World Heritage values.
We will also cooperate with the Industrial Heritage Information Centre to develop exhibits that better reflect the World Heritage values in harmony with the historical and cultural values of the region.
The local conservation council will review the implementation progress of this plan and consider ways to make improvements as appropriate.

Local Conservation Council meeting

Hierarchy of Physical Interpretation and Presentation

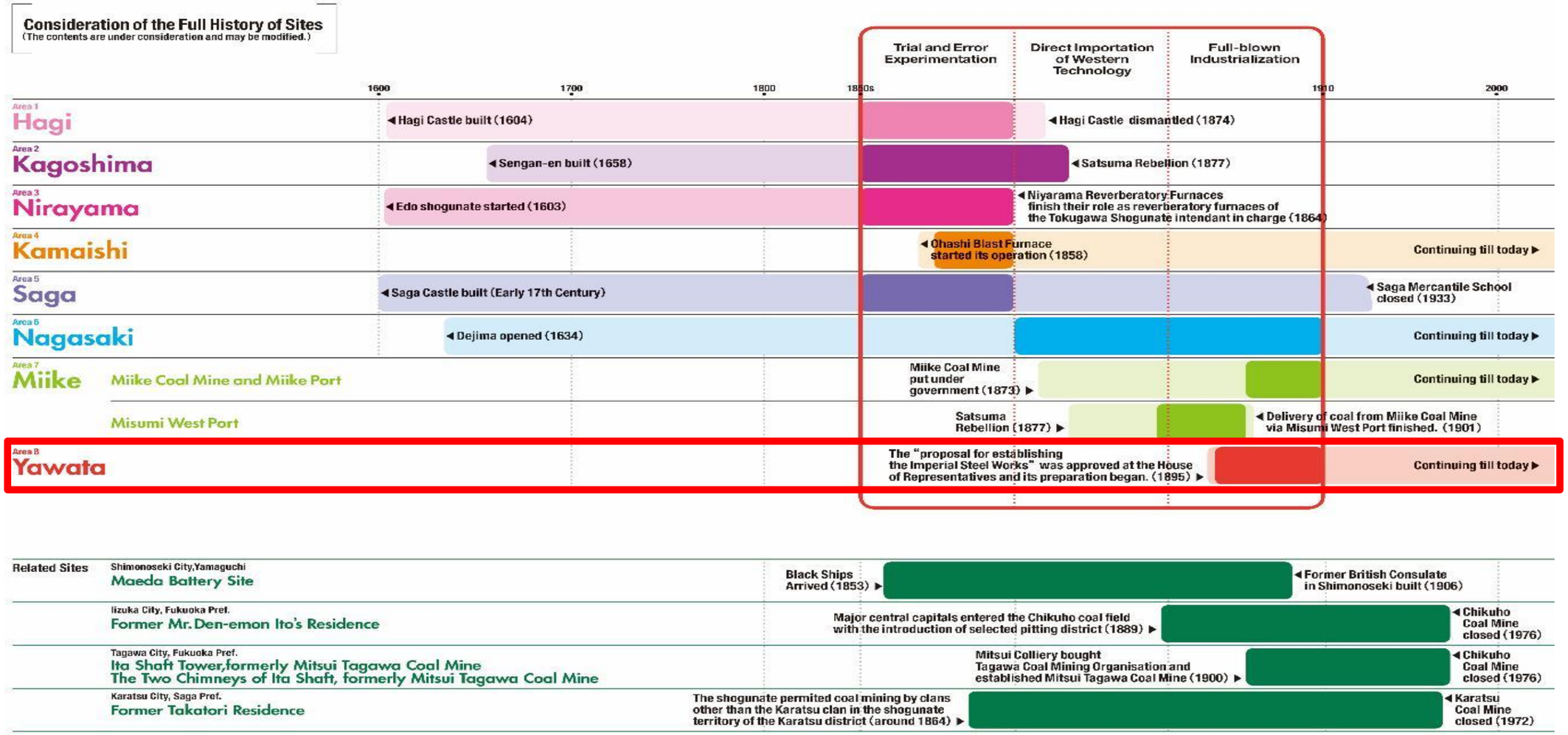
The Industrial Heritage Information Centre and the various local visitor centres will work together to build a system enabling the effective communication of the OUV of the Sites of Japan's Meiji Industrial Revolution.




Related sites: Sites that were component part candidates in the provisional UNESCO World Heritage listing on the January 5, 2009, and that comprise industrial heritage (valuable assets that provide insight into the historical background and social situation of the time) that will be utilized in an integrated manner with the World Heritage Listed "Sites of Japan's Meiji Industrial Revolution."

Consideration of the Full History of Sites

The Interpretation Strategy which the Cabinet Secretariat submitted to UNESCO in 2017, addressed consideration of the full history of sites as shown in the figure below.



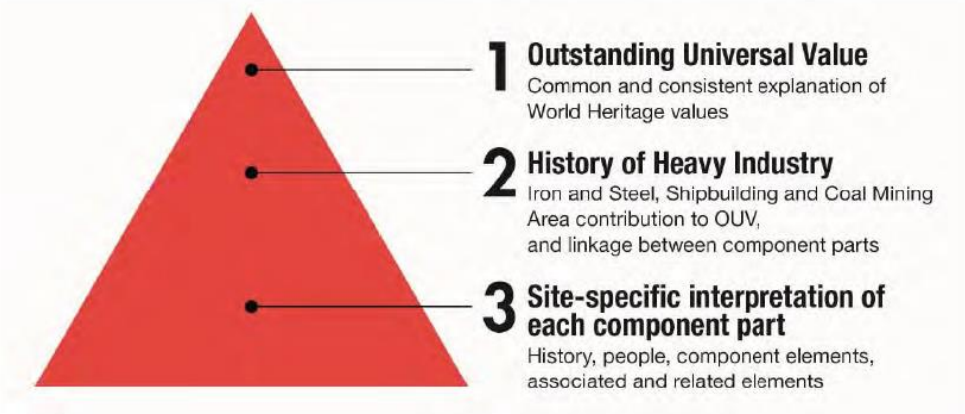
Interpretation in the Yawata Area

Approach of the Interpretation Strategy

The Interpretation Strategy provides the following schematic in relation to concepts for interpretation and presentation.

Interpretation for the Yawata area too will be approached in line with this in order to resolve the issues identified in interpretation audits.

