Preservation and listing of the industrial heritage in Norway 1970-2020

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orway's development as an industrial nation is partially rooted in the natural resources of the country: Ores and minerals, forestry, fishing traditions, significant hydroelectric resources, and from the 1970's on especially; oil and gas. Accessing and utilising these resources has been the foundation of the nation's most important industries. This historical background must be considered when accounting for the broad, structural changes of the 1970's and 1980's within Norwegian labour and business. Especially in the context of discourse regarding national industrial heritage, as these structural changes precipitated a focus on protecting cultural monuments specific to the industrialisation of Norway.

This article will detail how industrial preservation efforts have been carried out in the period 1970 to 2020 on an overarching national level, reified in the office and mandate held by Riksantikvaren; an office which has existed in close connection with Norwegian cultural heritage policies throughout the decades. In the following segments, we will summarise the policy and work of Riksantikvaren with regards to safeguarding the country's technical and industrial cultural heritage, including its financing. More succinctly, the 'official gaze' is the point of view from which this article is composed.

INDUSTRIAL HERITAGE: THE NUMBERS

In Norway, the quantity of listed industrial plans gradually rose from two in 1920, to 17 in 1983, growing to 51 by 2022. The rate is instead 2, to 20, to 216, if industrial heritage in a broader sense i.e. railway heritage, lighthouses, bridges, power plants etc. (excluding workers dwellings and traditional wind- and watermills) is included. The rise in listed lighthouses and train stations is especially eye-catching between 1993 and 2002, although a steady rise in this type of listings does continue after 2002. Although various causal factors are relevant, we will herein limit ourselves to explaining the efforts of Riksantikvaren towards the preservation of industrial heritage in the period 1970 to 1920.

FORMULATING A NATIONAL STRATEGY

The Ministry for Environment was established in 1972. The office of Riksantikvaren was transferred to this new ministry in the subsequent year, having been part of the Ministry of Church Affairs since its inception in 1912. The intention behind the transfer was to consolidate the delegated responsibilities for nature management, management of cultural monuments and sites, and physical planning, under the auspices of a single institution, enabling an integrated management of the environment as such.

In 1978, the previous two heritage acts - the Law for Archaeological Monuments and Sites from 1905, and the Law for Protection of Historical Buildings from 1920 - were merged into one new act concerning all physical cultural heritage, ensuring a more diverse representation. This is essentially the same act in use today, barring a few adjustments.

Through our current Norwegian Act for Protection of Cultural Heritage, it is possible to protect monuments, sites and larger cultural environments deemed significant in an architectural sense, or important to the cultural history of Norway. This also includes seafaring and floating vessels, but in contrast there is no legal insurance enshrined in the Act for the protection of other vehicular, or 'moving', objects such as trains, cars, or planes. It is, however, possible to list the roads and railways themselves.

The first, big focus on technical and industrial heritage in Norway came about in 1984. The former Arts Council – today under the Ministry for Culture as the Directorate for Arts and Culture – established a committee meant to produce an overview of technical and industrial sites and monuments in Norway. Previously, small-scale registrations predominated; local efforts contained within the counties themselves. The 1984 committee represents the first concerted effort towards an encompassing survey of the nation's industrial heritage. The work done by the committee lead to the publication of a report in 1988, formally recommending the conservation of historically significant technical and industrial sites going forward. The report paved the way for the preservation of several industrial sites, subsidised with funding from the Arts Council.



In 1991, the overall responsibility for preservation of technical and industrial heritage was placed at Riksantikvaren. Beginning in that year, the directorate was allocated earmarked funds in the national budget for its con- and preservation efforts. A new committee was then empowered for the purposes of both learning about, and selecting, industrial sites fit for protection and preservation. The committee consisted of representatives from Riksantikvaren, the Norwegian Confederation of Trade Unions (LO), Confederation of Norwegian Enterprise (NHO), the former Association of Norwegian Museums for Art and Cultural History (today Museumsforbundet), the former Art Council (today the Directorate for Arts and Culture Norway) and the Norwegian Museum of Science and Technology.

