JUNE 24 2019

Climate policy in Iceland

Mulitilateral Assessment, SBI 50
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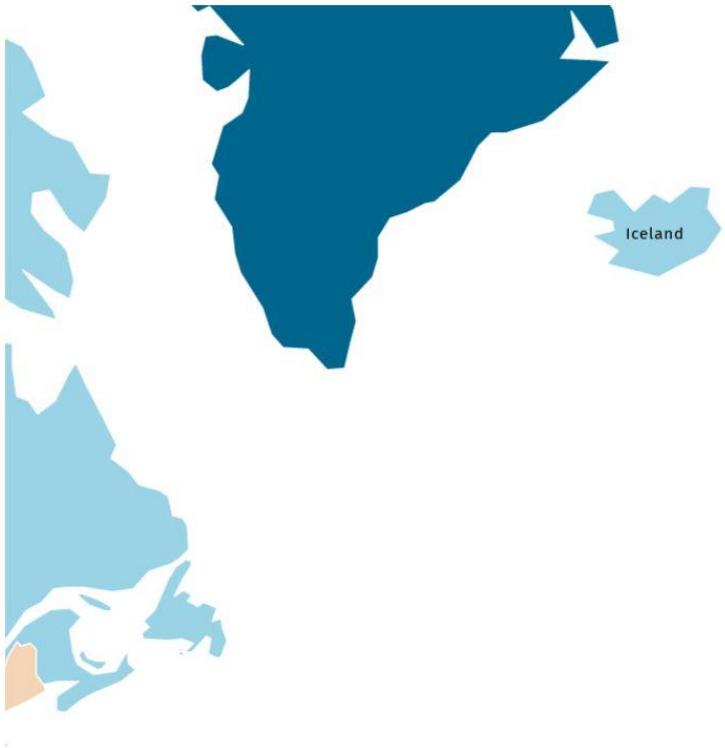
Iceland

