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Front cover photo: Aerial view of Nabuyatom Crater, Lake Turkana, Kenya It is the world's largest desert lake and the world's largest alkaline lake. © Martin Harvey / WWF

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WWF is one of the world's largest and most experienced independent conservation organizations, with over 5 million supporters and a global network active in more than 100 countries.

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable, and promoting the reduction of pollution and wasteful consumption.

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EXECUTIVE SUMMARY

WWF's mission it to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature. The goal of this report is to promote knowledge, create awareness on the linkage between biodiversity and investments and start a dialogue on how investors can improve the integration of biodiversity-related risks into their investment strategies and operations.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) has worked for decades to identify and protect special cultural and natural heritage sites around the world considered to be of "outstanding value to humanity".

World Heritage sites (WHS) have been granted the highest level of international recognition - "outstanding universal value" – and their importance has also been recognized in the Sustainable Development Goals¹. Yet, alarmingly, these areas are threatened by industrial activities such as mining, oil and gas production and infrastructure development. These can have a variety of negative consequences such as reduced biodiversity, disturbed ecosystem processes, habitat loss and fragmentation, introduction of invasive species and pollution of air, soil and water. Industrial activities can endanger not only the environment, but also the livelihoods and future prosperity of those who live there and depend upon the protection of these sites.

Environmental and societal risks associated with industrial activities and infrastructure in World Heritage sites can also ultimately represent a business risk for companies and investors.

UNESCO's advisory body, the International Union for Conservation of Nature (IUCN)² has consistently maintained a clear position that oil, gas and mineral activities are incompatible with the status of World Heritage. In spite of this, in recent years WWF and IUCN³ have noted a rise in extractive concessions and operations that could negatively impact the uniqueness of the sites.

A 2015 report⁴ from WWF-UK, Aviva Investors and Investec Asset Management indicated that as many as 70 of the 229, or 31%, of natural and mixed⁵ World Heritage sites were subject to extractive activity in some form, either with active operations already within their boundaries or through concessions that might bring such operations in the near future. In Africa, the figure increased to 61%.

Based on data from 2016, WWF has updated these figures and, in addition, analysed how many of the companies that have oil, gas and mining activities in World Heritage sites are included in the holding lists of five major

¹ The Sustainable Development Goals (SDGs) are a set of 17 goals that compel companies and countries to mobilise efforts to end all forms of poverty, fight inequalities and tackle climate change by 2030. The target 11.4 aims to "strengthen efforts to protect and safeguard the world's cultural and natural heritage." For more information see: www.un.org/sustainabledevelopment/cities

 $^{^{2}}$ IUCN is the global authority on the status of the natural world and the measures needed to safeguard it.

³ IUCN, Mining threats on the rise in World Heritage sites, July 2011. https://www.iucn.org/content/mining-threats-rise-world-heritage-sites.

⁴ WWF, Aviva Investors, Investec (2015). Safeguarding outstanding Natural value. The role of institutional investors in protecting natural World Heritage Sites from extractive activity. September 2015.

Link: http://www.wwf.org.uk/about_wwf/press_centre/?unewsid=7683

⁵ Mixed sites have both cultural and natural elements that define their unique value.

Norwegian investors⁶. The results show that the picture has not changed significantly since 2015, arguably it has deteriorated:

- Globally, 72 natural and mixed World Heritage sites are potentially threatened by extractive activity, that
 is a licence issued by a government to permit a company to explore for and/or extract oil, gas, and mineral
 resources
- In total, the five Norwegian investors assessed were invested in 25 companies that have licenses related to extractive activities in 23 World Heritage sites in 2016.
- The five Norwegian investors had invested roughly NOK 102 billion in these companies in 2016.

On the basis of the findings presented in this report, WWF is asking the financial community to:

- Ensure that appropriate monitoring mechanisms are in place to identify extractive companies that are
 planning or already involved with extractives activity within World Heritage sites;
- Engage with such companies to encourage them to disclose on their activities in World heritage sites and change their strategy and stop extractive activities in World Heritage sites;
- Consider divestment if insufficient progress is made.

Financial institutions should have a clear policy in place to make sure that the companies in their portfolios are not involved in activities that can damage World Heritage sites. Given the significant control that asset owners and asset managers have over global flows of capital, WWF believes that these can play a central role in safeguarding some of the most important natural sites on earth.

WWF fully support a 'no-go' policy for all World Heritage sites. Financial institutions are encouraged to extend their risk protection through policy commitments that include reference to other protected areas such as IUCN protected areas or Ramsar sites⁷.

In this report, WWF has reviewed the existing policies of five major Norwegian financial institutions. Several Norwegian actors have a clear ambition to be best in class when it comes to sustainability. Taking clear, urgent and firm actions on this issue is a necessary step to contribute to protect the common heritage that belongs to all the peoples of the world.

⁶ Norwegian Government Pension Fund Global (GPFG), Norwegian Government Pension Fund Norway (GPFN), Storebrand, KLP, DNB.

⁷ The Ramsar Convention has the mission to conserve all wetlands, definition which includes all lakes and rivers, underground aquifers, swamps and marshes, wet grasslands, peatlands, oases, estuaries, deltas and tidal flats, mangroves and other coastal areas, coral reefs, and all human-made sites such as fish ponds, rice paddies, reservoirs and salt pans. For more information: http://www.ramsar.org/about/the-ramsar-convention-and-its-mission

INTRODUCTION

World Heritage sites (WHS) are officially recognized by the United Nations Educational, Scientific and Cultural Organization (UNESCO), as universal legacy with significant cultural and natural implications to humanity. As of June 2016, there were a total of 194 natural World Heritage Sites located in 98 countries, and 35 of those are mixed properties (cultural and natural together).