This effort was the direct result of a political focus on preserving worker's environments in the wake of the rapidly emerging post-industrial society, and of the aforementioned integrated management capacities under the Ministry for Environment.

The committee's mandate was to select monuments and sites to serve as pilot projects for preservation planning, and to secure outside funding in complement with state grants facilitated via the national budget. The committee was also intended to advise, inspire and be a driving force behind Riksantikvarens work on technical and industrial cultural heritage. Six industrial sites were selected as pilot projects for preservation, all with preserved production lines, including machinery, infrastructure, and surrounding environments with social functions and housing.

PRESERVATION ACTS IN NORWAY (SIMPLIFIED) 1897 The Church Act 1905 Ancient Monuments Act (revised in 1951) 1920 Listed Buildings Act 1978 Cultural Heritage Act Source: Askeladden, Riksantikvaren.

Riksantikvaren, The Directorate for Cultural Heritage in Norway

Riksantikvaren was established in 1912. The directorate is responsible for the management of cultural heritage, cultural environments, and cultural landscapes of historic significance. The Directorate for Cultural Heritage is part of Norwegian environmental management. It is a subordinate agency under the Ministry of Climate and Environment. The directorate is involved in strategy development and are responsible for special areas of focus within the field of cultural heritage. The tasks also include guidance, skills development and working with key data on cultural heritage monuments and sites in public administration.

The Directorate for Cultural Heritage is accountable for the cultural heritage work that takes place in municipalities, county authorities, the Sámi Parliament, the Governor's Office on Svalbard, and the cultural heritage management at museums.

The directorate is the decision-making authority on the topic of protection of cultural heritage monuments and sites. It is likewise the administrative appeals body for decisions made by regional cultural heritage management, in so far as it pertains to the the field of cultural heritage. The Directorate for Cultural Heritage has the authority to make an objection in planning cases.

As a general rule, the county authorities are responsible for managing protected cultural heritage monuments and sites. This means that the county authorities are the correct authorities to provide exemptions from the Cultural Heritage Act and are responsible for safeguarding cultural heritage monuments and sites in relation to land-use planning. The Directorate for Cultural Heritage is administratively responsible for a variety of cultural heritage monuments and sites, including the medieval towns of Oslo, Tønsberg, Bergen and Trondheim. 95



Odda meltingplant Photo: Trond Isaksen, Riksantikvaren.

The experience gained by following up on the six pilot projects led to Riksantikvaren publishing a conservation plan for technical and industrial heritage in 1994, expanding on the work of the preceding committee and associated report from 1988. The new conservation plan emphasised 3I sites of national importance, conceived as a cross section of the many types of sites related to the early phases of industrial development in Norway. It included monuments and environments that demonstrate production, labour and living conditions of the period. The conservation plan concluded among other things that the preservation of large, complex technical and industrial sites requires a great many resources, that only a few such sites can realistically be prioritised, and that the biggest challenge to preservation will be securing funding and personnel for future operation and maintenance.

The conservation plan was a milestone in the long-term work towards protecting industrial heritage in Norway.

The selection of sites provided an important basis for further prioritisation and initiatives and set the course for the work of Riksantikvaren in the following years, even leading to the establishment of a National Conservation Programme in 2006.

THE STATE CULTURAL HISTORIC PROPERTIES (SKE-PROJECT)

The Norwegian state owns and manages a broad range of properties of cultural-historical value. As such, another project that has played an important role in the listing and protection of technical and industrial heritage is the State Cultural Historic Properties (Statens kulturhistoriske eiendommer, the SKE-project). The SKE-project started up in 2002 and was adopted by the Royal Decree of September 1st, 2006, which instructed all the central government agencies to draw up a national protection plan for properties of cultural-historical value, and a management plan for each of these properties. This entailed registering and documenting all the state properties managed by the various agencies and assessing their cultural-historical value.

The project resulted in two categories of protection: Buildings and facilities in Grade 1 are protected under the Cultural Heritage



Atlungstad Distillery Photo: Anke Loska, Riksantikvaren.

