



Financing green investments in the Arctic and Barents Region- The Arctic Council Project Support Instrument (PSI) and NEFCO's near term cooperation

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Green Financing, Blue Economy: Investments
in Arctic biodiversity

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Green financing, blue economy: Investments in Arctic biodiversity

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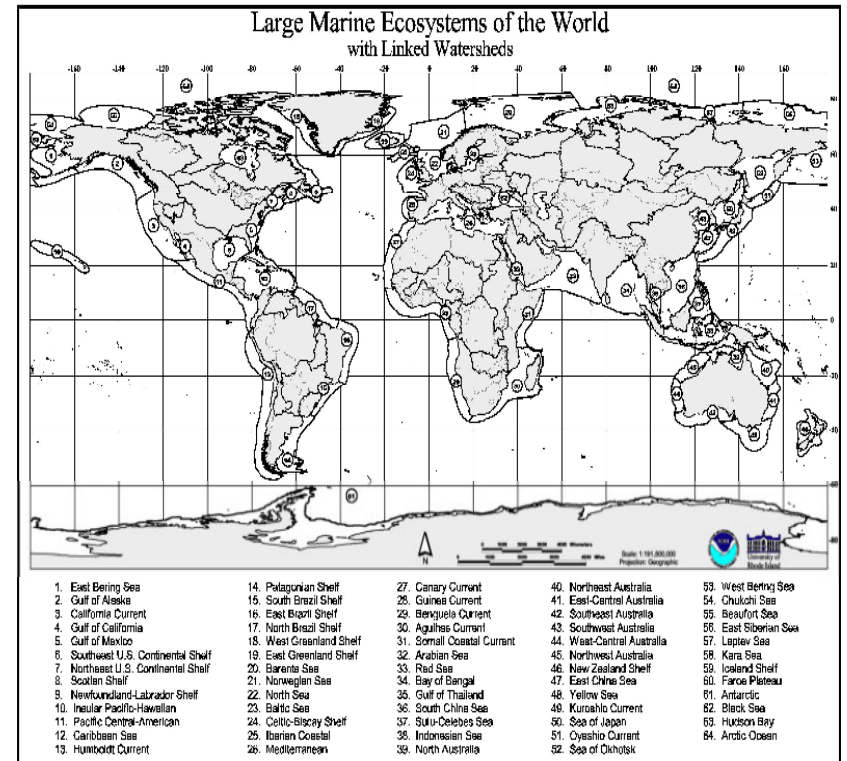
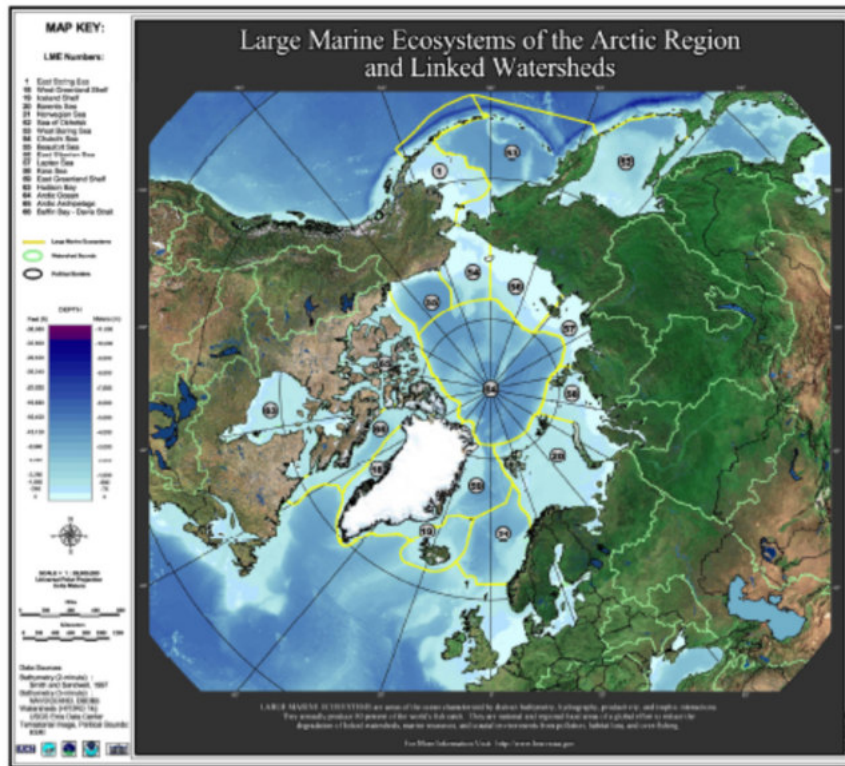


Introduction

- NEFCO – established in 1990 by the five Nordic countries is an international finance institution (IFI) to finance green investment projects primarily in Eastern Europe
- The Arctic is a diverse, vast, sparsely populated (about four million culturally diverse residents)
- The Arctic is undergoing rapid change in an environmentally sensitive region – harbours 18 of the 64 LME (30 percent) - providing an emerging global investment opportunity
- Address removal of hot-spots, harnessing cross-media impacts, and improving the Arctic environment in general
- Orientation of available financial platforms, partnerships and examples of existing initiatives/interventions aiming at mitigation of climate impacts, pollution prevention, enhancing energy and resource efficiencies,



Large Marine Ecosystems (LME)

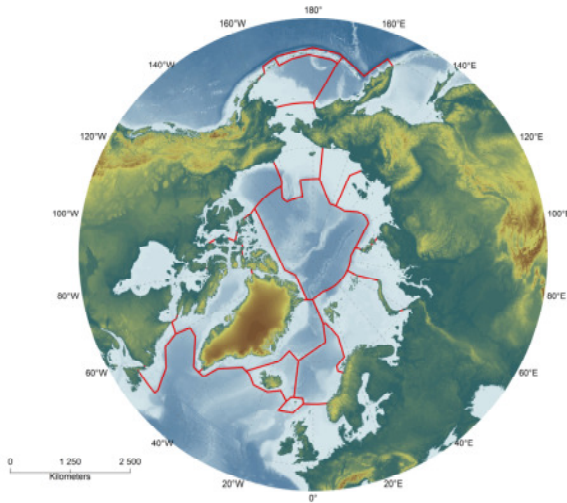


95% of Marine Productivity from 64 LMEs. 18 in the Arctic



LME – Governance - Strategy

LME approach: application of a 5-module strategy for measuring the changing states of LMEs, and for taking remedial actions toward the recovery and sustainability of degraded goods and services.