**Interpretation and presentation of the Sites of Japan's Meiji Industrial Revolution: Hierarchy of value and themes**




OUV stands at the top of the interpretation pyramid at the Industrial Heritage Information Centre and the various regions' visitor centres and is therefore the top-priority theme over the interpretation and presentation of individual regions and industries, such as history specific to an area or component part. Addressing interpretation in the order of (1) OUV, (2) the history of heavy industry, and (3) site-specific interpretation of each component part, as shown above, will ensure consistent presentation across the property

**Interpretation flow at each local visitor centre**

Hierarchy of Interpretation

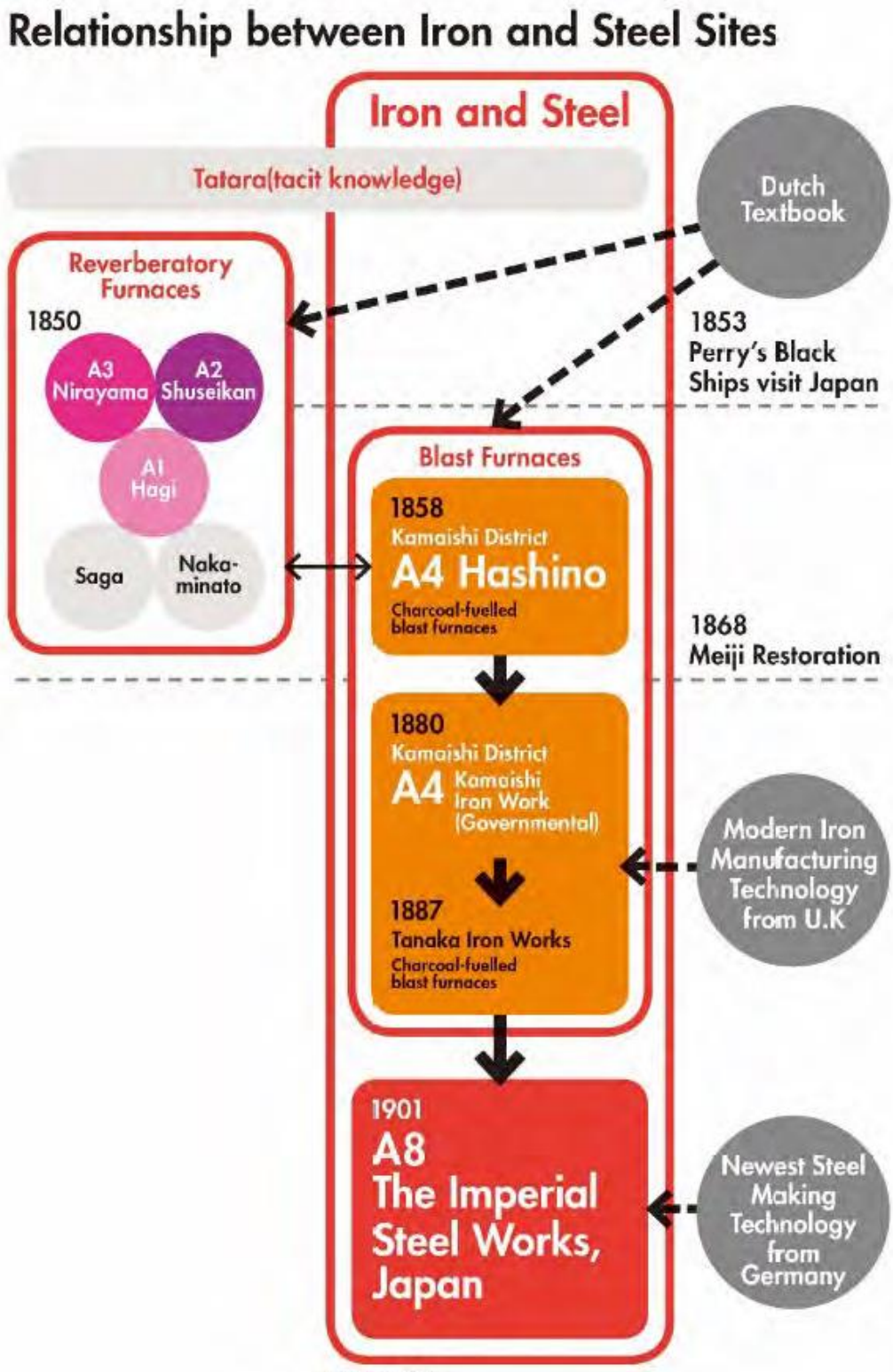

Relationship between Iron and Steel Sites
Iron and Steel
Tatara(tacit knowledge)
Dutch Textbook
Reverberatory Furnaces
1850
A3 Nirayama
A2 Shuseikan
A1 Hagi
Saga
Naka-minato
1853 Perry's Black Ships visit Japan
Blast Furnaces
1858
Kamaishi District
A4 Hashino
Charcoal-fuelled blast furnaces
1868 Meiji Restoration
1880
Kamaishi District
A4 Kamaishi Iron Work (Governmental)
1887
Tanaka Iron Works
Charcoal-fuelled blast furnaces
Modern Iron Manufacturing Technology from U.K
1901
A8
The Imperial Steel Works, Japan
Newest Steel Making Technology from Germany

Figure 3-2

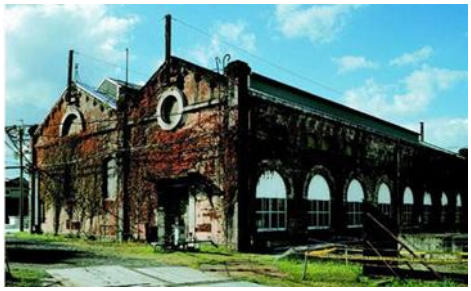
Presentation Using “Liquid Galaxy,” Etc.

The Industrial Heritage Information Centre, which was established in March 2020 pursuant to the Interpretation Strategy, uses an immersive video multi-display that draws on the World Heritage OUV period (1850s-1910), as well as the Consideration of the Full History of Sites schematic. It explains through images the history and transformation of component parts in the various areas, as well as the way that people lived, etc., presenting these in a way that enables visitors to experience in a very real way the evolution of the property, the contribution to OUV, and the full history.
This area will also establish a digital archive of documents gathered by the Industrial Heritage Information Centre and the visitor centre in the area, which will be gradually reflected into interpretation tools.

Yawata Area Component Parts

This area contains four component parts in total, all heritage that relates to the Imperial Steel Works, Japan, with the Repair Shop and Onga River Pumping Station being component elements that are still operational today.