Act, while Grade 2 encompasses properties that the sector under which it falls are obligated to preserve in some other way. In being ineligible for formal protection, this is then typically achieved through the Planning – and Building Act. The responsibility for following-up on Grade 2 listed properties lies with the sector in question, or the state enterprise itself. The SKE-project was pioneering and generated a broad empirical foundation for heritage management and exemption practices. The project is an example of how delegation of responsibilities at a sectoral level contributes to the effectivity of ministerial work, the efficacy of their subordinate agencies, as well as an example of how enterprises can meet the environmental targets within their own areas of responsibility. Around 550 objects have been listed through the SKE-project. Today, some of the earliest national plans are undergoing revision and updating, while others still are still works in progress.

Below are examples of national protection plans that fall within the category of 'technical and industrial cultural heritage': 97

98 The Ministry of Transport:

- The Norwegian Coastal Administration, lighthouses, and maritime infrastructure.
- Norwegian State Railways, railways, and stations
- Avinor, airports/aviation infrastructure
- The Norwegian Public Roads Administration, roads, bridges, and other infrastructure

Ministry of Trade, Industry and Fisheries:

- Telenor/Norwegian Telecommunications, buildings and infrastructure for telegraphy, telecommunications, and broadcasting
- The Norwegian Mining Museum for The Directorate of Mining with the Commissioner of Mines at Svalbard, state owned mines.

Ministry of Local Government and Regional Development:

- The Norwegian Mapping Authority, topographic mapping, and surveying
- Ministry of Petroleum and Energy
- The Norwegian Water Resources and Energy Directorate (hydroelectric powerplants, damns, locks, and channels)
- Norwegian Petroleum Museum for the Norwegian Petroleum Directorate and the Norwegian Oil Industry Association, oil, and gas fields in Norway

NEW TARGETS FOR THE NATIONAL STRATEGY

In 2006, the Norwegian government published a white paper on the management of cultural heritage: "The government's environmental policy and the state of the environment in Norway" (St.meld. nr. 26 (2006–2007)). The white paper promulgated a set of actions on how the government would further develop its cultural heritage policy, connecting it with three general national targets set down by the government.

One of the programmes put forward was the initiation of I0 specific conservation programmes meant to raise awareness of certain sites as resources for continued active use: As reposito-

ries of knowledge, cultural-historical sites were to provide opportunities for the public to engage with and experience Norway's cultural heritage, while simultaneously allowing for economic activity on the sites. A different programme was dedicated to the preservation of technical and industrial cultural heritage: The conservation programme counted 10 facilities by 2007, with five more sites added in the period up to 2015. A total of 15 sites were defined as national priority sites for technical and industrial heritage. These sites altogether consist of over 500 objects, ranging from 8 to 70 objects on a given site. To put things in perspective, the site with "only" eight objects is melting plant (figure 2).

Today, II of the 15 sites are museums containing a functioning and operational machine park, e.g. Sjølingstad Wool Mill and Salhus Textile Mill - with the museum even producing wool products. Two sites are still fully operational; these are Bredalsholmen Shipyard and Conservation Centre for Historic Steel Ships, and Atlungstad Distillery, with its annual production of Aquavit.

Technical and industrial cultural monuments and sites are traces of industrial culture that are of historical, technological, social, architectural or scientific value. Technical and industrial heritage includes buildings and production lines with machinery, transport and other infrastructure, as well as the social aspect of industrial history, with housing, religious buildings, schools, recreational areas and green facilities.