The importance of these sites are also recognized in the agenda of the Sustainable Development Goals (SDGs), a set of 17 goals that compel companies and countries to mobilise efforts to end all forms of poverty, fight inequalities and tackle climate change by 2030. The target 11.4 under the goal "Sustainable cities and communities" aims to "strengthen efforts to protect and safeguard the world's cultural and natural heritage."8

Although World Heritage sites cover less than one per cent of the planet, they provide vital benefits such as clean water and shelter, resources and income for the local communities (IUCN, 2014). In addition, World Heritage sites contain outstanding natural value such as iconic landscapes and species, including some of the rarest and most treasured animals on Earth, such as mountain gorillas, African elephants, snow leopards, whales and marine turtles.

World Heritage sites are increasingly under pressure from human activity. A study⁹ by WWF in 2015 revealed that almost a third (31 per cent) of all natural and mixed World Heritage sites are under threat from extractive activities and the share rises to almost two thirds (61 per cent) for natural World Heritage Sites in Africa. However, there is a need for a greater understanding on the current and future threats and drivers to World Heritage sites in order to address them in an efficient manner.

The present study analyses the extent of extractive activity (oil, gas, and mining) within UNESCO World Heritage sites in 2016, and the extent to which the companies involved are included in the portfolios of major Norwegian investors. The goal of this study is to build knowledge and highlight the threat related to the extractive sector in World Heritage sites in order for civil society organisations, governments, private companies and investors to come together, discuss and find solutions to mitigate these impacts within a policy and practice context.

⁸ For more information see: <u>www.un.org/sustainabledevelopment/cities</u>

⁹ WWF, Aviva Investors, Investec (2015). Safeguarding outstanding Natural value. The role of institutional investors in protecting natural World Heritage Sites from extractive activity. September 2015.

WORLD HERITAGE SITES

World Heritage sites are officially recognized by the United Nations Educational, Scientific and Cultural Organization (UNESCO), as universal legacy with significant cultural and natural implications to humanity. They are legally protected by the international treaty of "convention concerning the protection of the cultural and natural heritage" adopted by UNESCO in 1972 and ratified by 192 countries¹⁰. There are three types of World Heritage sites; cultural, natural and mixed. In this report, we focus on natural and mixed World Heritage sites.

The World Heritage Committee, established within UNESCO, is the main implementing agency of the convention. The committee members are 21 state party representatives elected by the General Assembly, usually every four years. The Committee applies 6 cultural criteria and 4 natural criteria for selecting the World Heritage site. The selected site must represent an outstanding universal value and meet at least one of the ten criteria¹¹.

There are many factors that could negatively impact these sites, such as wars and conflicts, earthquakes and other natural disasters, as well as industrial activities such as mining, land-use and infrastructure. In fact, many World Heritage sites are under great threat and risk to lose their outstanding universal value. UNESCO maintains a list of World Heritage in Danger¹², used to inform the state members about which sites that are in risk of losing its world heritage values, and encourage appropriate actions to protect the sites. Sites such as the Mount Nimba Strict Nature Reserve¹³ in Côte d'Ivoire or the Selous Game Reserve¹⁴ in Tanzania are examples of sites that UNESCO considers in danger because of – among others - activities related to mining, oil and gas exploration and production. The World Heritage Committee would remove the world heritage status if further stress on nature in these sites take place. So far, two sites have been delisted, in 2009 the Dresden Elbe Valley (Germany) and in 2007 the Arabian Oryx Sanctuary (Oman).

'No-go' commitment for extractive activity in World Heritage sites

The World Heritage Committee has a clear position that "mineral, oil and gas exploration or exploitation is incompatible with the World Heritage status, and that such activities should not be undertaken within World Heritage properties" ¹⁵. Further, the Committee supports a 'no-go' commitment of the International Council on Mining & Metals (ICMM), and encourages "all State Parties to the World Heritage Convention and the leading industry stakeholders to respect the ICMM 'no-go' commitment by not permitting extractive activities within World Heritage properties, and by making every effort to ensure that extractive companies located in their territory cause no damage to World Heritage properties." ¹⁶

¹⁰ http://whc.unesco.org/en/conventiontext/

¹¹ http://whc.unesco.org/en/statesparties/

¹² http://whc.unesco.org/en/158/

http://whc.unesco.org/en/list/155

¹⁴ http://whc.unesco.org/en/list/199

¹⁵ http://whc.unesco.org/en/extractive-industries/

http://whc.unesco.org/en/decisions/5018/

ICMM¹⁷ has the goal of improving the social and environmental performance of the mining and metals industry. Its members are made up 23 of the world's leading mining and metals companies as well as 34 national and regional mining associations and global commodity associations. In 2003, ICMM announced¹⁸ a 'no-go' commitment that asked all member companies not to explore or mine in World Heritage sites and not to put the integrity of these properties at risk.

IUCN's resolution on World Heritage sites

The *International Union for Conservation of Nature* (IUCN) is an institution with members consisting of both governments and civil society organizations. IUCN is an official advisory body of the World Heritage Committee and it has the responsibility of evaluating the state of conservation of all natural and mixed sites¹⁹.

Since 2000, IUCN has maintained the same position²⁰ as the World Heritage Committee, prohibiting any mineral, oil and gas exploration and production activities within World Heritage sites. In addition, it states that activities outside the World Heritage sites "should not, under any circumstances, have negative impacts on their Outstanding Universal Value".

In November 2016, IUCN approved a new resolution²¹ in which it calls on the business community and financial institutions "not to conduct, invest in or fund environmentally damaging industrial activities and infrastructure development" within all type of IUCN categories of protected areas.

Financial institutions are encouraged to extend their risk protection through policy commitments that include reference to other protected areas such as IUCN protected areas or Ramsar sites²².