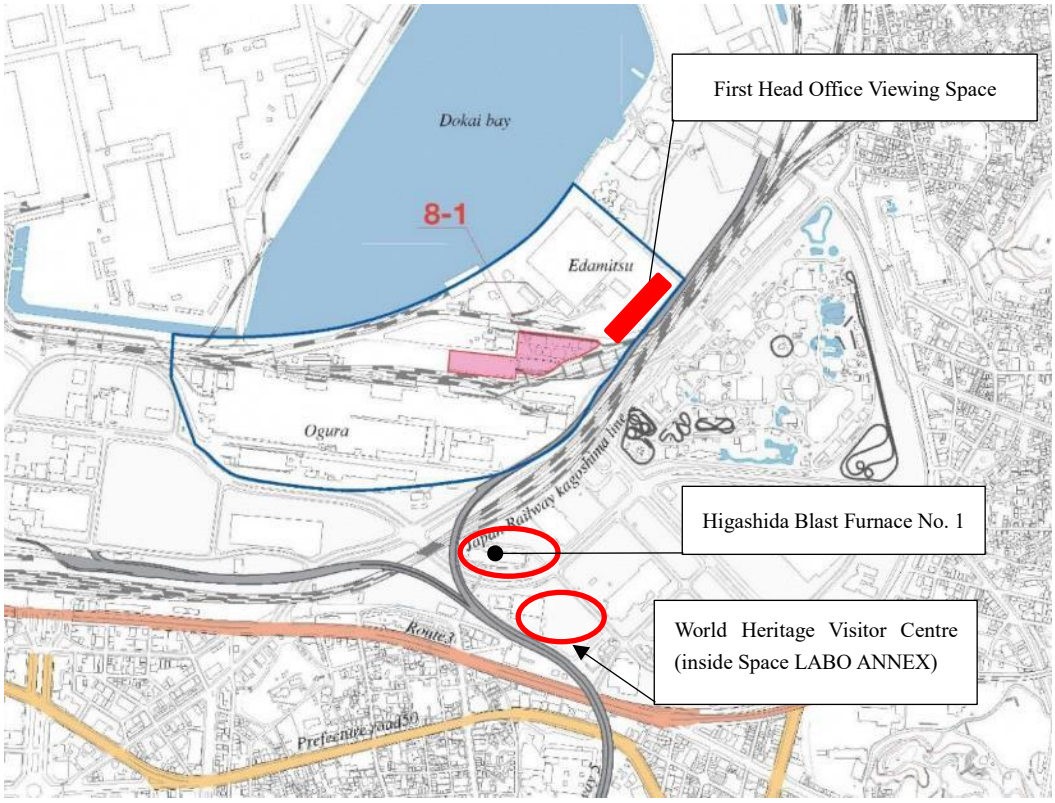
| | |
|---|---|
| Relevant industries: Iron and steel<br>Name of component part: First Head Office of the Imperial Steel Works, Japan<br>(Overview of component part)<br>Built in 1899 ahead of production facilities, this edifice is an architectural fusion of Japanese and European design, a two-story, red brick building with bilateral symmetry and a central dome set with a Japanese tile roof. The building contained offices for the director, chief engineering officer, and advisory engineer and performed a central function in the steel works. |  <br>(Facility not open to the public) |
| Relevant industries: Iron and steel<br>Name of component part: Repair Shop of the Imperial Steel Works, Japan<br>(Overview of component part)<br>Designed by German firm Gutehoffnungshütte (hereafter GHH) and built using their steel material in 1900, this facility remains today as the oldest existing steel-structured building in Japan. It was used in the manufacturing and processing of various parts used in the steel works and for repairing machinery. Since then, it has been enlarged on three occasions to accommodate the increase in the amount of steel production and remains today as an industrial facility still in operation for over a century. |  <br>(Facility not open to the public) |

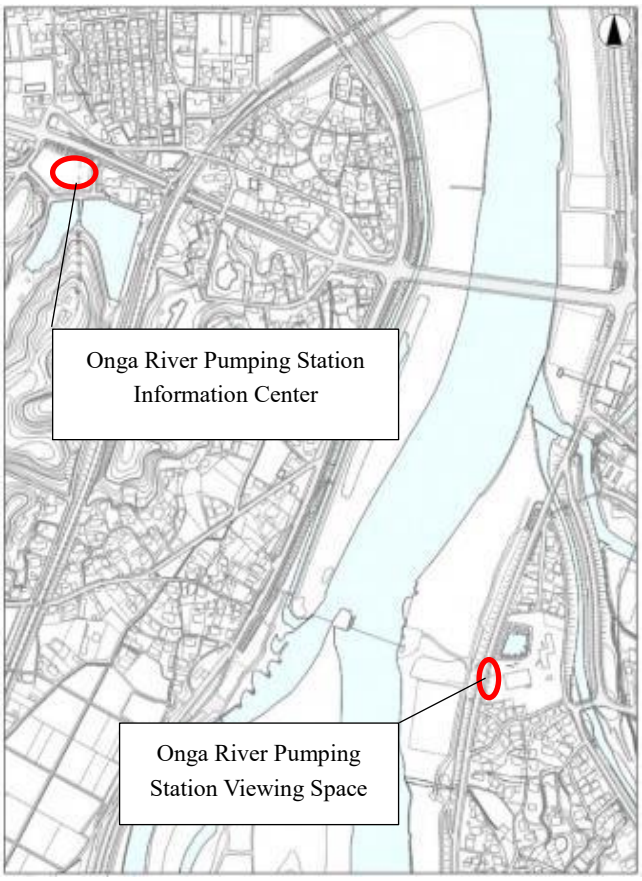
| | |
|---|---|
| Name of component part: Former Forge Shop of the Imperial Steel Works, Japan |  |
| (Overview of component part)<br>Built in 1900 for the purpose of manufacturing forgings needed for the construction of the steel works. This steel-structured building was designed by German firm GHH and built using their steel material, just like the Repair Shop. Forgings needed for the construction of the steel works, such as large-scaled spanners, chisels, hammers, and stands for machine mounting, were manufactured here. | (Facility not open to the public) |
| Relevant industries: Iron and steel | |
| Name of component part: Onga River Pumping Station |  |
| (Overview of component part)<br>Facility used to deliver water to the steel works. It began supplying industrial water in 1910 to cope with the shortage that arose with the 1st phase expansion plans for the steel works. It is a red brick building typical of Meiji architecture. Steam has been replaced by electricity for power, and the facility is still in operation today. | (Facility not open to the public) |