From a management perspective, it is essential to establish a baseline condition against which to measure the success or failure of actions to recover depleted fish stocks, restore degraded habitats, and reduce and control coastal pollution and nutrient enrichment.

The 5 modules focus on the application of suites of indicators for measuring LME

- (i) productivity and oceanography,
- (ii) fish and fisheries,
- (iii) pollution and ecosystem health,
- (iv) socioeconomics and
- (v) governance



Inputs into the Arctic Region

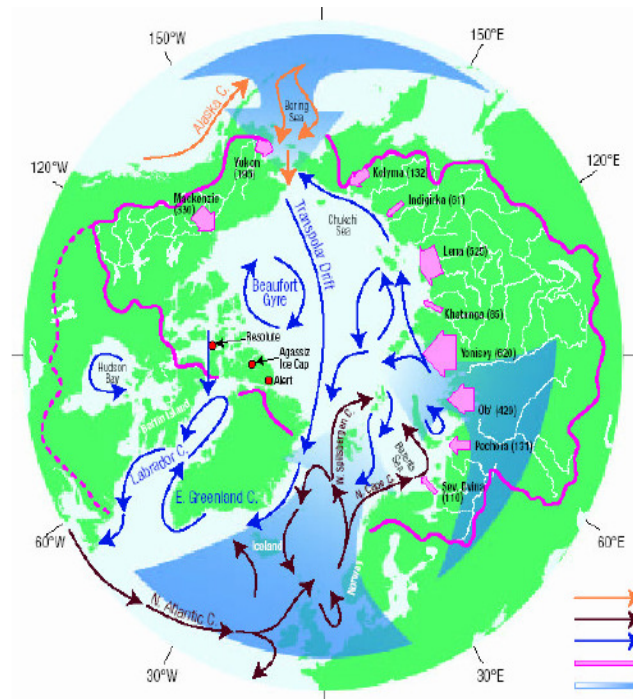


Figure 2. The major physical pathways (wind, ocean currents and rivers) that transport contaminants to the Arctic (Source, Bidleman *et al.*, 2003).

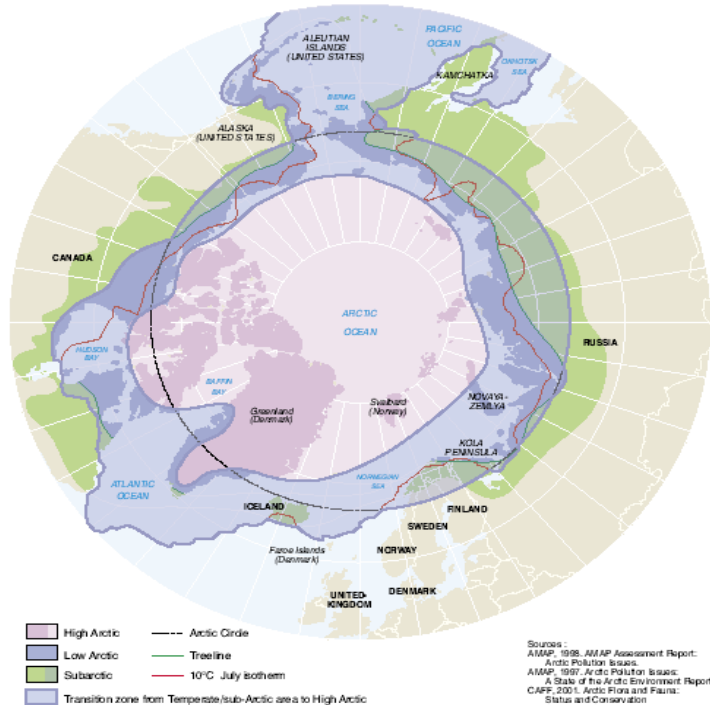


Four major rivers drain RF (Yenisei, Ob, and Lena rivers) and Canada (Mackenzie River). A total of 3,300 km³ per year of freshwater to the Arctic Ocean. Flow onto the world's largest continental shelf. Discharge nearly 10 per cent of the river discharge to the world oceans

Regional/Global Perspectives



Figure 1. Boundaries of the Arctic. Several definitions of the Arctic as a region exist and are all used extensively.



The Arctic: a breeding ground for birds

During the summer, the sun never or nearly never sets, resulting in a short but intensive breeding season where millions of migratory birds arrive in the Arctic to breed. The majority of

these birds seek the wetlands and coastal shores of the tundra plains. No other place on Earth receives so many migratory species from nearly all corners of the planet. The Arctic coastal regions therefore hold a very special global conservation value.