THE PRESERVATION PROGRAMME FOR TECHNICAL AND INDUSTRIAL CULTURAL HERITAGE

These sites require a high degree of maintenance due to the sheer complexity of the facilities, the size and number of objects and buildings, the infrastructure, and machine parks that the sites consist of. There is an almost constant demand for increasingly complex and expensive repair-work, and the consequences of climate change only exacerbate this need for repairs and mainte-





Bredalsholmen Shipyard Photo: Gustatsson, Riksantikvaren Photo: Jonas Jerimiassen Tomter





hoto:Bård Løke





Kistefos Wood Pulp Mill

noto: Kistelos Museel







Salhus Textile Mill/Knitwear Factory Photo: Helge Sunde

Sjølingstad Woll Mill Photo: Bård Løken







Folldal Copper Mine Photo: Tommy Kristoffersen, Stiftelsen Folldal Gruver



Næs ironworks Photo: Braathen, Naes iernverksmuseum



Spillum Sawmill Photo: Trond Isaksen, Riksantikvaren



Halden Canal and Lock Photo: Haldenvassdragets Kanalselskap AS



Odda Melting Plant Photo: Trond Isaksen, Riksantikvaren



Tyssedal Hydroelectric Power Station Photo: Harald Hognerud, NVIM

Grants from post 72 over a period from 1991-2005.





Sjølingstad Wool Mill Photo: Trond Isaksen, Riksantikvaren.

nance. By 2020, II of the I5 sites are regarded as fully restored, requiring only regular maintenance. Annual state grants have been the most important contributor to reaching the programme ambitions, and this includes grants for both operation and maintenance, as well as retaining cadres of traditional craftsmen on the various sites.

All 10 conservation programmes have been linked to the overarching national targets set by the government, prioritising efforts towards systematically improving the state of repair of cultural heritage objects across the many different categories. Advancement of the sector, and dissemination of knowledge regarding the sector, has likewise been of high importance. In a general sense, the priorities and results of these various conservation programmes laid the foundation for the management of Norway's cultural environment in the past 15 years.

GRANT SCHEMES / POST 72 TECHNICAL AND INDUSTRIAL CULTURAL HERITAGE

The heritage programmes are funded through earmarked grant schemes on the annual national budget, with funding in the range of 300 million NOK having been invested into these 10 programmes since 2006. The grant scheme, "Post 72 Technical and Industrial Cultural Heritage", has existed since 1991 and has mostly been used for securing and preserving selected sites, such as six of the aforementioned pilot projects. It has been the most important element in executing the conservation programmes of the 15 selected industrial sites since 2006. Although Norway yet still lacks a dedicated act and an accompanying national strategy for protecting and preserving movable cultural heritage, grants have nonetheless been approved for preservation efforts pertaining to movable cultural heritage such as trains, airplanes, electric trams, and cars, as well to facilities outside the purview of the conservation programme.

Over a period of 14 years (1991-2005) Riksantikvaren has approved grants for nearly 160 million NOK, spread across 30 sites and monuments outside the conservation programme. By 2006 the picture began changing, and the grants were mainly directed



to the aforementioned 15 sites selected under the programme. In the period 2006 to 2020, nearly 660 million NOK were invested into restoring and maintaining these sites.

The annual budget for the technical and industrial heritage grant scheme was 58.45 million NOK in the period 2015 - 2020. A quarter of the annual national budget were allocated for the operation and maintenance of the 15 sites; 16% of this allocation went towards wages and permanent employment of skilled craftsmen specific to the various sites; 10% went to operation and maintenance itself; 49% to site-specific rehabilitation projects, and 25% was provided to other industrial sites and monuments.

The inclusion of funding for wages to ensure permanent employment for skilled craftsmen on-site, is a significant difference from earlier practice with regards to grants earmarked for conservation of industrial heritage sites. This inclusion is a direct response to the problem of future operation of the facilities as concluded by the 1994 Conservation Plan.

The grants connected to the preservation programme have therefore aimed at securing adequate operation, maintenance, and competence on each site by means of hiring relevantly skilled professionals. The intent is to improve – or at least maintain – a general state of repair, thus requiring only ordinary maintenance of the sites. Through the grants, the I5 sites have been able to accrue knowledge and expertise in the preservation and restoration of technical and industrial cultural heritage applicable across the sector, in addition to securing competent personnel ensuring that machinery and other technical installations remain operational.