¹⁷ https://www.icmm.com/en-gb/members/member-companies

¹⁸ http://hub.icmm.com/document/43

¹⁹ https://www.iucn.org/theme/world-heritage/about/iucn-and-world-heritage

https://www.iucn.org/sites/dev/files/import/downloads/iucn advice note on mining in wh sites final 060512 2 .pdf

²¹ The IUCN resolution "urges companies, public sector bodies, financial institutions (including development banks), relevant certification bodies and relevant industry groups not to conduct, invest in or fund environmentally damaging industrial activities and infrastructure development within, or that negatively impact protected areas or any areas of particular importance for biodiversity and ecosystem services [...] and to make public commitments to this effect." For more information: https://portals.iucn.org/congress/motion/026
²² The Ramsar Convention has the mission to conserve all wetlands, definition which includes all lakes and rivers, underground aquifers, swamps and marshes, wet grasslands, peatlands, oases, estuaries, deltas and tidal flats, mangroves and other coastal areas, coral reefs, and all human-made sites such as fish ponds, rice paddies, reservoirs and salt pans. For more information: https://www.ramsar.org/about/the-ramsar-convention-and-its-mission

METHODOLOGY

The methodology used for this study is based on WWF-SIGHT tool. A platform and approach developed by WWF to map major sectoral developments, understand their risks and link them to financial institutions. The first step has been to perform an overlap analysis to calculate the extent of extractive activity — oil, gas and mining — within World Heritage sites, and link them to companies operating and/or owning the contracts. A "threat" occurs when an extractive contract overlaps the area of a WHS. When there is no overlap, this study assumes marginal or no threat. The second step has been to perform an "ownership" analysis to establish the link between extractive concessions within World Heritage sites and Norwegian investments.

In this study, an extractive "concession" (also referred to as "contract" or "claim") is a licence issued by a government to permit a company to explore for and extract oil, gas, and mineral resources within a defined spatial area for an agreed time period. It is important to underline that concessions do not necessarily result in extractive activity occurring, but they are a prerequisite of activity and an indication of intent. Even when a concession expires or a company commits not to operate within WHS, the risk of extractive activity occurring remains, as concessions can be reissued or sold to a third party.

The overlap analysis uses four data layers:

- 1) **Mining claims**: data sourced from the SNL Metals and Mining database (accessed 15th October 2016). Claims indicate an area that has been leased for an activity to take place:
 - o leased or licensed to be explored. No extraction activity.
 - o permit for exploration of minerals to occur. No extraction activity.
 - mining activity (extraction)
 - o other lease type such as infrastructure leases.
 - o leased or licensed to be prospected for minerals.
 - patent claim, where the owner has more freedom over what they can do with that land after exploration.
- 2) Mining projects: data sourced from the SNL Metals and Mining database (accessed 15th October 2016). These are registered metals & mining mines, processing facilities and mining reserve at different development status (e.g. exploration or production). In particular, projects include: processing facilities, plant, concentrator, smelter, refinery, pellet plan, coal washing plant. Mining projects are related with the previous category, mining claims, but they constitute a separate dataset.
- 3) Oil and gas contracts: data sourced from the DrillingInfo database (accessed 17th October 2016).
- 4) UNESCO's World Heritage sites classified as "natural" (197 sites) and "mixed" (32 sites): the location and boundary of protected areas was defined using the IUCN and UNEP-WCMC World Database on Protected Areas (WDPA).

The spatial overlap between these datasets as recorded by the GIS analysis was exported to MS Excel®. Any extractive activity that could be interpreted as having a limited or negligible impact on a protected area was excluded using the following filters:

Oil & gas

- Included all claims with the following status: "Application", "Contract", "Pre-award".

- Excluded contracts with status "Force majeure" or "Open" as these are not active/not assigned to a company.
- Removed contracts that are registered as expired before 01.09.2016.
- Removed contracts not linked to any company ("Not operated").
- Removed contracts with overlap area smaller than 5 km² and with less than 50% of the contract area falling within a WHS²³.

Mining claims

- Include all claims with status "Granted", "Pre-award".
- Removed claims with status "Not operated" or not linked to any company.
- Removed contracts that are registered as expired before 01.09.2016.
- Removed claims with status "Application".
- Removed mining claims with overlap area smaller than 1 km² where less than 50% of the claim area is within a WHS.

Mining projects

- Include contracts with status "Active".
- Removed contracts with status "Inactive" or "On hold".
- Included contracts with following development stages: Reserves Development; Operating; Advanced Exploration; Feasibility; Exploration; Prefeas/Scoping; Construction Started.
- Note: Data on mining projects do not include information on the size of the mining area (square meters) and it is therefore not included in the results for the area overlap.

Results were then combined to provide an overall summary of extractive activity within World Heritage sites. Attempts were made to aggregate the holders of oil and gas concessions to their ultimate parents. Maps were produced using these filtered results.

Holding lists of Norwegian investors

The holding lists used for this study do not represent the total portfolio of the investors analysed, but are based on what is publicly available. Holding lists are in NOK, and refer to a period of time spanning from 31.12.2015 to June 2016, in particular:

- Government Pension Fund Global: stocks and bonds per 31.12.2015 (published march 2016)
- Government Pension Fund Norway: stocks and bonds per 30.06.2016 (published mid-year 2016)
- Storebrand Asset Management²⁴: 31.12.2015, aggregated holding lists for 19 main funds published in the annual report.
- KLP Kapitalforvaltning AS²⁵ ²⁶: 31.12.2015, aggregated holding lists for 9 main KLP funds, published in annual report. To this, we have added KLP's internal holding list (stocks) published in the annual report.

²³ This study took a more in-depth look at the claims with an overlap area smaller than 1km, and calculated how much of this area falls within the World Heritage sites. By doing this we found that many small claims (<1km) fall totally within the area of the World Heritage site, for example in Australia. For this reason, we have decided to retain part of these overlaps, that is claims with more than 50% of their area falling within the borders of a WHS.