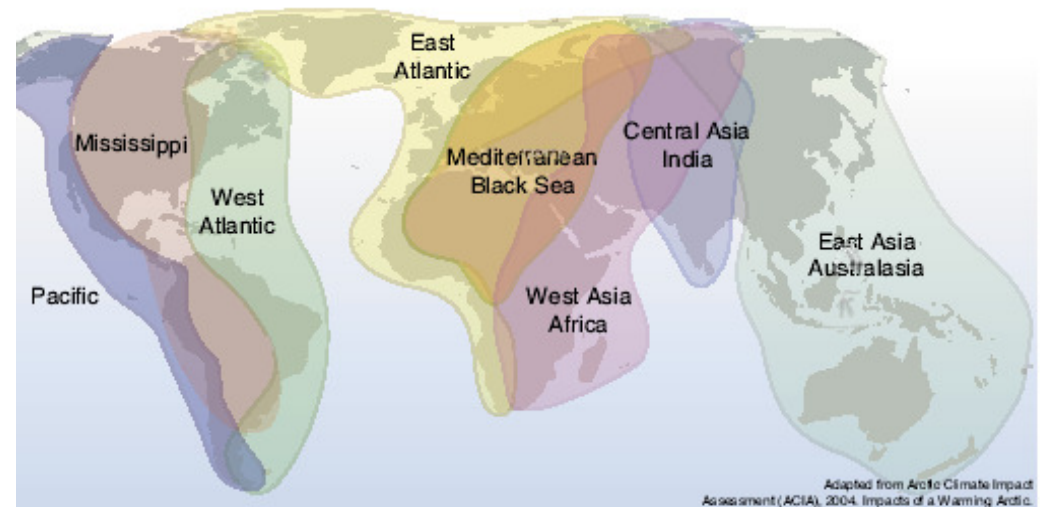
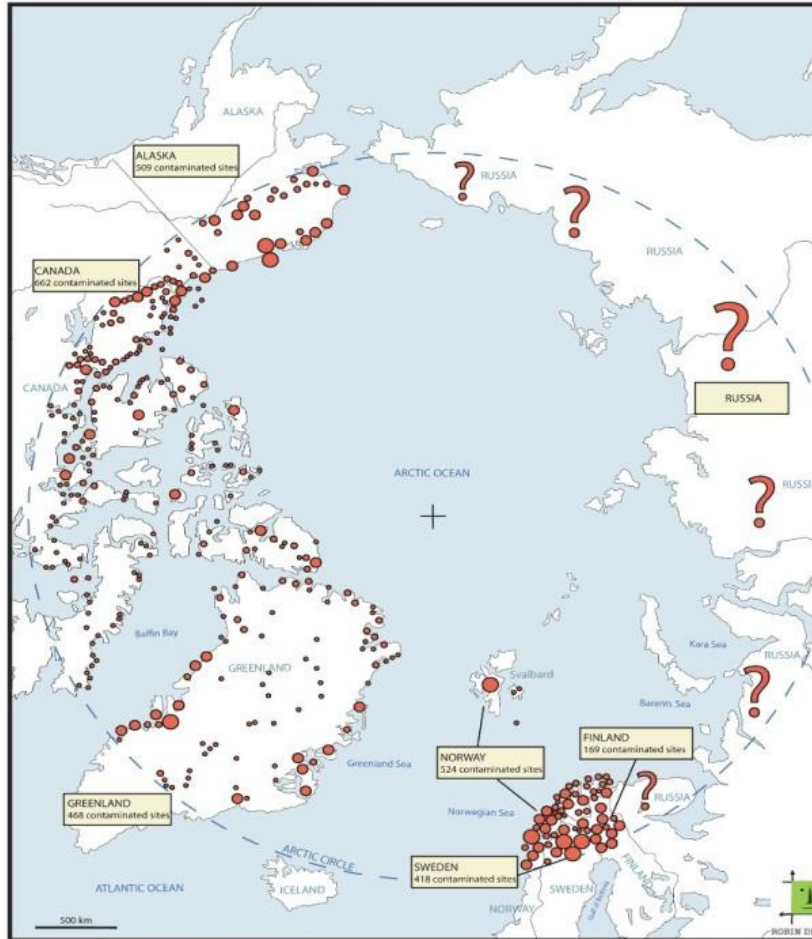


Figure 6. Major global bird migration routes to the Arctic. Bird species that migrate to the Arctic coasts and wetlands arrive from nearly every corner of the planet.