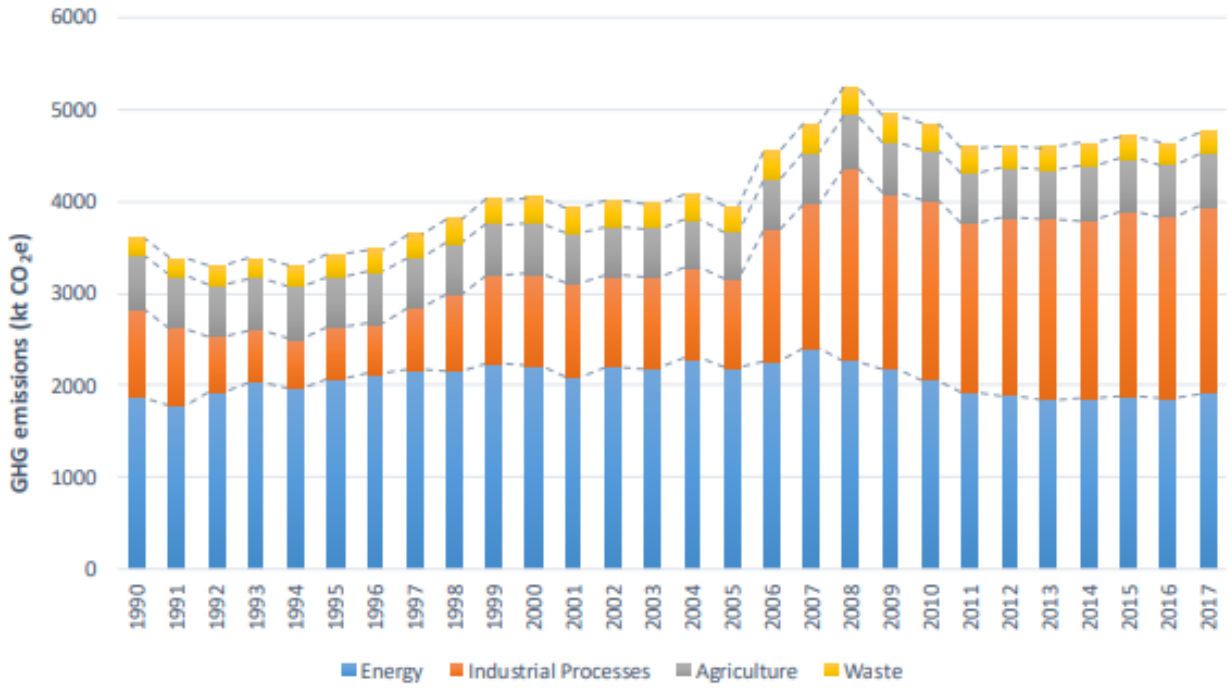


- General information
  - 358.000 inhabitants
  - 103.000 km^2
  - Population density: 3 inh./km2
  - Population growth 2017-2018: 2,4%
- Most important industries
  - Fishing
  - Power intensive industry
  - Tourism

Climate Reduction Targets to 2020

- Kyoto target for 2nd commitment Period (2013-2020)
  - -20% compared to 1990: as part of a joint fulfilment of 29 countries, EU+IS
    - Bilateral agreement (2015) with EU on Iceland‘s participation in joint fulfilment of Kyoto 2nd commitment period; (non-ETS emission)
- Iceland is part of the EU Emissions Trading Scheme (EU-ETS)
  - As a part of the EEA Agreement
- Climate regulation comparable to EU countries