MONITORING

A condition survey based on acknowledged standards was established to monitor the development of the 15 sites, regardless of whether these were currently meeting the given national targets. Annual reports on condition rating turned out to be rather difficult, both because of the complexity and the diversity of the technical and industrial sites. As of today, we are still at work developing a reasonable method for conducting these surveys.

Grants post 72, 2006-2021 (Period for The Conservation program).

PROTECTION OF THE 15 SELECTED SITES IN THE CONSERVATION PROGRAMME

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In 2018, Riksantikvaren initiated the protection process for those of the 15 selected sites which were yet to be protected. By 2023, 10 of the sites enjoyed formal protection under the Cultural Heritage Act, and the process is ongoing for the remaining sites. In being protected under the Cultural Heritage Act, the sites all contribute to the overall fulfilment of Riksantikvaren's strategy for listed monuments and sites.

| Site | Protected under the Cultural Heritage Act |
|---------------------------------------|--|
| Atlungstad Distillery | Protected (2019) |
| Bredalsholmen Shipyard | Protection process ongoing |
| Fetsund Timber Booms | Protected (1989) |
| Folldal Copper Mine | Protection process ongoing |
| Halden Canal and Locks | Protection process ongoing |
| Klevfos Wood Pulp & Paper Mill | Protection process on hold |
| Kistefos Wood Pulp Mill | Protection process ongoing |
| Neptun Herring oil factory | Protected (2019) |
| Næs Ironworks | Protected (1967) |
| Odda Melting Plant | Protected (2011) |
| Rjukan Railway Line | Protected (2014) |
| Salhus Textile Mill/ Knitwear Factory | Protected (2020) |
| Sjølingstad Wool Mill | Protected (2019) |
| Spillum Sawmill | Protected (2021) |
| Tyssedal hydroelectric power station | Protected (2000) |

102 PROTECTION OF TECHNICAL AND INDUSTRIAL SITES UNDER THE CULTURAL HERITAGE ACT

The very first industrial monument to be protected under the Cultural Heritage Act – although an earlier articulation of the current Act - was a melting furnace from one of the earliest copperworks in Norway (Kvikne Copper Work). It was listed and protected in 1959, however this specific object represents a much simpler conceptualisation of what 'industrial cultural heritage' entails today.

Some cultural monuments – which today are understood as technical and industrial cultural monuments specifically – were already designated as protected as early as the 1920s, such as significant mining industry sites in Næs and Røros.

Over the years, a number of industrial sites that were singled out in the Conservation Plan from 1994 were protected under the Cultural Heritage Act; examples of these are Hagavik Barrel Factory (1996); Sellevåg Wooden Shoe Factory (2012); and Mellemværftet (Mellemværftet Shipyard, 2018).

In addition to the protected sites delineated in the Conservation Programme, the sites and monuments in the SKE-project, and other protected technical and industrial sites, Norway also has three World Heritage sites that fall under the category of technical and industrial cultural heritage. These are the Struve Geodetic Arc, Røros Mining Town and Circumference, and Rjukan-Notodden Industrial Heritage.

PROTECTION BY DOCUMENTATION

Within the SKE-project, it was agreed upon that the public sector were responsible for preserving the listed sites through documentation, both due to the complexity of the sites, disproportionate costs required, and/or other socio-economic concerns. This applies to the petroleum sector, the aviation sector and energy sector.

With regards to this type of protection, Riksantikvaren has initiated documentation projects for Engene dynamite factory in Hurum, and Hiorthhamn cable car station in Longyearbyen, Svalbard. Engene dynamite factory was one of the first of its kind and, to our knowledge, the world's best-preserved factory for production of dynamite by Alfred Nobel's patent. Due to production residue of nitro-glycerine in the oldest part of the factory, the factory a safety risk which could not be eliminated by any other means than demolition and full sanitation. The cable station in Hiorthhamn is threatened by rapidly coastal erosion; in fact, the growing effects of climate changes pose a direct threat to the preservation of a multitude of cultural heritage monuments, sites, and environments. Riksantikvaren's own Climate Strategy underlines the need for documentation of cultural heritage at risk of being lost due to the consequences of climate change.