²⁴ https://www.storebrand.no/site/stb.nsf/Get/get920902e34f82f2042fd6f9418b1b14cc/\$FILE/Arsrapport-2015-SAM.pdf

https://www.klp.no/polopoly_fs/1.33240.1457941459!/menu/standard/file/KLP%20Kapitalforvaltning%202015%20weboriginal.pdf

²⁶ https://www.klp.no/polopoly_fs/1.33323.1459407627!/menu/standard/file/KLP%20a%CC%8Arsrapport%202015.pdf

 DNB Asset Management²⁷: 31.05.2016, aggregated holding lists for main funds available on Morningstar and DNB's website.

Data Considerations

The coverage for extractive activity assessed includes ~170 countries for oil and gas concessions and ~70 countries for mining concessions.

Mining claims don't have data coverage in the following countries: Aruba, Afghanistan, Angola, Anguilla, Albania, Aland, Andorra, United Arab Emirates, American Samoa, Fr. S. Antarctic Lands, Antigua and Barb., Austria, Azerbaijan, Burundi, Belgium, Benin, Bangladesh, Bahrain, Bahamas, Bosnia and Herz., Bajo Nuevo Bank (Petrel Is.), St-Barthélemy, Belarus, Belize, Bermuda, Barbados, Brunei, Bhutan, Switzerland, Chile, China, Clipperton I., Cyprus U.N. Buffer Zone, Cook Is., Comoros, Cape Verde, Coral Sea Is., Cuba, Curação, Cayman Is., N. Cyprus, Czech Rep., Germany, Djibouti, Dominica, Denmark, Algeria, Egypt, Dhekelia, Estonia, Falkland Is., Faeroe Is., United Kingdom, Georgia, Guernsey, Gibraltar, Gambia, Guinea-Bissau, Eq. Guinea, Greece, Grenada, Hong Kong, Heard I. and McDonald Is., Honduras, Croatia, Haiti, Isle of Man, India, Indian Ocean Ter., Br. Indian Ocean Ter., Iran, Iraq, Iceland, Israel, Italy, Jamaica, Jersey, Jordan, Japan, Baikonur, Siachen Glacier, Kenya, Kyrgyzstan, Kiribati, St. Kitts and Nevis, Korea, Kosovo, Kuwait, Lebanon, Libya, Saint Lucia, Liechtenstein, Sri Lanka, Lesotho, Lithuania, Luxembourg, Latvia, Macao, St-Martin, Morocco, Monaco, Moldova, Madagascar, Maldives, Mexico, Marshall Is., Macedonia, Malta, Montenegro, Mozambique, Montserrat, Mauritius, Malaysia, Norfolk Island, Nigeria, Niue, Netherlands, Nepal, Nauru, Oman, Pakistan, Pitcairn Is., Spratly Is., Puerto Rico, Dem. Rep. Korea, Palestine, Fr. Polynesia, Qatar, Romania, Russia, W. Sahara, Saudi Arabia, Scarborough Reef, Serranilla Bank, Singapore, S. Geo. and S. Sandw. Is., Saint Helena, Sierra Leone, El Salvador, San Marino, Somaliland, Somalia, St. Pierre and Miquelon, São Tomé and Principe, Suriname, Slovakia, Swaziland, Sint Maarten, Seychelles, Syria, Turks and Caicos Is., Togo, Thailand, Tajikistan, Turkmenistan, Timor-Leste, Tonga, Trinidad and Tobago, Tunisia, Turkey, Tuvalu, Taiwan, U.S. Minor Outlying Is., United Kingdom (except in Northern Ireland), United States (except in Alaska), USNB Guantanamo Bay, Uzbekistan, Vatican, St. Vin. and Gren., Venezuela, British Virgin Is., U.S. Virgin Is., Vietnam, Vanuatu, Wallis and Futuna Is., Akrotiri, Samoa, Yemen and South Africa.

Oil and gas contracts don't have data coverage in the following countries: Anguilla, Aland, Andorra, Armenia, American Samoa, Fr. S. Antarctic Lands, Antigua and Barb., Azerbaijan, Burkina Faso, Bajo Nuevo Bank (Petrel Is.), St-Barthélemy, Belarus, Bermuda, Bhutan, Clipperton I., Cook Is., Cape Verde, Coral Sea Is., Curaçao, Cayman Is., N. Cyprus, Dominica, Dhekelia, Estonia, Finland, Georgia, Guernsey, Gibraltar, Hong Kong, Heard I. and McDonald Is., Isle of Man, Indian Ocean Ter., Br. Indian Ocean Ter., Jersey, Japan, Baikonur, Siachen Glacier, Kazakhstan, Kyrgyzstan, Kiribati, St. Kitts and Nevis, Kosovo, Saint Lucia, Liechtenstein, Lesotho, Luxembourg, Macao, St-Martin, Monaco, Maldives, Marshall Is., Macedonia, Montserrat, Mauritius, New Caledonia, Norfolk Island, Niue, Nepal, Nauru, Pitcairn Is., Spratly Is., Puerto Rico, Fr. Polynesia, Russia, Rwanda, Scarborough Reef, Serranilla Bank, Singapore, S. Geo. and S. Sandw. Is., Saint Helena, Solomon Is., El Salvador, San Marino, Swaziland, Sint Maarten, Turks and Caicos Is., Togo, Tajikistan, Turkmenistan, Tuvalu, U.S. Minor Outlying Is., United States (except in offshore), USNB Guantanamo Bay, Uzbekistan, Vatican, British Virgin Is., U.S. Virgin Is., Vanuatu, Wallis and Futuna Is., Akrotiri and Samoa.

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²⁷ https://www.dnb.no/privat/sparing-og-investering/fond/kurs-avkastning.html

RESULTS: EXTRACTIVE ACTIVITY WITHIN WHS

World Heritage sites have been conferred the highest status of protection among all protected areas of the world. Yet, this status alone does not seem to shield them against industrial activities that have the potential to damage the environment and the outstanding features that are basis for their status. The analysis WWF has performed in 2015 and updated in 2016 reveals that a significant number of sites are under threat from extractive activity that involves exploration and/or extraction of oil, gas and minerals.