World Heritage Plaques

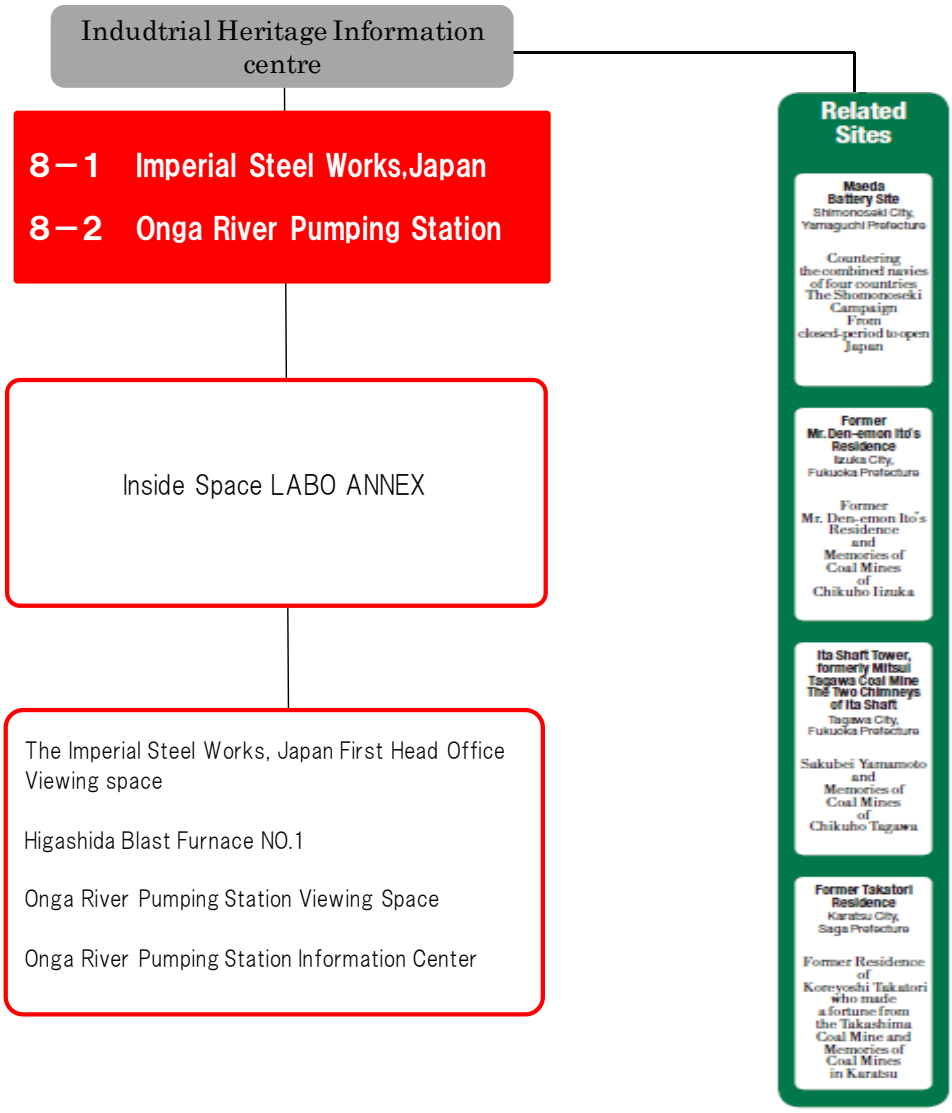
In line with the UNESCO Guidelines, World Heritage plaques have been installed at the various component parts to inform visitors properly about the OUV of the property.

Yawata Area: Distribution of Interpretation Facilities



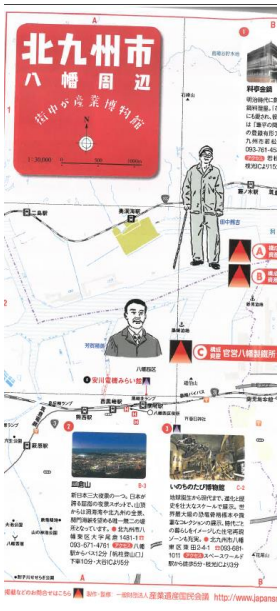



Yawata Area: Hierarchy of Physical Interpretation and Presentation



Access Guide Maps

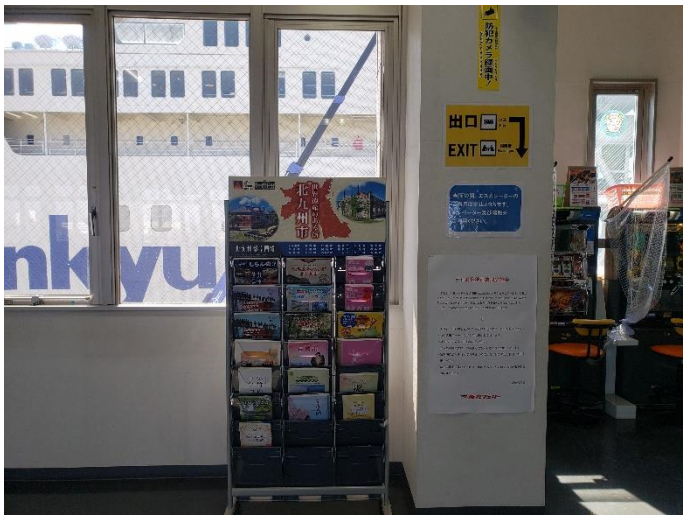
Access guide maps for the component parts in each area have been produced in both Japanese and English and are distributed free to visitors. The Nagasaki area map will also be available in Chinese and Korean as of early December. The access maps are designed to help tourists orient themselves in relation to the component parts of the various areas and enable them to visit as many component parts as possible within each area.
By linking the maps to a smartphone app, information can be communicated about component parts not open to the public using augmented reality (AR) functions to show 3D models, videos, and 360-degree panorama views of inaccessible sites.


Information Counters

These are set up in administrative institutions and airports to distribute access guide maps and other information.


Kitakyushu City Hall




Hankyu Ferry Terminal (Izumiotsu City, Osaka)

Guide Map Distribution Points and Number of Maps Distributed

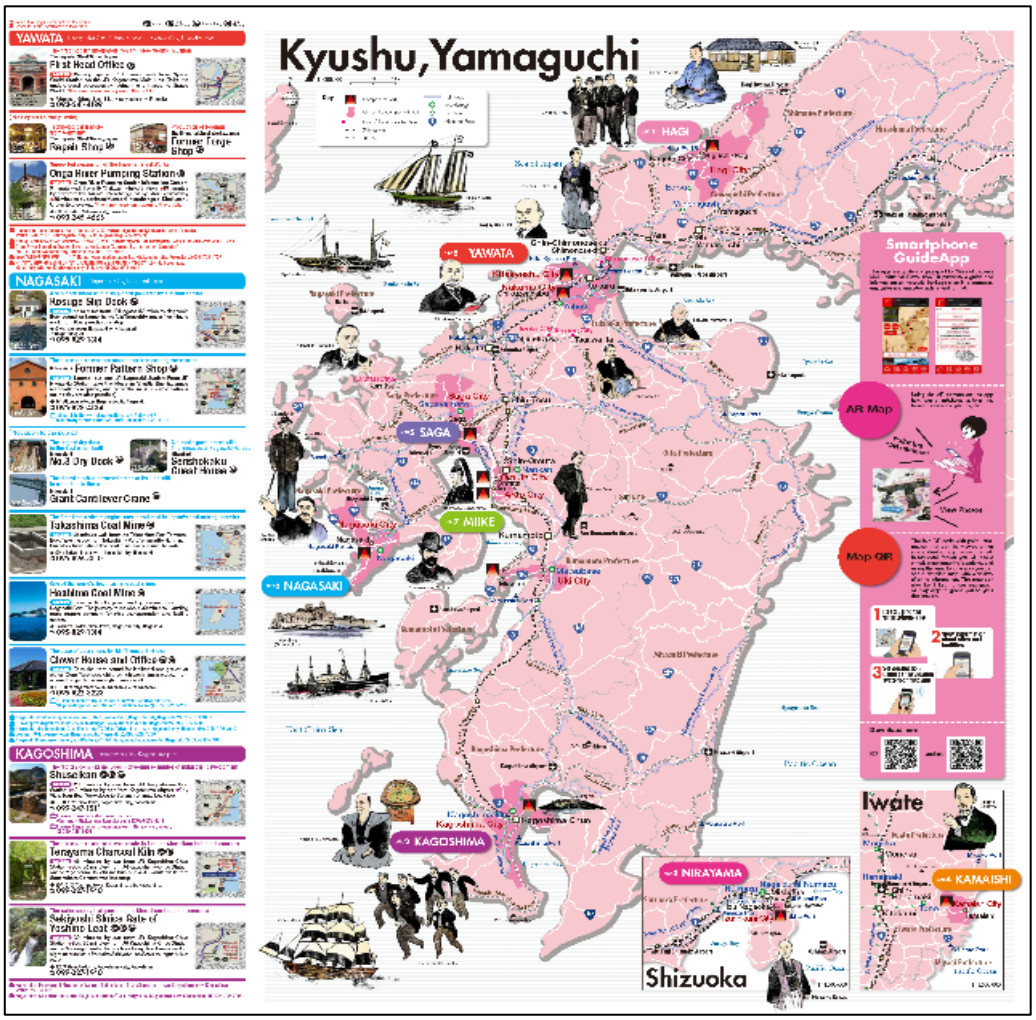
Guide map distribution points and the number of maps distributed are as follows.