Another complex digital documentation project in Norway in the last few years has been the documentation of the SVEA mine in Svalbard. As part of the governmental decree to close the mining facility, and in accordance with the Svalbard Environmental Protection Act, the Svalbard-based Norwegian coal mining company, Store Norske Spitsbergen Kullkompani (SNSK), was to remove all surface installations, all industrial waste, and get rid of all structures that are not under protection. The area was, to the extent that it was possible, to be restored to its original state as arctic wilderness.

The white paper issued by the Norwegian government (St Meld 16, 2019 – 2020) states that digital documentation can provide a wide range of new opportunities within research, management and dissemination of information regarding cultural heritage. The paper claims that documentation can provide new knowledge, understanding and experiences. However – crucially – the paper also states that documentation will never be able to replace the physical cultural monuments, sites, and environments as sources of knowledge, enjoyment, and common use. All forms of documentation are by definition a secondary source: No matter how accurate and comprehensive a piece of documentation is, the original object will always be the primary source.

> 3d model of the cable station in Hiorthhamn, Svalbard. Riksantikvaren



104 In cases where cultural monuments, sites and environments cannot be preserved or made accessible, digital documentation, such as virtual presentations, will serve to strengthen the interpretation efforts, and increase the accessibility of the data for researchers and the public at large. The documentation of Engene, Hiorthhamn and SVEA are examples of this.

VOLUNTEERING AND ALTERNATIVE **CONSERVATION STRATEGIES**

In the future, protecting sites under the Cultural Heritage Act may not be the ultimate goal. Norway already has a great number of technical and industrial heritage sites that are not formally protected; pursuant to the Cultural Heritage Act, the Planning and Building Act, or a binding agreement. These sites are often maintained by a group of local volunteers who preserve and maintain the factory, machinery/objects, and especially vessels in their free time.

The community and regional authorities are considered important partners in facilitating public awareness and acknowledgement of the value potential of industrial heritage sites, e.g., regional, or local identities, new jobs, demand for skilled craftsmanship, or as both domestic and foreign tourist destinations. In recent times, a lot of facilities offer leisure activities in authentic industrial environments (e.g. the sawmill in Indre Ofredal, Vestland), or has opened to the public as rentable culture venues (e.g. the former heating plant in Longyearbyen, now called FOSSIL). Some counties have banded together to create so-called "Powerplant-tourism" – conceptually similar to the existing Stave Church tourist route.

What these projects all have in common is a concerted effort to re-establish themselves as attractions in their respective regions, ones that are worth a visit, rather than being examples of abandonment and decay. Recognising preservation possibilities beyond listing is an area that Riksantikvaren will want to develop further, especially with regards to delineating a preservation strategy for technical and industrial heritage.

A SHIFT IN THE NATIONAL POLICY

In 2020, the Government published a new white paper "Meld. St. 16 (2019–2020) New goals for Norway's cultural environment policy. Involvement, sustainability, and diversity". As the title indicates, the paper sets in motion new national goals for Norway's cultural environment policy, replacing the existing set of ambitions. The paper underlines the importance and necessity of managing the cultural environment in tandem with - and integrated into - the broader Norwegian approach on climate change and its consequent environmental impact.

"This connection has also come to the fore through the impact of the changing climate on the cultural environment. At the same time, the preservation of cultural environments can help reduce greenhouse gas emissions and contribute to the circular economy. The paper argues that there is a need for new goals that indicate more clearly what Norway wants to achieve with its cultural environment policy and how the cultural environment contributes to promoting positive, sustainable social development. In addition, there is a need to render visible Norway's ambitions and responsibilities in light of international treaties and conventions."

- (Meld. St. 16 (2019-2020) New goals for Norway's cultural environment policy. Involvement, sustainability and diversity, page 8)

FROM CONSERVATION PROGRAMME TO PRESERVATION STRATEGIES

The replacement of the previous overarching ambitions with regards to cultural heritage also necessarily entails a transition from former conservation programmes to new preservation strategies.