The results of the 2016's overlap analysis reveals that there are **extractive activities in 72 (or 31%) of the 229 natural and mixed World Heritage sites.** In particular:

- 25 sites threatened by concessions for exploration and extraction of oil and gas;
- 47 sites threatened by mining concessions;
- 13 sites threatened by mining projects.

WWF found two sites - Lorentz National Park (Indonesia) and Selous Game Reserve (Tanzania) – with licenses within the three types of extractive activities simultaneously. Nine other sites are affected by two types of extractive activity at the same time.

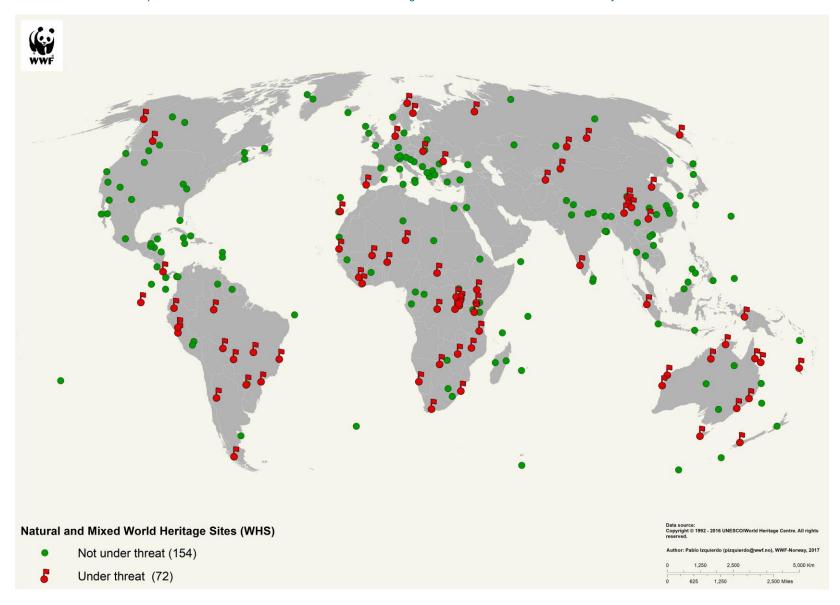
Eight of the 72 sites appear on the list of *World Heritage in Danger* since UNESCO considers these as particularly threatened by a variety of human activities such as deforestation, agriculture, poaching and extractive activities. For five of these sites, mining is especially reported among other threats: Manovo-Gounda St Floris National Park; Kahuzi-Biega National Park; Okapi Wildlife Reserve; Selous Game Reserve; Tropical Rainforest Heritage of Sumatra.

"Oil Spill in a UNESCO World Heritage Site in Bangladesh: An oil spill occurred in The Sundarbans, Bangladesh on Tuesday, 9 December 2014 when a small coastal oil tanker sank after being rammed by another vessel from behind, releasing approximately 400,000 liters of oil in the water. The Sundarbans was inscribed on the World Heritage List in 1997 and is one of the largest mangrove forests in the world. It lies on the delta of the Ganges, Brahmaputra and Meghna rivers on the Bay of Bengal, and is adjacent to the border of India's Sundarbans National Park. The site is intersected by a complex network of tidal waterways, mudflats and small islands of salt-tolerant mangrove forests, and presents an excellent example of such ongoing ecological processes. The area is known for its wide range of fauna, including 260 bird species, the Bengal tiger and other threatened species. Regional experts indicate that there is likely damage to the Outstanding Universal Value of the property, which must be evaluated. The UNESCO World Heritage Centre is seriously concerned about the impact of the oil spill on the World Heritage area, and is working with national authorities to ascertain the status of the situation and the best measures to be taken."

Text from http://whc.unesco.org/en/news/1209/

The following map shows all the 229 natural and mixed World Heritage sites, differentiating between terrestrial and marine sites, and those that have been found to be threatened by extractive activities.

Map 1: Location of the 229 natural and mixed World Heritage sites: 72 of these sites are threatened by extractive activities.



The following table shows the 10 World Heritage sites with the largest spatial overlap with all extractive concessions combined, and the type of extractive concessions found to overlap with the area of the sites:

Table 1: 10 World Heritage sites with the largest spatial overlap with all extractive concessions combined

Country	World heritage Site (* on the endangered list)	Overlap area (total oil, gas and mining) km²	Oil & Gas	Mining claims	Mining projects
Democratic Republic of the Congo	Salonga National Park *	30 162,64	X		
Niger	Aïr and Ténéré Natural Reserves *	18 722,49	X		
Central African Republic	Manovo-Gounda St Floris National Park *	9 662,66	X		
Tanzania	Selous Game Reserve *	5 005,46	X	Х	X
Indonesia	Lorentz National Park	3 860,32	X	X	X
Dem. Republic of the Congo	Okapi Wildlife Reserve	3 254,48		X	
China	Sichuan Giant Panda Sanctuaries - Wolong, Mt Siguniang and Jiajin Mountains	1 848,24	X		
Namibia	Namib Sand Sea	1 780,46		X	
Netherlands; Germany; Denmark	The Wadden Sea	1 446,64	X		
Dem. Republic of the Congo	Virunga National Park *	1 066,58	X	X	

NORWEGIAN INVESTMENTS IN EXTRACTIVE ACTIVITY WITHIN WORLD HERITAGE SITES

WWF has performed an additional analysis to find out how many companies with concessions linked to extractive activities in the WHSs – as defined in the methodology chapter - are included in the holding lists of five major Norwegian investors, namely: the Norwegian sovereign wealth fund, both its global unit (Norwegian Government Pension Fund Global, GPFG) and the national unit (Norwegian Government Pension Fund Norway, GPFN); Norway's largest insurance and pension funds, Storebrand and KLP, and Norway's largest commercial bank, DNB.