| Overall map | | Yawata Map | |
|---|---|---|---|
| **No. distributed** | **177,762** | **No. distributed** | **65,519** |
| Japanese & English | 177,762 | Japanese | 50,090 |
| **Main distribution point** | **No. distributed** | **Main distribution point** | **No. distributed** |
| Administrative organizations | 300 | Administrative organizations | 14,104 |
| Airports | 550 | Airports/ Airlines | 1,350 |
| Hotels | 50 | Hotels | 2,700 |
| Car rental agencies | 100 | Car rental agencies | 100 |
| JR (Railway) | 600 | JR (Railway) | 800 |
| Tourist information centers | 700 | Tourist information centers | 81 |
| Michi-no-eki roadside stations | 4,400 | Michi-no-eki roadside stations | 2,000 |
| NEXCO | 168,500 | NEXCO | 15,300 |
| Public interest corporation/foundation/ incorporated association | 550 | Public interest corporation/foundation/ incorporated association | 4,250 |
| | | | |
| Other | 2,012 | Other | 40,685 |
| JR Kyushu Hakata Station General Information | | Council for the Japan Heritage Kanmon Straits | |
| West Nippon Expressway Retail Co., Ltd. | | General Affairs Division, Planning and Coordination Bureau, City of Kitakyushu | |
| West Nippon Expressway Service Holdings Company Limited | | Cultural Promotion Division, Human Resources Development and Citizens Affairs Department, Fukuoka Prefectural Government | |
| Fugetsu Foods Co., Ltd. | | Kitakyushu Museum of Natural History & Human History | |
| Fukuoka International Airport Co., Ltd. | | Yawata Steel Works, Nippon Steel Corporation | |
| Nagasaki Airport | | Iizuka City Historical Museum | |
| Kagoshima Prefectural Library | | Tagawa City Coal Mining Historical Museum | |
| JR Kagoshima Chuo Station Tourist Information Center | | Moji Coast Guard Office | |
| Kitakyushu Convention & Visitors Association | | Fukuoka City Tourist Information Center | |
| Omura City Hall Industrial Promotion Dept. | | Kitakyushu Air Terminal Co., Ltd. | |
| JR Miyazaki Station Tourist Information Center | | Kanmon-Kisen Co., Ltd. | |
| | | | |

| Total no. distributed for the entire area |
|---|
| **464,025** |

World Heritage Route

In accordance with the Interpretation Strategy, and also as noted in pages 395–396 of the Nomination Document, the World Heritage Route Promotion Council was founded to provide guidance and tourism infrastructure for understanding World Heritage as a whole. The Council attracts visitors to all component parts and related sites by producing maps, apps, and GPS navigation and by installing road signs and other signage using the common logo to promote the Sites of Japan's Meiji Industrial Revolution so that visitors are able to understand the World Heritage value constituted by the 23 component parts.
Work will continue to be undertaken steadily pursuant to the Nomination Document and the Interpretation Plan.




Map on p. 396 of the Nomination Document


World Heritage Route Promotion Council meeting

Installation of Road Signage, Etc., Using the Common Logo

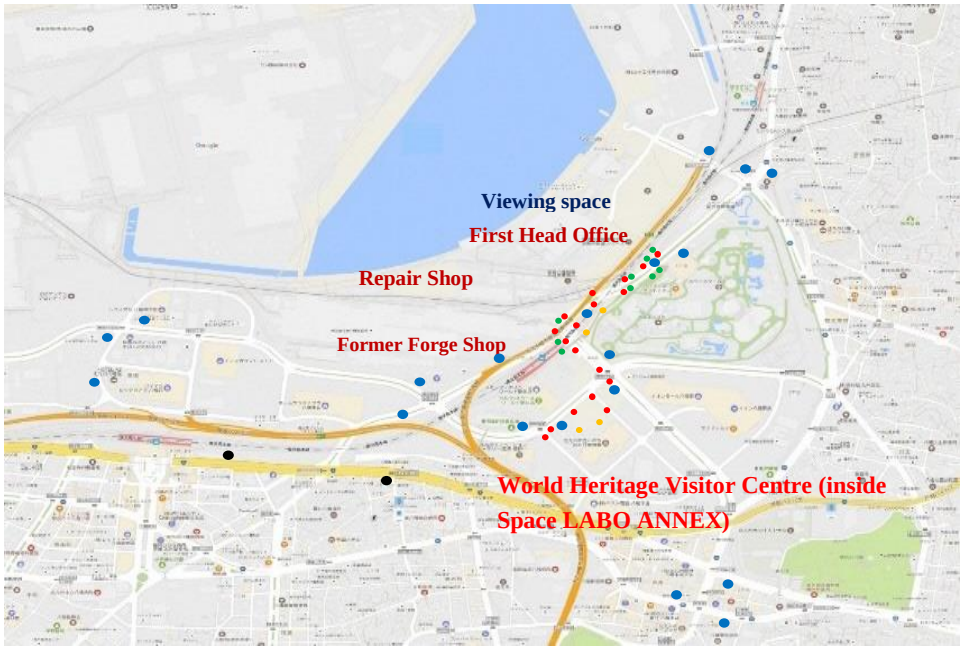
Status of installation of road signage

| Place | No. of signs installed |
|---|---|
| Kitakyushu City | 54 |
| Nakama City | 14 |

Photos of road signage

Locations of Road Signs Using the Common Logo

(Kitakyusyu City)