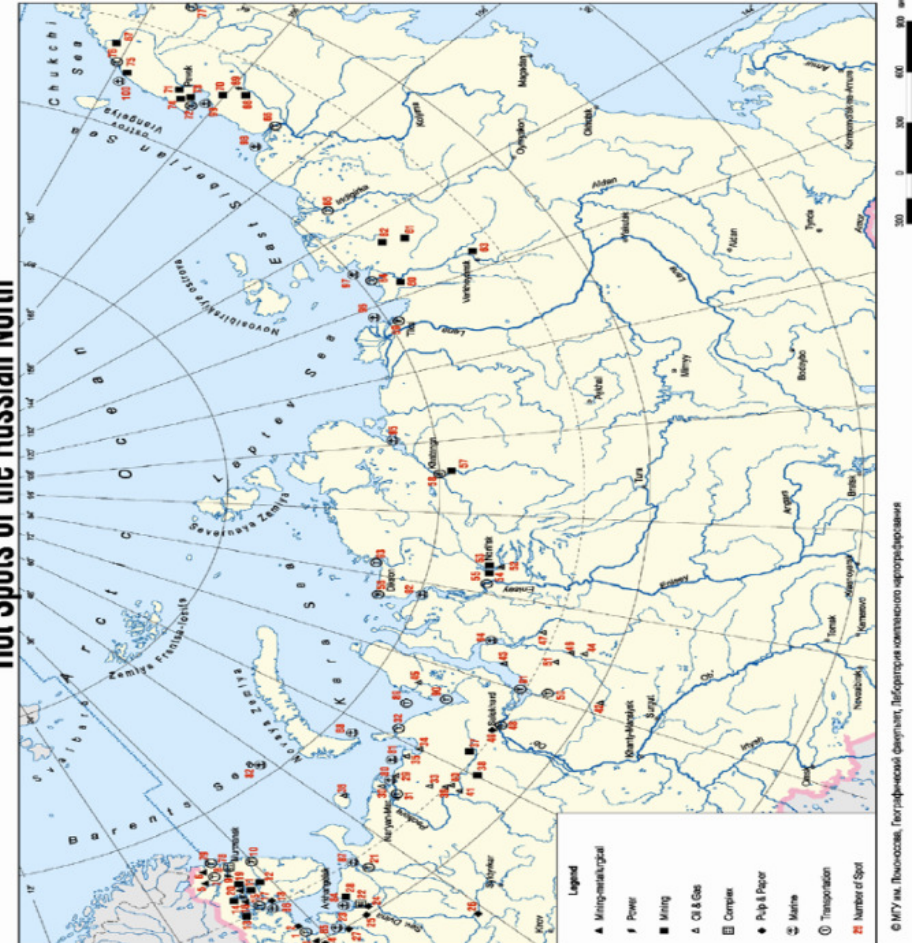


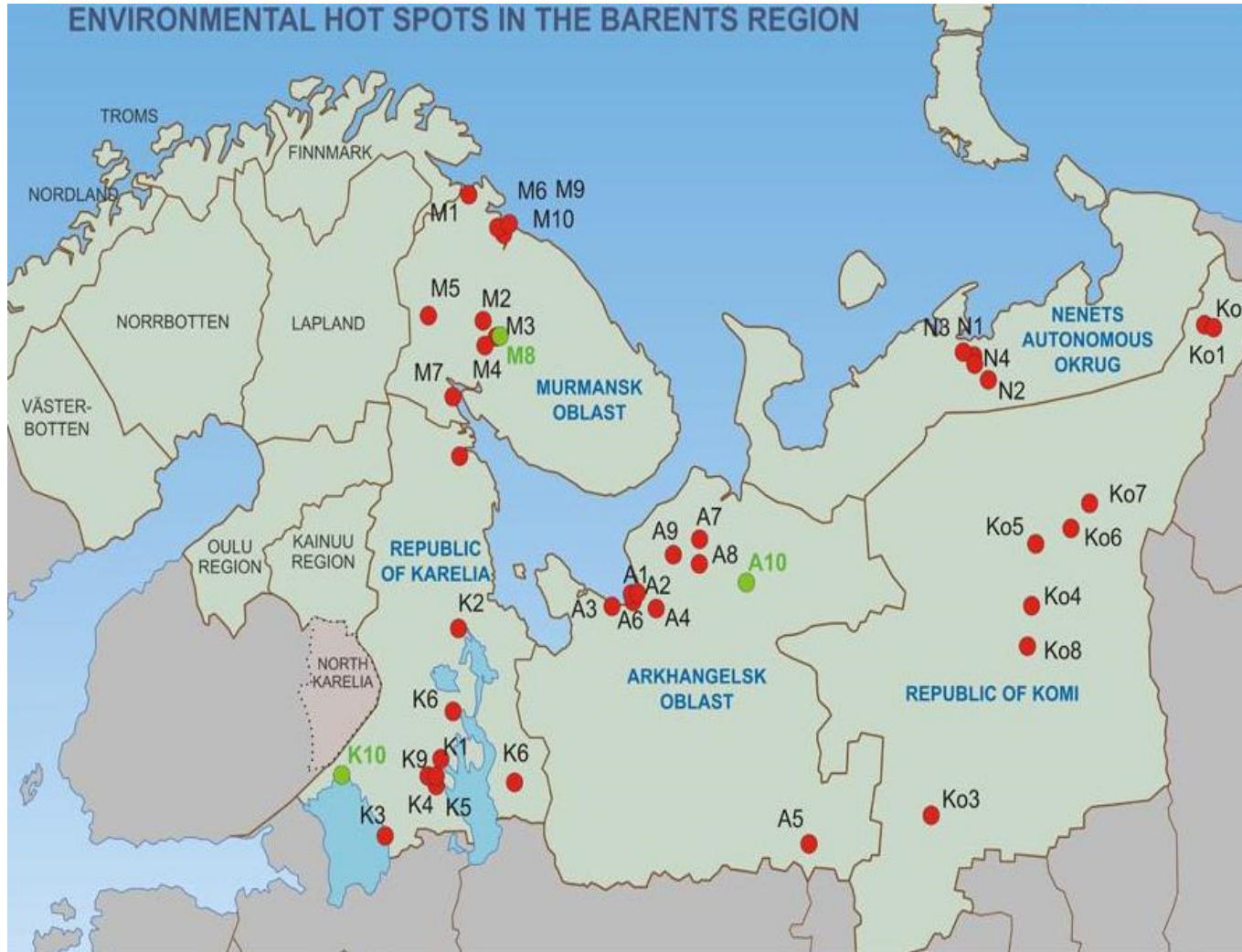
Arctic Challenges – Near term

2750 Arctic Contaminated sites



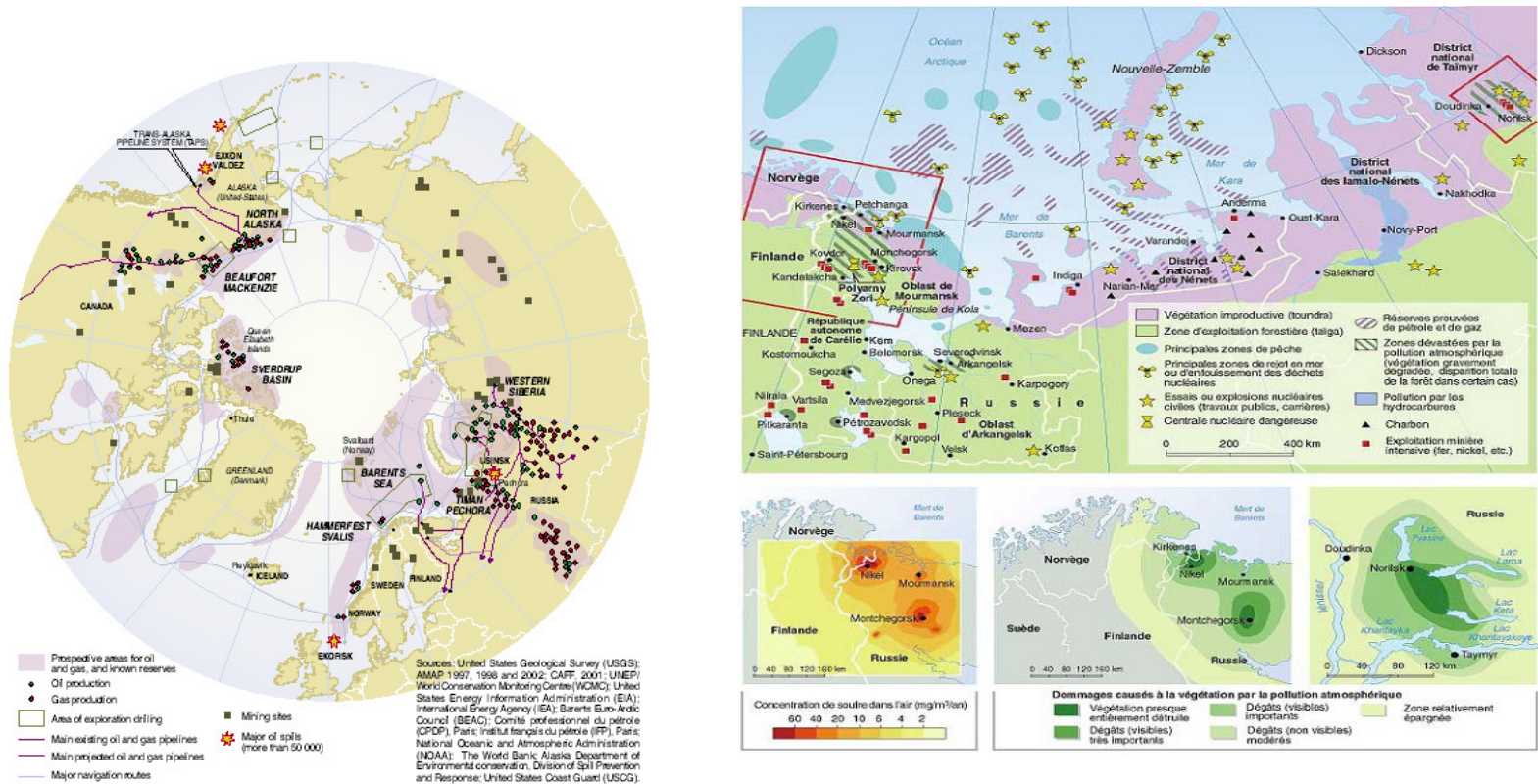
Hot Spots of the Russian North







Best Practice and Private Sector Investment



Some Industrial Activity in the Arctic



The Arctic

- Growing interest in four key sectors
 - mineral resources (oil, gas and mining),
 - fisheries,
 - logistics (including shipping)
 - and Arctic tourism
- Expected investment reaching \$100bn or more in the Arctic region by 2022-2025 (Lloyd's 2012) mostly in the minerals - extractive sector.
- Industrial activity, fishing, trade, transportation and exploitation of resources bring with it demands for an efficient strategy to mitigate and remediate damage.

Map of the Arctic and shipping routes





NEFCO - globally and in the AC PSI

NEFCO Owners' new Agreement in June 2017 broadens NEFCO's mandate for investment activities geographically to include projects also outside Eastern Europe.

Hitherto, the Corporation's trust funds, including those aimed at climate projects and SME internationalisation, have been the only financing instruments operating with a global scope.