WWF found that – at the end of 2015 and in mid 2016 - these five major Norwegian investors together had invested a total of **102 billion NOK in 25 companies**²⁸ with oil, gas and mining claims in **23 natural World Heritage Sites** spanning across 18 countries. Six of these sites are currently listed on the UNESCO endangered list.

All these five financial institutions are invested in at least 10 companies, with the exception of the GPFN which has an investment mandate limited to the Nordic countries and, consequently, no exposure to extractive companies listed on the stock exchanges of other countries. The following table shows Norwegian investors and the number of companies they have shares in, and which are overlapping the 72 World Heritage sites.

Table 2: Norwegian Investors and number of companies they have shares in, based on holdings per end 2015/mid 2016.

Investor	Number of companies	
	overlapping WHS ²⁹	
Storebrand	12	
KLP	20	
DNB	19	
GPFG	22	
GPFN	2	

The following map and table provide an overview of the geographical location of the World Heritage sites and the associated financing volume in companies associated with extractive activities in these areas.

²⁸ We considered as one all companies belonging to the same group/conglomerate: for example, "Company 1" and "Company 1 Financial" (usually issuing bonds) are considered as the same company.

²⁹ The results are based on portfolios as they were in the period 31.12.2015 to 30.06.3016 and do not reflect changes happened after this period, for example if the investors have excluded some of the companies. See methodology for details on the period the portfolios analyzed refer to.

Map 2: In red, all World Heritage sites with extractive activities and – in yellow – those with one or more companies in which Norwegian financial institutions invest in.

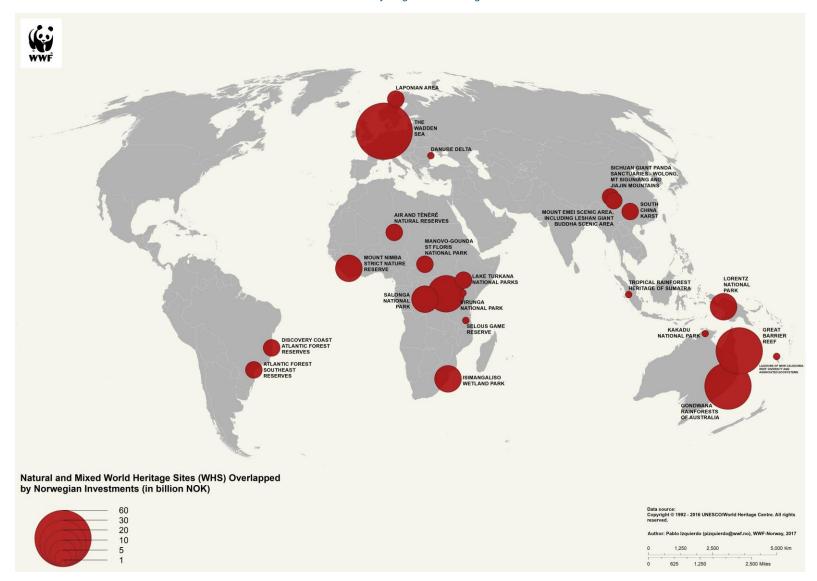


Table 3: World Heritage sites and associated financing volume of the five Norwegian investors in companies associated with extractive activities in these areas.

Country	World heritage Site (* on the endangered list)	Norwegian investments (NOK)	Oil & Gas	Mining claims	Mining projects
Niger	Aïr and Ténéré Natural Reserves *	1 219 226 083	X		
Brasil	Atlantic Forest Southeast Reserves	1 764 127 538		X	
Romania	Danube Delta	162 170	X		
Brasil	Discovery Coast Atlantic Forest Reserves	3 085 929 381	X	X	
Australia	Gondwana Rainforests of Australia	28 872 596 562	X		
Australia	Great Barrier Reef	23 118 748 788	•	X	
South Africa	iSimangaliso Wetland Park	7 704 908 231	X		
Australia	Kakadu National Park	438 504 224		X	
Kenya	Kenya Lake System in the Great Rift Valley	363 341 214	X		
France	Lagoons of New Caledonia: Reef Diversity and Associated Ecosystems	56 587 699		X	
Kenya	Lake Turkana National Parks	4 910 568 819	X		
Sweden	Laponian Area	2 470 275 484	•	X	
Indonesia	Lorentz National Park	5 618 282 145	X		
Central African Republic	Manovo-Gounda St Floris National Park *	1 219 226 083	X		
China	Mount Emei Scenic Area, including Leshan Giant Buddha Scenic Area	1 219 226 083	X		
Cote d'Ivoire; Guinea	Mount Nimba Strict Nature Reserve	5 996 910 131		X	X
Democratic Republic of the Congo	Salonga National Park *	7 634 172 499	X		
Tanzania	Selous Game Reserve *	60 688 349	X		
China	Sichuan Giant Panda Sanctuaries - Wolong, Mt Siguniang and Jiajin Mountains	1 219 226 083	X		
China	South China Karst	1 692 431 451	X		-
Netherlands; Germany; Denmark	The Wadden Sea	52 938 665 649	X		
Indonesia	Tropical Rainforest Heritage of Sumatra *	438 504 224		X	
Democratic Republic of the Congo	Virunga National Park *	16 128 920 146	X		

The following map shows the World Heritage sites affected by concessions related to extractive activities – as defined in the methodology chapter - related to companies in which Norwegian financial institutions invest in. The size of the bubble indicates the value of the investments of the five institutions in the companies operating within every world heritage site.

Map 3: World Heritage sites affected by extractive activities. The size of the bubble indicates the value of the investments of the five institutions in companies operating within every single world heritage site.



Many of the extractive concessions within WHS are either directly or indirectly linked to large global companies that are listed on stock exchanges around the world and often issue corporate bonds. These stocks and bonds are purchased by financial institutions such as banks, pension funds, insurers and sovereign wealth funds which typically invest - on behalf of their customers - in a large number of companies across all economic sectors.