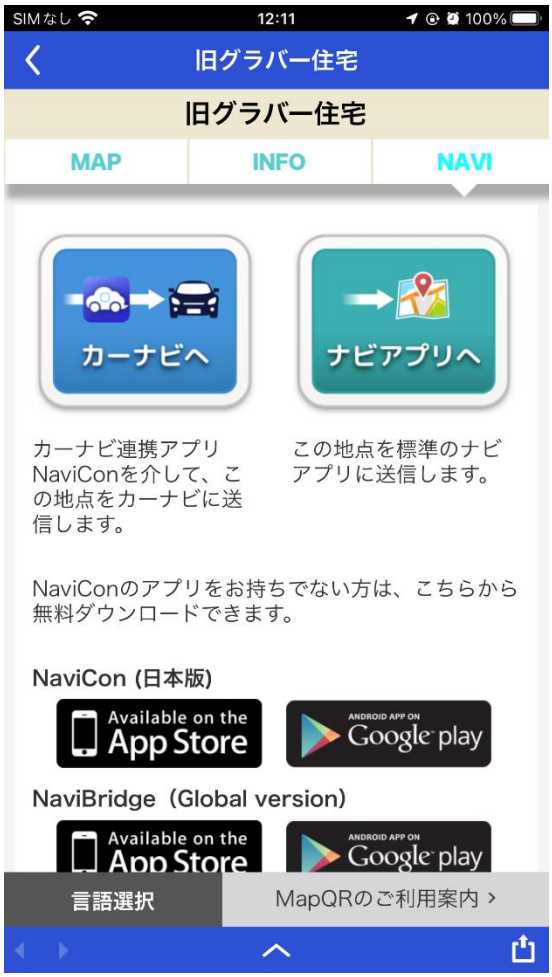

（Nakama City）

Linkage with Car Navigation (Denso Car Navigation)

Example of linkage with smartphone app so that the target destination can be sent to a car navigation system




The destination can be sent directly from a smartphone to the car navigation system.

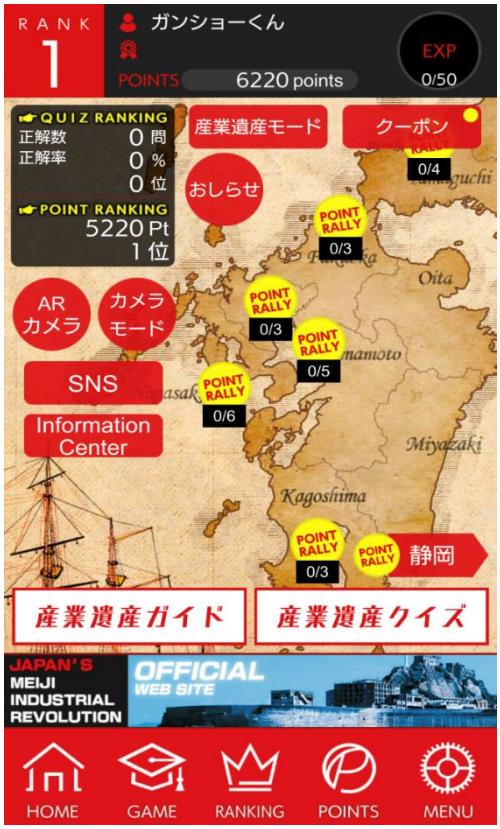




A video on how to use the application has been put up on YouTube.

App Utilization

The app introduces the Sites of Japan's Meiji Industrial Revolution, including detailed stories and explanations, as well as the historical background, using video and computer graphics, etc. Users can earn points by playing games and using the AR camera on the app and use them as coupons for souvenirs and other prizes. As such, it serves as a mechanism for both deepening understanding of World Heritage value and feeding back into World Heritage Route tours. The smartphone app is available in Japanese, English, Korean, simplified Chinese, traditional Chinese, and Vietnamese.




Use of Line App

Points acquired on the app can be exchanged for coupons.

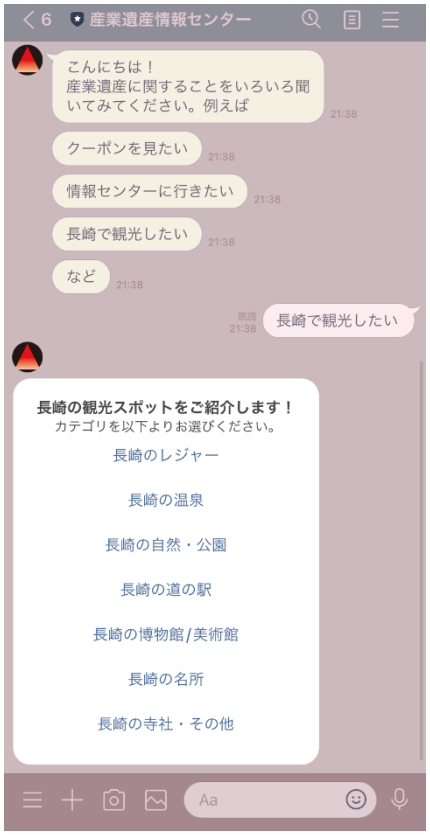


Point-of-purchase advertising has been created and placed in stations and information centres, etc., to encourage people to sign up to the LINE app.

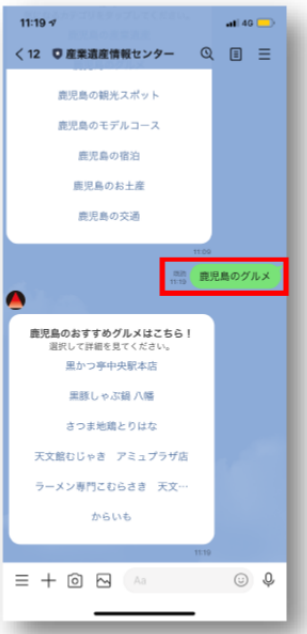
LINE is used as a runway for achieving two-way communication geared to the circumstances of the user based on locational information, such as the use of existing guide apps and communication about coupons that can be used in shops at the area visited. The service is provided in multiple languages so as to support international visitors.