NEFCO will now be able to explore new ground by providing loan capital and equity for relevant green growth investments of interest to the owner countries.



NEFCO - globally and in the AC PSI

NEFCO's current main priorities are to

- enhance existing activities and initiate new interventions related to green investments and the promotion of green growth
- prevent climate change with a focus on interventions related to renewable energy, energy efficiency and the reduction of short-lived climate pollutants
- continue the successful activities targeting the reduction of pollutants affecting the Baltic Sea and the Arctic and Barents Regions



NEFCO Methodology

1) The Project, Process, Responsibility

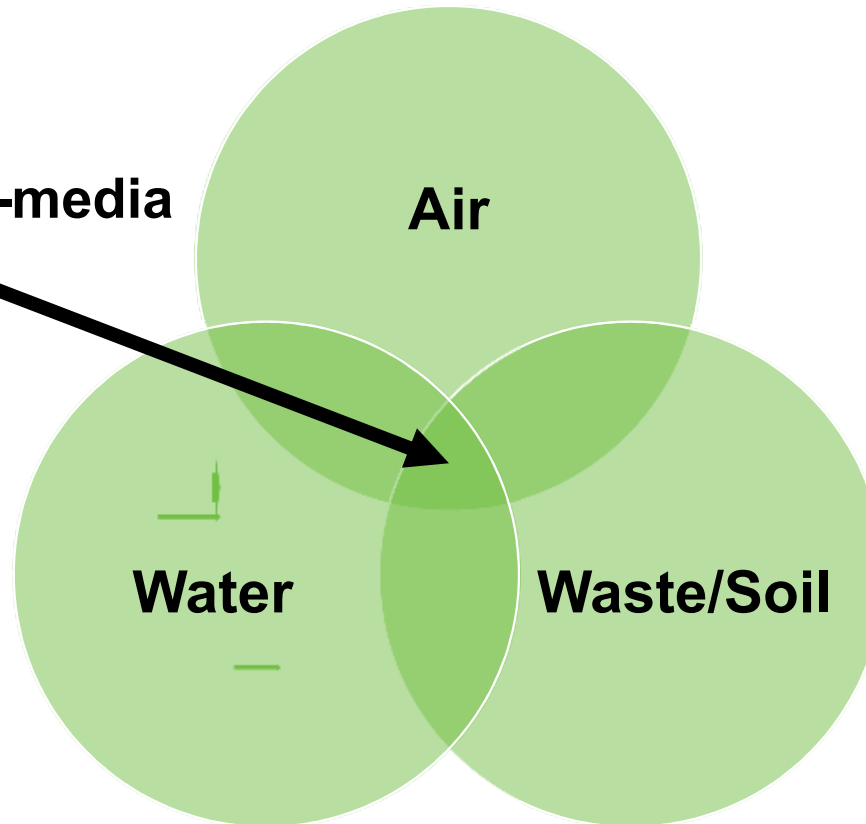
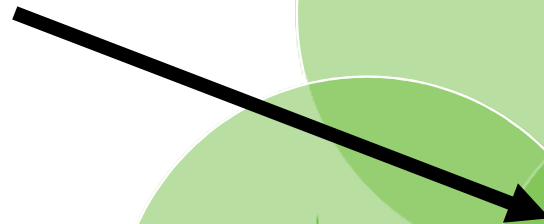
- Investment Costs, Operation Costs
- Performance (Financial, technical, economical, energy and environmental (EEE), ROI etc.)
- Environmental Guidelines (Categories, Impact Assessment (EIA), Audits (EA), CSR)
- Monitoring and Reporting (Indicators, Proj. Env. Report (PER))

