

How to reduce black carbon emissions in Russia's oil and gas industry?

- Gas flaring as a major environmental problem in the Arctic
- Environmental certificates to address oil and gas industries

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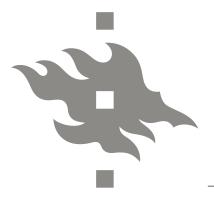
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Gas (APG) flaring in Russia

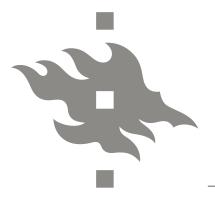
- 10 20 Bcm of associated petroleum gas is flared (2-4 % of EU's consumption)
- Russia produces 13 % of world's oil, but has been responsible for 1/4 of flaring
- Black carbon (soot) from Russian flaring has accounted 25 % of Arctic warming
- Gazprom prevented utilization of APG
- APG policy < electricity market reform





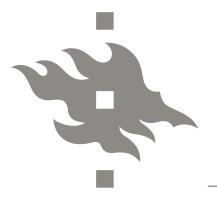
Environmental certificates as a solution?

- CSR and eco certificates in territorial production (e.g. forestry)
- Supply chain certificates to combat 'blood diamonds / metals'
- Certificates within the energy sector (e.g. biofuels, eco-electricity)
- Fossil energy is <u>point-source production</u>: low 'natural' pressure to reconsocial and environmental problems
 - Deliberate policies needed in hydrocarbon industries
 - Promotes responsible practices and conflict resolution



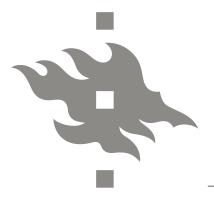
(Energy) security via eco-responsibility certificates

- Societal effects along the energy flow unfolded -> promotes our security
- We are all responsible to develop sustainable practices
- BP, Total, Fortum etc. run short in promoting sustainability
- The Energy Union could have the leverage -> certified flows
- Narrow social responsibility (workers etc.) followed in the Russian energy sector
- Wide societal and environmental (health, energy efficiency, global emissions) responsibility poorly



Détente via Arctic environment & energy?

- Russia wants to engage in partnerships in the Arctic that follow sustainable practices
- + Reliance more on soft means to influence globally
- + Environmental investments increase costs -> energy transition
- Justifies (Arctic) fossil-energy based development and deepens Russia's hydrocarbon lock-in



Research group on the Russian Environment and Energy

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