Several financial institutions have guidelines to take economic, social and environmental aspects into account when they make investment decisions. However, most of them do not possess monitoring and early-warning capabilities that are able to identify – for instance - companies that are carrying out activities within WHS.

It is challenging for investors and stakeholders to identify ongoing and potential activities that can negatively impact World Heritage sites. Large extractive companies may have hundreds of projects and licenses under application. Governments do not always provide data on operating and under application licenses in an aggregated and open way. Moreover, companies often have complex corporate structures that are not fully transparent, and this makes it difficult to track extractive activities by subsidiary companies. Overall, company disclosure on business activities in world heritage sites is poor. For this reason, WWF wants to contribute to build knowledge, advance access to data and engage with investors to develop effective policies and monitoring systems.

NORWEGIAN INVESTORS' POLICIES ON WORLD HERITAGE SITES

Do the five Norwegian investors have guidelines or policies on investments in companies with business activities in World Heritage sites? WWF has reviewed publicly available information on the investors' websites, annual reports and responsible investment reports.

The Norwegian Sovereign Wealth Fund

The Norwegian Government Fund consists of two entities: the Government Pension Fund Global (GPFG) with a market value of 8000 billion NOK, investing outside Norway, and the Government Pension Fund Norway (GPFN) with a market value of 216 billion NOK, investing exclusively in the Nordic countries. The mandate for the GPFG is set by the Parliament and the Ministry of Finance which consider "financial return over time is dependent on sustainable economic, environmental and social development", 30

The mandate of the GPFG as well as the guidelines for the GPFN refer to internationally recognized standards of responsible management, such as the UN Global Compact, the OECD Principles of Corporate Governance and the OECD Guidelines for Multinational Enterprises.³¹ ³² In 2004, ethical guidelines were adopted for the management of the GPFG. The guidelines list criteria for either excluding companies from the investment universe or putting companies on observation. One of these criteria is "severe environmental damages"³³. This also applies to the non-Norwegian investments of the GPFN. **However, neither the GPFG nor the GPFN appear to have an explicit policy on World Heritage sites.** WWF does note that the Council on Ethics, which reviews the portfolio and recommends exclusions based on the criteria in the ethical guidelines, has assessed several investments in companies that have activities in World Heritage sites in 2016.³⁴ The Council reports that there are few of the companies that represent an "unacceptable risk" to damage World Heritage sites. It is however unclear to WWF which criteria the Council on Ethics use when they assess this risk.

investment-2016.pdf

³⁰ https://www.regjeringen.no/en/topics/the-economy/the-government-pension-fund/responsible-investments/id446948/

³¹ White paper report to the Parliament (2015-2016)

https://www.regieringen.no/contentassets/377869abd5374e33af6cdbb4eb85fab8/en-gb/pdfs/stm201520160023000engpdfs.pdf 32 https://www.nbim.no/contentassets/2c3377d07c5a4c4fbd442b345e7cfd67/government-pension-fund-global---responsible-

³³ http://nettsteder.regjeringen.no/etikkradet/en/guidelines/

³⁴ Council on Ethics. Annual report 2016. http://etikkradet.no/files/2017/03/Etikkraadet annual report 2016 web.pdf

"The GPFG excludes one company because of high risk for environmental damages to protected areas

Spring 2017 the Executive Board in Norges Bank decided to exclude Bharat Heavy Electricals Ltd from the Government Pension Fund Global based on an assessment of the risk of severe environmental damage. The Council on Ethics recommended the exclusion due to the unacceptable risk of the company being responsible for severe environmental damage through its operations in Khulna, Bangladesh.

In its recommendation, the Council on Ethics wrote: "BHEL has been awarded a contract to build a large coalfired power plant in southern Bangladesh. The power plant is to be built close to the boundary of the Sundarbans national conservation area, the world's largest mangrove forest. The entire area is also a Ramsar area. It is rich in biodiversity and contains several protected species, including Bengal tigers and river dolphins. The conservation area also encompasses two world heritage sites in Bangladesh, as well as a further world heritage site on the Indian side of the border."

Source: https://nettsteder.regieringen.no/etikkradet-2017/files/2017/05/BHEL-recommendation.pdf

The Government Pension Fund Global (GPFG) is managed by Norges Bank Investment Management (NBIM). NBIM carries out ownership activities such as voting at general meetings and company engagement on behalf of the fund. NBIM also carries out "risk-based divestments". These are divestments to reduce the fund's exposure to risks that NBIM believes could have a negative impact on the portfolio over time and are based on "a total assessment of individual companies' exposure to, and management of, relevant environmental, social and governance risks"35. NBIM reports that it has identified the oil and gas sector, as well as metal and mining, among a selection of sectors with "elevated exposure to environmental, social and government risks that warrant further analysis". There is however no public information on which companies the fund has divested from using the risk-based approach, or whether or to which degree considerations related to World Heritage sites are included in the analysis. Neither is there any information on whether NBIM raises issues related to World Heritage sites in their active ownership work with the companies.

Storebrand offers products within life insurance, property and casualty insurance, asset management and banking to companies, public sector entities and private individuals. Storebrand has developed guidelines for its investments³⁶. The guidelines state that it "shall not invest in companies that contribute to or cause serious environmental damage". Storebrand has published Analysis Criterion for environmental damage³⁷, which elaborates on the principles, standards and factors that the asset manager takes into consideration when assessing a company for exclusion based on the environmental criterion. Detrimental environmental damage is considered to be more severe in areas of "great ecological value (e.g. conservation areas), or affect animal or plant species that are particularly vulnerable." Further, Storebrand states that impact on World Heritage sites can add to the seriousness of an event.³⁸ Storebrand publishes a list of the companies excluded under the environmental criterion; however, there are no further details explaining why the companies are excluded.