LINE functions (examples)

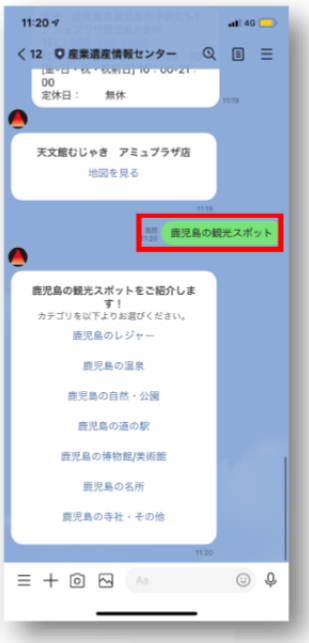

Introduction to model courses



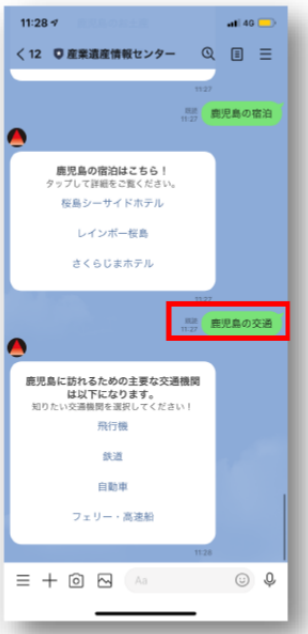

AI chatbot function



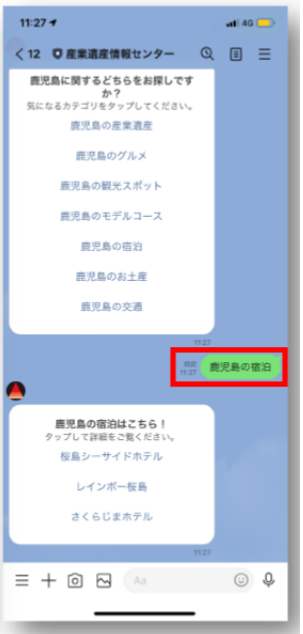

Gourmet information




Tourist spots



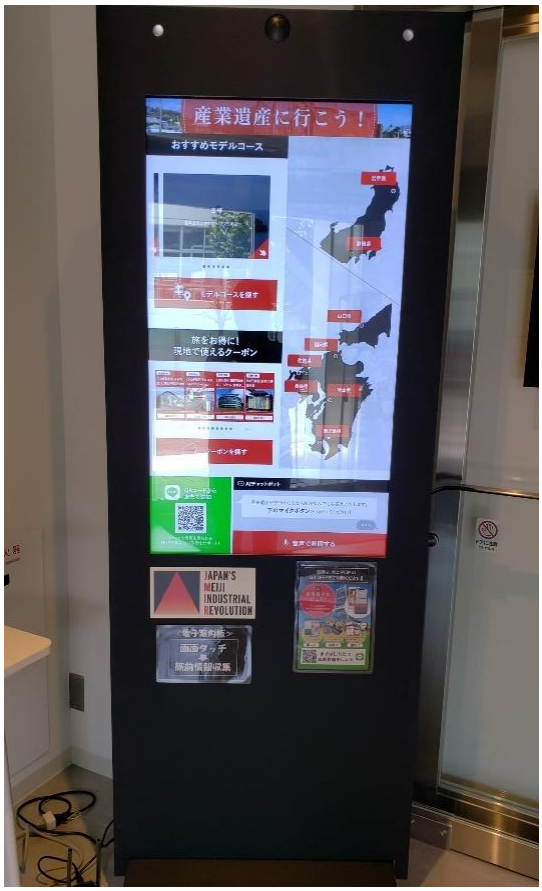

Traffic information




Accommodation information

Digital Signage Functions

Digital signage has been installed in the Industrial Heritage Information Centre as a mechanism for encouraging multi-destination tourism by displaying local guide maps and information on multi-destination industrial heritage routes. AI chatbots have also been installed to respond to a wide range of multi-destination routes and tourism questions in real time.

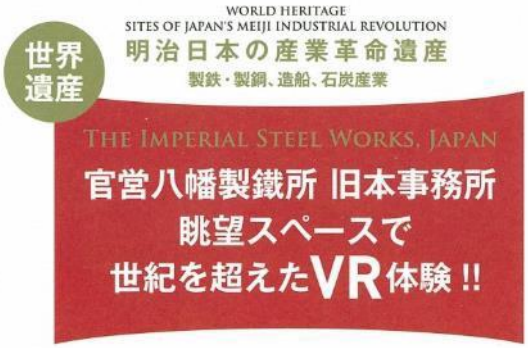



Enhancement of digital content

Component elements that are operational and not open to the public in this area are introduced on relevant websites and applications with content created using digital technology that recreates scenes of facilities in operation.

1) Explanation of OUV and a simulated tour utilizing virtual reality (First Head Office Viewing Space)


写真提供：日本製鉄㈱九州製鉄所



## 官営八幡製鐵所 VR視聴コンテンツ

### HISTORY 世界遺産 官営八幡製鐵所
［プロローグ］

写真提供：日本製鉄㈱九州製鉄所


3分50秒

日本製鉄（株）九州製鉄所には、操業当時からの歴史を記憶したガラス乾板写真があります。この貴重な史料を使用し、世界遺産たる官営八幡製鐵所の歴史的な価値を伝えるストーリーです。

※コンテンツ全体のプロローグとしてご覧ください。

### TIME TRAVEL
［タイム・トラベル］
**構成資産 旧本事務所**

写真提供：日本製鉄㈱九州製鉄所

1分

### TIME TRAVEL
［タイム・トラベル］
**構成資産 修繕工場**

写真提供：日本製鉄㈱九州製鉄所

1分

現在の写真から、当時を再現したCGで一世紀前へタイムトラベル。構成資産である「旧本事務所」と「修繕工場」の2つのコンテンツが、お楽しみいただけます。

THE IMPERIAL STEEL WORKS, JAPAN

### VIRTUAL TOUR 旧本事務所 見学ツアー
［バーチャル・ツアー］

3分30秒

官営八幡製鐵所「旧本事務所」内部を歩いている感覚で見学できる360°バーチャルツアーです。内装復元工事前の様子を2018年春に360°カメラで撮影した貴重な映像を元にしています。

### VIEW FROM SKY 空から観る世界遺産関連施設
［ビュー・フロム・スカイ］

視聴時間は任意です

眺望スペース上空から、ドローン&360°カメラで撮影。「旧本事務所」「修繕工場」「旧鍛冶工場」3つの構成資産に加え、東田第一高炉史跡広場や北九州イノベーションギャラリーを空の上からの爽快な眺めとともにご紹介します。

## タブレットでも、VRデバイスと同じコンテンツをお楽しみいただけます。

グループやご家族で眺望スペース訪れた方やVRは苦手という方には、タブレットでの視聴が可能です。

写真提供：日本製鉄㈱九州製鉄所

### ご利用上の注意

※VRの視聴は無料ですが、台数に限りがございます。
※眼科に通われている場合や目に疾患をお持ちの方は、専門医に相談の上、ご利用ください。
※屋外での視聴のため、雨天の場合など、天候によりVR視聴ができない場合があります。
※13歳未満は原則タブレットでの視聴となりますが、保護者の同意を頂く方のみVRゴーグルでの体験を実施させて頂いています。
（但し、7歳未満は保護者の同意があってもVRゴーグルを使用できません。）