2) Cost effectivity, Unit Abatement Costs

3) Cross Media Issues

Performance Interplay – Cross Media - Economics

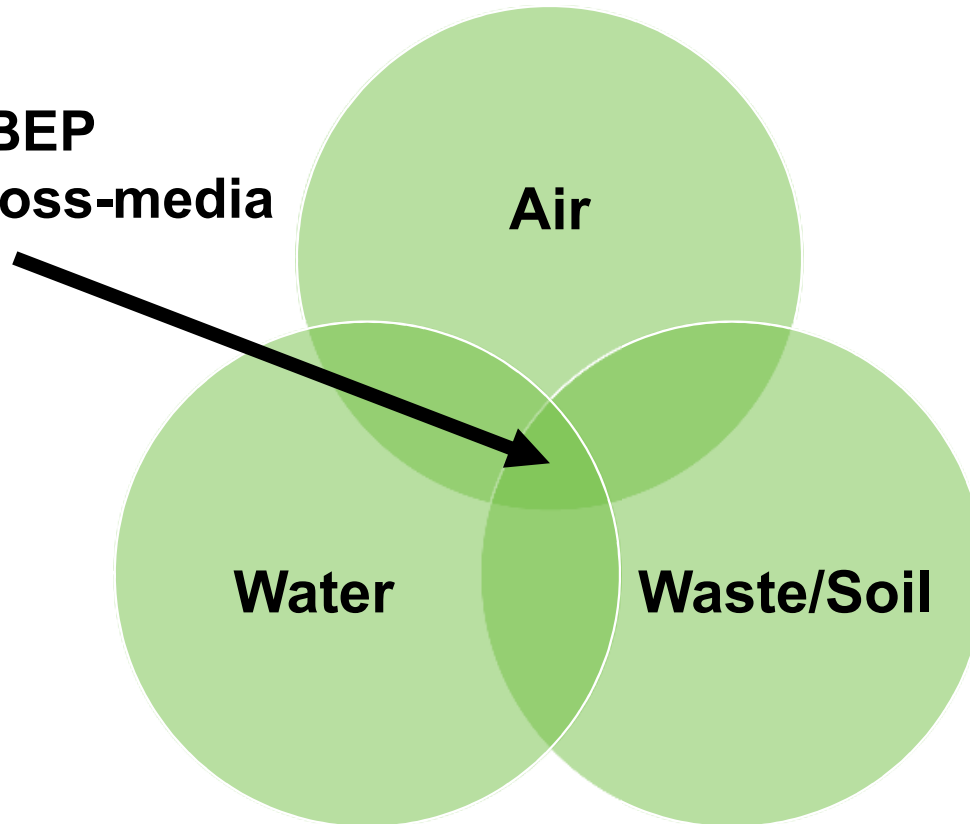
BAT – BEP
incl. Cross-media



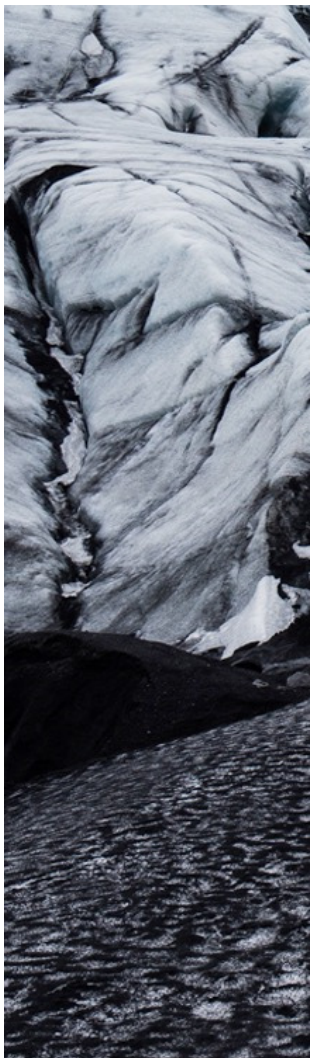
Performance
Resource
Energy
Release
Cost/Benefit
Internalise costs

Performance Interplay – Cross Media - Economics

**BAT – BEP
incl. Cross-media**



**Performance
Resource
Energy
Release
Cost/Benefit
Internalise costs**



NEFCO-PSI Projects - Work Plan 2018-2019

- Arctic Council Project Support Instrument (PSI). Through the AC Working Groups.
- Mainly ACAP and CAFF projects
- Status of PSI financed projects under implementation

No	PSI Project No	Project name	Sector	AC WG / PSI	PSI Allocation, EUR	Status Sept 2018
1	PSI-1/14	Valday Cluster (8 sites) - Diesel Black Carbon (BC) – Investment Project (IP)	Climate	ACAP	1 120 000	5 out of 8 sub-projects commissioned (Jan 2016), 3 on hold
2	PSI-2/14	Tundra Diesel BC Indigenous Peoples Reindeer Farm – Investment Project	Climate - Hg	ACAP	95 500	Completed (2015)
3	PSI-3/14	Mapping substituting solutions for diesel plants – TA Study	Climate	ACAP	30 000	Completed (2015)
4	PSI-4/14	Dolgoshcheli diesel energy supply conversion (BC) – TA Feasibility Study	Climate	ACAP	70 000	Feasibility Study Completed (2015)
5	PSI-1/15	PCB Project - Component 1 - Feasibility Study	Waste	ACAP	400 000	WIP. Awaiting response from RR
6	PSI-1/16	AIA Community Based BC - Health Assessment – TA	Climate – Health	ACAP	137 500	Ongoing since Sept 2017
7	PSI-2/16	Pesticides SCWO: Component 1 Feasibility Study	Waste	ACAP	100 000	Completed 2017
		Component 2 - Demo Testing (investment)			450 000	Under implementation