"Experience indicates that the conservation programme has been an effective way to organize the conservation work. The conservation programme, the protection strategy and the work on cultural heritage in the municipalities have all been closely linked to the existing national targets, where priority was given to minimizing losses, improving the state of repair, and increasing representativeness. This type of basic safeguarding of cultural historical assets will continue to be an important priority in

the management of the cultural environment. The new national goals, which are much broader and attach greater weight to the importance of the cultural environment for society, will require a change in the focus of the preservation work. While the conservation programme was primarily linked to financial incentives, there is now a need to take a broader approach to preservation and development, ensuring they elicit support, involvement and dissemination and are firmly anchored in various pieces of legislation. For example, there is a need to assess using a wider range of instruments, not only financial incentives, and to increase collaboration with different sectors. In order to preserve a diversity of cultural environments, the government will therefore develop preservation strategies for priority topics where all use of policy instruments must be harmonised and coordinated."

- (Meld. St. 16 (2019-2020) New goals for Norway's cultural environment policy. Involvement, sustainability and diversity, page 78)

STATUS 2023

Riksantikvaren has begun the work on identifying relevant areas of interest and developing the proposed preservation strategies. Nonetheless, as is stated in the white paper, it will require time until the strategies are ready for execution. The white paper also remarks on the considerable amount of work already underway within the existing conservation programme. Gradually phasing out of the existing programme will be necessary to ensure the effective establishment of the new – naturally, this also means arriving at a sustainable solution for phasing out the conservation programme specific to technical and industrial heritage.

As part of this overall change, it will be assessed whether retaining some of the current conservation programme as ordinary grant schemes is tenable. In June 2023, Riksantikvaren delivered a proposal for areas of interest for the new strategies, with a suggestion for a pilot-strategy: "Coastal Cultural Environment"; a broad topic most certainly of relevance to large segments of the technical and industrial cultural heritage in Norway. The existing conservation programme include mostly sites within wood processing industries.

Bredalsholmen Shipyard and Neptun Herring oil factory are examples of facilities that represent the Norwegian coast's cultural environment. The conservation strategy for the coast's cultural environments will include monuments linked to fisheries, catching, aquaculture and processing, shipping and transport, boatbuilding, coastal agriculture, defence, recreation, and tourism. In short, cultural environments of all sorts with links to coastal industries and the coast itself.

The proposal also suggests a new strategy for cultural environments linked to the industrial development: Transport, small industry, trade, power development and the oil industry, but also old roads, mining, quarries, and remnants of resource exploitation dating back to prehistoric times.

Looking forward, a general challenge in formulating the new strategies will be the increasing and wide-reaching impact of climate change on our cultural heritage. Measures adopted for reducing greenhouse gas emissions, and adaption of the cultural heritage to the changing climate, will be vital in the years to come, and is likely to be focus area of high priority in the continual efforts towards preserving the technical and industrial heritage in Norway.

Litterature

About The Directorate for Cultural Heritage - Riksantikvaren; www.ra.no/en Gunhild Gursli-Berg og Edvard Thorup (red.), 2008, Industrispor, Fra Melbu til Lindesnes

Kjetil Gjølme Andersen & Olav Hamran (2014), Teknikk på museum, Norsk Teknisk Museum 1914-2014

Norsk Industriarbeidermuseum (2018) Rjukan Notodden industriarv -

Preservation plan for technical and industrial heritage of national significance (1994)

Riksantikvaren (2017), Riksantikvaren bevaringsprogram for tekniske og industrielle kulturminner

Tom Nilsen (2019) Når Fortida blir framtida, Arbeiderbevegelsen i de tekniske og industrielle kulturminnene

White Papers from the Ministry of Climate and Environment

Report No. 16 to the Storting (2004-2005) Living with our Cultural Heritage The government's environmental policy and the state of the environment in Norway (St.meld. nr. 26 (2006–2007)

Meld. St. 35 (2012-2013) Framtid med fotfeste

Meld. St. 16 (2019–2020) New goals for Norway's cultural environment policy. Involvement, sustainability and diversity