## 官営八幡製鐵所 旧本事務所 眺望スペース

（北九州市八幡東区東田5丁目）


■入場無料　■開場時間／9:30～17:00（入場は16:30まで）　■閉場日／毎週月曜日、年末年始

アクセス
■JR利用／鹿児島本線 スペースワールド駅から徒歩約10分
■都市高速利用／北九州都市高速「枝光IC」から車で2分
※専用駐車場（無料）あり

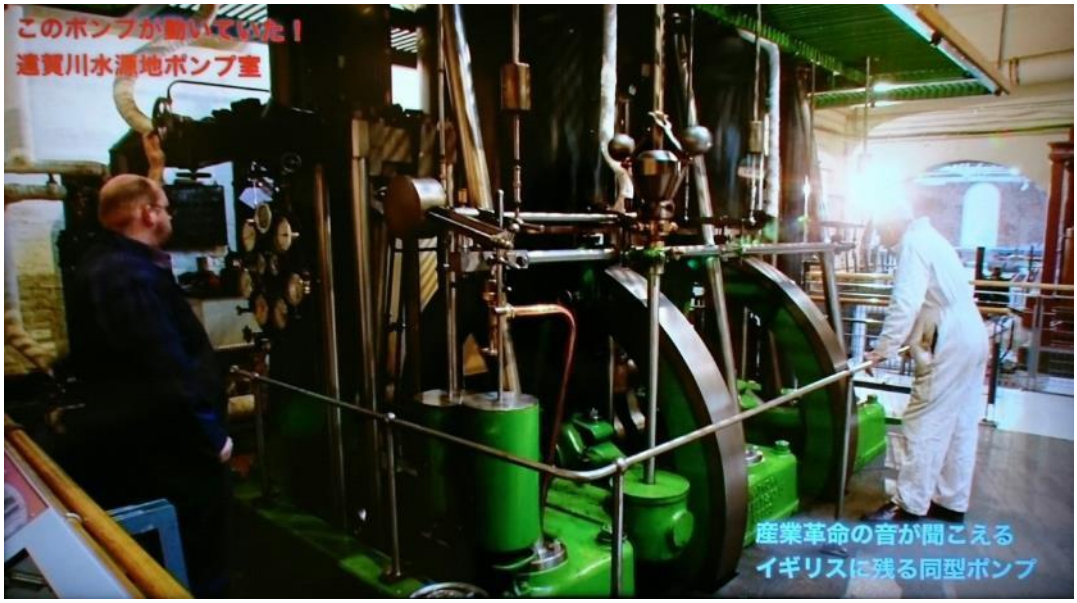
2) Commemorative photo using AR app
(First Head Office Viewing Space)


3) Footage of the interior and description of components, etc., using digital signage



4) 3D measurement technology images of the Onga River Pumping Station building interior (Onga River Pumping Station Information Center)


5) Video introducing the same triple expansion pumping engine as that of the Onga River Pumping Station (Onga River Pumping Station Information Center)

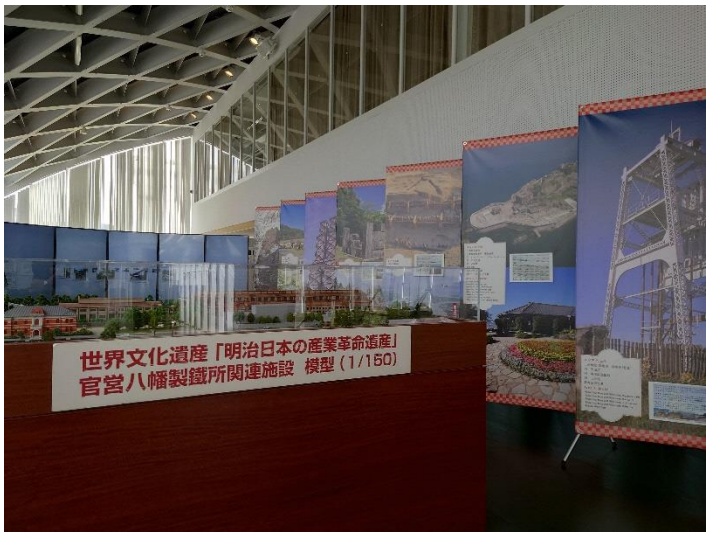


Visitor Centres

The Yawata Area is equipped with one visitor centre and four auxiliary facilities with exhibits of component parts and the industrial sector in line with the interpretation strategy. Each facility cooperates with the local community to prepare exhibits that best bring out the true World Heritage values in harmony with the historical and cultural values of the region. They aim to create exhibits that allow visitors to understand the value of the components easily. We will work to digitize valuable primary historical material and create exhibits leveraging digital tools going forward in cooperation with the Industrial Heritage Information Centre, taking into consideration issues raised by the interpretation audit.

[Inside Space LABO ANNEX]

A facility where visitors can learn about the overall history and World Heritage values through miniature replicas 1/150 in size that recreate the Imperial Iron Works-related facilities, along with panel exhibits and video content.

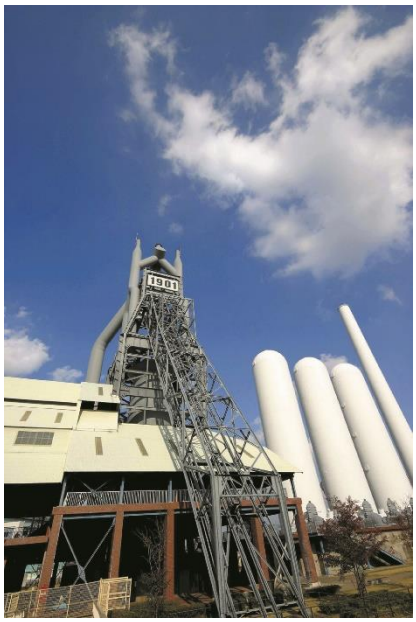



[The Imperial Steel Works, Japan First Head Office Viewing Space]

The Imperial Steel Works, inscribed as World Heritage, is not open to the public as it is situated in a steel works area that is still operational today. Thus, a viewing space is made available to allow visitors a closer look at the First Head Office which is a World Heritage facility.

[Higashida Blast Furnace No. 1]

Blast Furnace No. 1 is preserved as a monument to symbolize Kitakyushu, which is the birthplace of Japan's first integrated iron production. The blast furnace has undergone ten reconstructions and had operated from its first firing in August 1962 until its shutdown in January 1972 as a pioneer for Japan's super-high-pressure blast furnace era.



[Onga River Pumping Station Information Center]

Visitors to this facility learn about the Onga River Pumping Station, from its construction to the history of the transition that took place in the water delivery system, as well as World Heritage values through displays of bricks and water pipes uncovered at the Onga River Pumping Station and intake weir used until recent years, in addition to old photos, interpretive panels, and images of the interior.

[Onga River Pumping Station Viewing Space]

This facility allows visitors to view the exterior of the Onga River Pumping Station and to learn about World Heritage values with interpretive panels. A static exhibit of the electric pump that was used inside until recent years is also on display in a neighboring location.

Monitor tour

Learning Program for Children

# Appendix 1-8