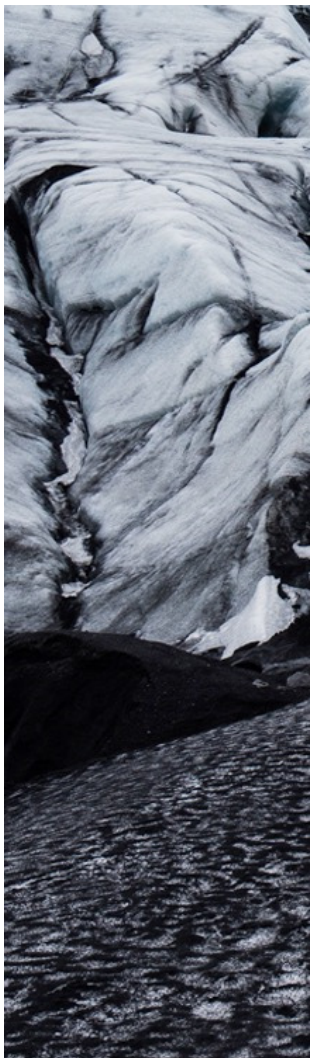


NEFCO-PSI Projects - Work Plan 2018-2019

Status of PSI financed projects under implementation

No	PSI Project No	Project name	Sector	AC WG / PSI	PSI Allocation, EUR	Status Sept 2018
8	PSI-3/16	Arctic Migratory Bird Actions - for two flyways – Study - TA	Biodiversity	CAFF	100 000	Ongoing since Sept 2017
9	PSI-2/17	Arctic Oil and Gas APG – Flaring: Phase 1a Evaluation of AGP Flaring on the Arctic Zone environment	Climate	ACAP	200 000	Ongoing since Feb 2018 Awaiting response from EG experts
		Phase 1b Demonstration of best available technologies and practices (BAT-BEP) to reduce SLCP from AGP flaring			250 000	Planned to commence after Phase 1a completed Awaiting response from EG experts
		Phase 2 The use of new technologies to reduce AGP flaring at remote fields			400 000	Planned to commence after Phase [1a] [1 b] completed
10	PSI-3/17	HFC-ODS in Fisheries and Food Enterprises – Feasibility Study	Ozone-Climate	ACAP	180 000	Under implementation Feb 2018 Awaiting response from EG experts
11	PSI-6/17	PSI Evaluation	Evaluation	PSI	75 000	Completed Final Report submitted 27 Sept. 2018
12	PSI-1/18	PSI Communication	Outreach	PSI	50 000	Approved 3/2018
Total					3 658 000	

IP = Investment Project, TA = Technical Assistance Project (commonly used for planning and feasibility studies)



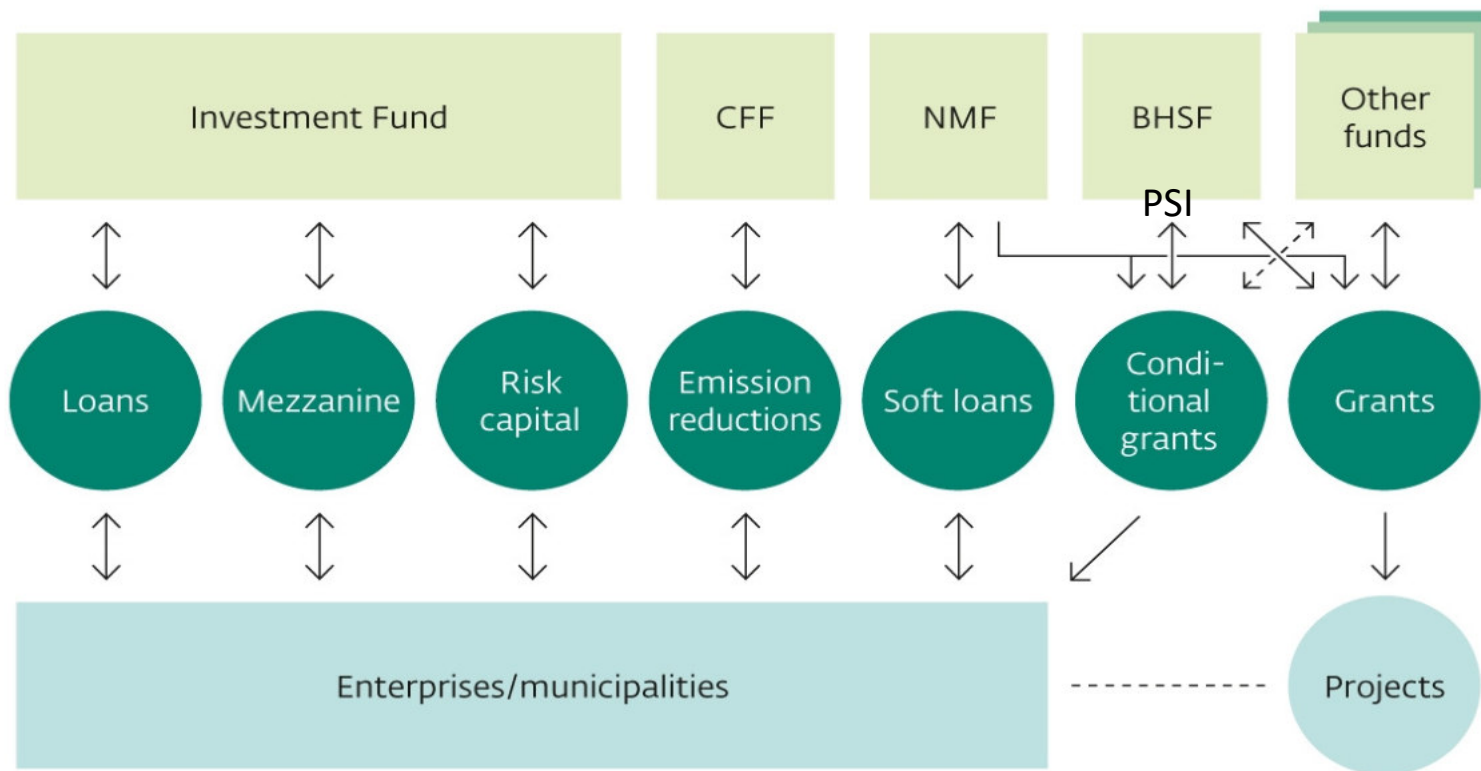
NEFCO PSI Projects - Work Plan 2018-2019