³⁵ NBIM: Responsible Investment. Government Pension Fund Global. 2016

https://www.nbim.no/en/transparency/reports/2016/responsible-investment-2016/

³⁶ Storebrand guidelines for ethical investments: https://www.storebrand.no/om-storebrand/barekraft/storebrandstandarden

³⁷ Storebrand Analysis Criterion - Environmental Damage:

https://www.storebrand.no/cms/omstorebrand/barekraft/storebrandstandarden/ attachment/6225? ts=157b3a29883

³⁸ https://www.storebrand.no/om-storebrand/barekraft/storebrandstandarden/ attachment/6225? ts=157b3a29883

In addition to exclusions, Storebrand's sustainability strategy includes analysis and selection of companies that the asset manager deems well positioned for future challenges. Storebrand lists "bio-diversity programs" as one of the parameters against which companies are assessed. There is however, no further information on the details of this parameter or if it includes business activity in World Heritage Sites.

KLP is Norway's largest life insurance company with total assets of NOK 596 billion. According to its guidelines, KLP will exclude companies that are assessed to represent unacceptable risk for severe environmental damage.³⁹ KLP publishes a list of all excluded companies, including the reason for exclusion. "Irreversible biodiversity loss" and "serious environmental damage" are some of the reasons for exclusions, however there is no reference to World Heritage sites. KLP also publishes a list of companies with which it engages in order to improve sustainable business operations. The list only indicates the topic for engagement, for example "environment".

KLP is part of Nordic Engagement Cooperation (NEC). In its 2016 report⁴⁰, the cooperation reports that it engaged the company AES on various issues, including the impact the company's hydroelectric dam project in Panama, Chan 75, may have on the World Heritage Site La Amistad National Park. According to NEC, a 2016 field report on behalf of UNESCO noted that impacts from Chan 75 are measurable, but still limited. The Nordic Engagement Cooperation ended its engagement with AES in 2016, concluding that the company's measures to address environmental concerns and response to the situation satisfactory.

DNB is Norway's largest financial services group and one of the largest in the Nordic region in terms of market capitalisation. The Group offers financial services such as loans, savings, advisory services, insurance and pension products for retail and corporate customers. DNB has group guidelines for CSR credit activities and for ethical investments⁴¹. The guidelines for credit activities explicitly refer to protected areas: "No type of financing of corporations with activities that negatively affect or harm (...) UNESCO World Heritage Sites."⁴² How the bank defines "negatively affect or harm" is not clear to WWF. The guidelines for the investments, however, does not mention world heritage sites. The guidelines state: "Companies may be excluded from the investment universe if there is an unacceptable risk that a company contributes to or is responsible for (...) grave harm to the environment."⁴³ There is no additional information about whether World Heritage sites are included in the exclusion decisions. DNB publishes a list of the companies excluded under the environmental criterion; however, there are no further details explaining why the companies are excluded. DNB also publishes the number of company dialogues in which environmental issues were a topic. Again, no further information regarding the content of the dialogues is disclosed.

³⁹ KLP's responsible investment under section 2 Serious Environmental Damage:

https://www.klp.no/polopoly_fs/1.23945.1417438347!/menu/standard/file/Retningslinje%20for%20ansvarlige%20investeringer2014.pdf 40Nordic Engagement Cooperation, Annual report 2016:

https://www.klp.no/polopoly_fs/1.36022.1493373007!/menu/standard/file/NEC_Annual%20Engagement%20Report_GES_2016_final.pdf

⁴¹ DNB webpage with guidelines: https://www.dnb.no/en/about-us/csr/sustainability-library.html?la=EN&site=DNB_NO

⁴² DNB Group Guidelines for Corporate Social Responsibility – Credit Activities

⁴³ DNB Group Guideline – Ethical Investments

RECOMMENDATIONS

WWF recommends that investors:

- 1. Monitor whether any extractive companies in which they invest (or plan to invest in) currently own concessions or operate within or adjacent to World Heritage sites, or if they plan to do so in the future.
- Directly engage, in particular, extractive companies in their portfolio that are active in, or adjacent to, World Heritage sites to encourage them to end activities in WHS, or to consider divestment if insufficient progress is made.
- 3. Publicly disclose company dialogues and divestments related to WHS issues
- 4. Engage with the extractive sector at industry level, where appropriate, to encourage improved disclosure on the issue and the wider adoption of 'no go' and 'no impact' commitments for WHS.
- 5. Collaborate with other investors to address the issue collectively, for instance through the UNPRI collaborative engagement platform.
- 6. Encourage the disclosure of extractives concessions data either publicly or in widely used financial data sources.

WWF recommends that companies:

- Disclose current or intended activity within or adjacent to World Heritage sites.
- 2. Suspend existing operations within or adjacent to World Heritage sites.
- Commission independent assessments of any impacts made on the Outstanding Universal Value of the WHS. The company should then be transparent with investors about any future intentions for the site.
- 4. Adopt of a company 'no go' commitment and 'no impact' commitment for World Heritage sites, evidenced by a letter confirming the policy sent to the World Heritage Committee via the UNESCO World Heritage Centre.
- 5. Undertake collaboration with other extractives companies through industry bodies to address the World Heritage issue collectively.

NORWEGIAN INVESTMENTS IN WORLD HERITAGE SITES

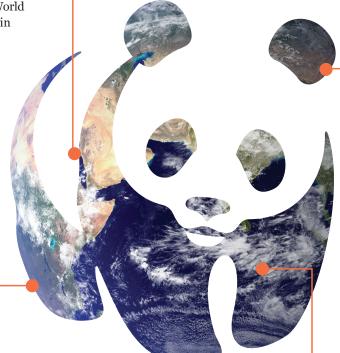
72

World heritage sites threatened

by Norwegian investments

UNIQUE

229 natural World heritage sites in the world



25

Companies in the portfolios of Norwegian investors, with concessions in World Heritage sites

23

- World heritage sites threatened by Norwegian investments



Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony and nature.