Approved commitments for projects under study reservation (RF)

No	PSI Project No	Project name	Sector	AC WG / PSI	PSI Allocation, EUR	Status May 2018
13	PSI-1/17	Decreasing Arctic Pollution by BAT-BEP	Cross-media	ACAP	425 000	PCOM March 2017; Study reservation by RF
14	PSI-4/17	Dudinka Municipal Solid Waste - Russian Arctic	Waste	ACAP	50 000	PCOM March 2017; Study reservation by RF
15	PSI-5/17	Arctic Rivers Green Shipping	Climate	ACAP	60 000	PCOM Oct 2017; Study reservation by RF
Total					535 000	



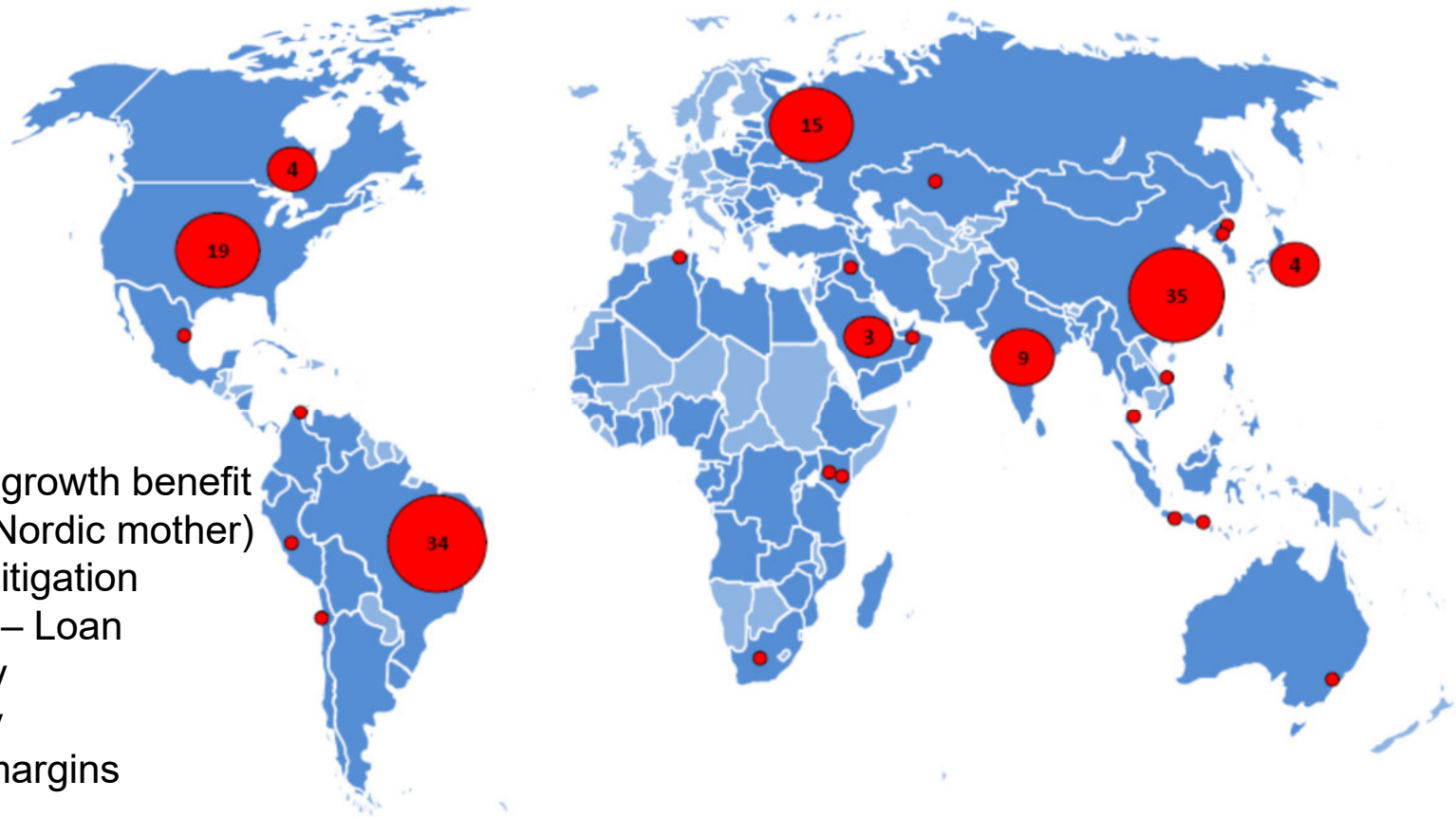
NEFCO's funding resources





NEFCO Green Growth Investments outside Eastern Europe - SME

Green growth benefit
SME (Nordic mother)
Risk mitigation
Equity – Loan
Solidity
History
EBIT margins





CONCLUSION

For sustainable investments projects there is merit in addressing transparent and good governance which include

- Structuring of investment size – Large, medium, small
- Managing Environmental, Energy and Economic (3E) Performance; Social Responsibility – eco-system services, traditional [local] knowledge
- Establishing reliable indicators
- Harnessing IFI (e.g. NEFCO), public-private engagement bringing additional benefits and risk reduction to the client
- Addressing grievance, monitoring, reporting, exit strategy
- Gaining from lessons learnt



Thank you for Listening!

NEFCO – Green Growth Financing

<https://www.nefco.org/>

<https://www.nefco.org/work-us/our-services>

<https://www.nefco.org/work-us/our-services/grants/arctic-council-project-support-instrument>

<https://www.nefco.org/work-us/our-services/grants/barents-hot-spots-facility>