Emissions Profile 1990-2017*



Emissions: 4.755 kt. CO_2e

- 1990-2017: 3.598 – 4.755 **+32,1%**
- 2016-2017: 4.640 – 4.755 **+2,5%**

100% renewables

- for electricity and heating

Energy related emissions

- mainly transport and fishing industry

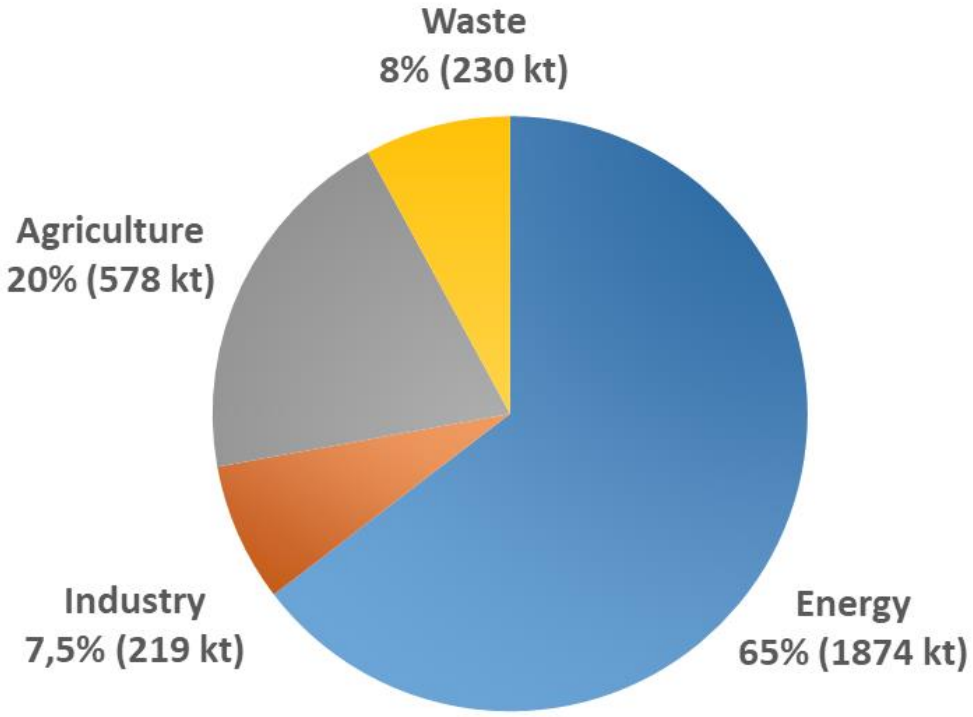
Heavy industry

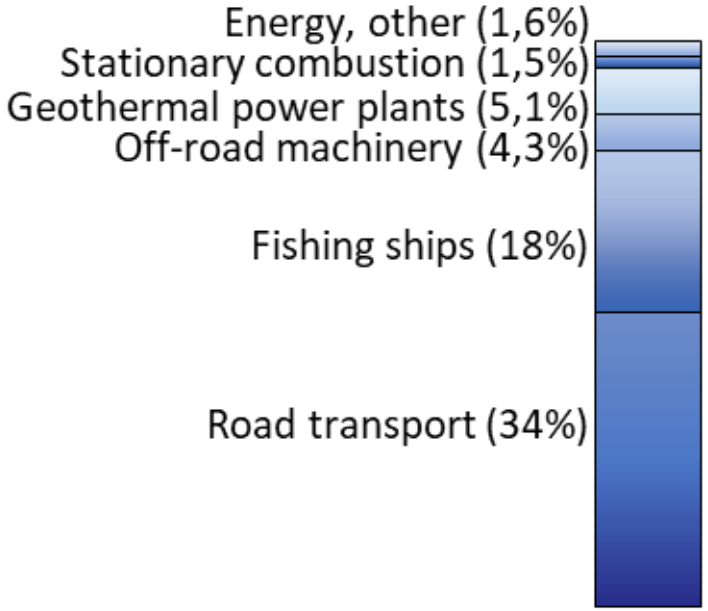
- main source of emissions
- also main increase since 1990

*without LULUCF,
Without international aviation/shipping

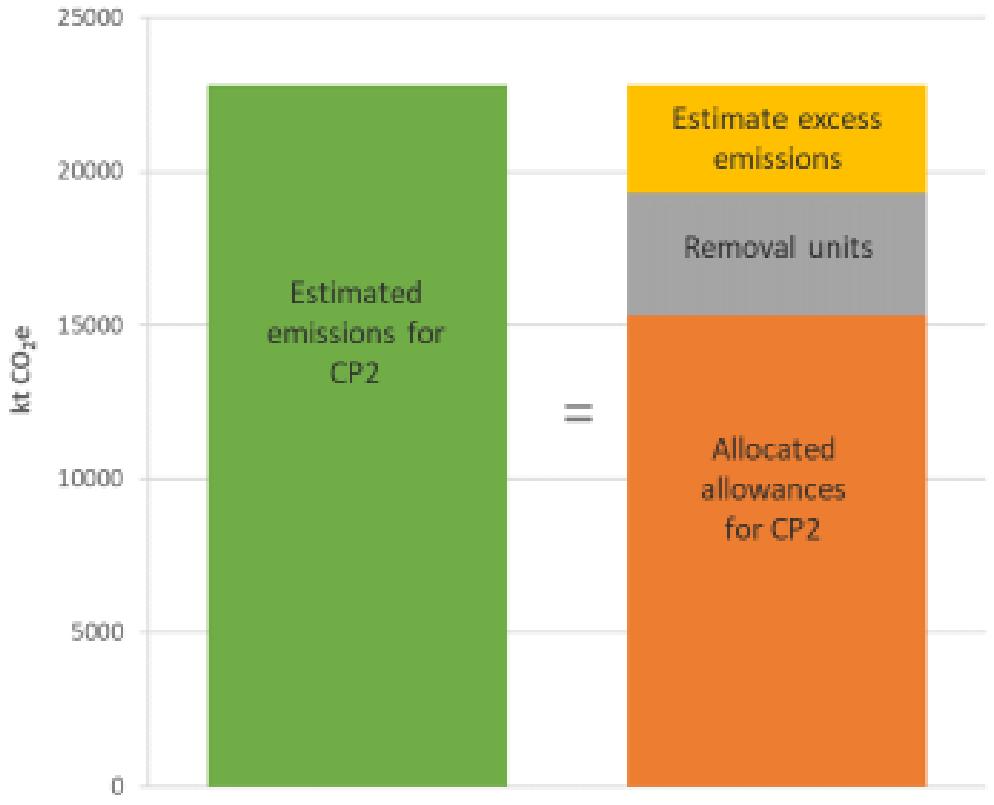
Effort sharing*

Emissions by sectors 2017





* Without international aviation/shipping; without CO_2 from domestic aviation; without LULUCF



Estimate for 2. commitment period of Kyoto (CP2)

(based on 2013-2017 emissions)

- Total emissions CP2: 22.812 kt CO_2e
- Allocated allowances CP2 : 15.327.217 (t CO_2e)*
- Removal units: 3.698-3.970 kt CO_2-íg

Estimate for CP2:

3.514 – 3.787 kt CO_2e in excess of allocated emissions

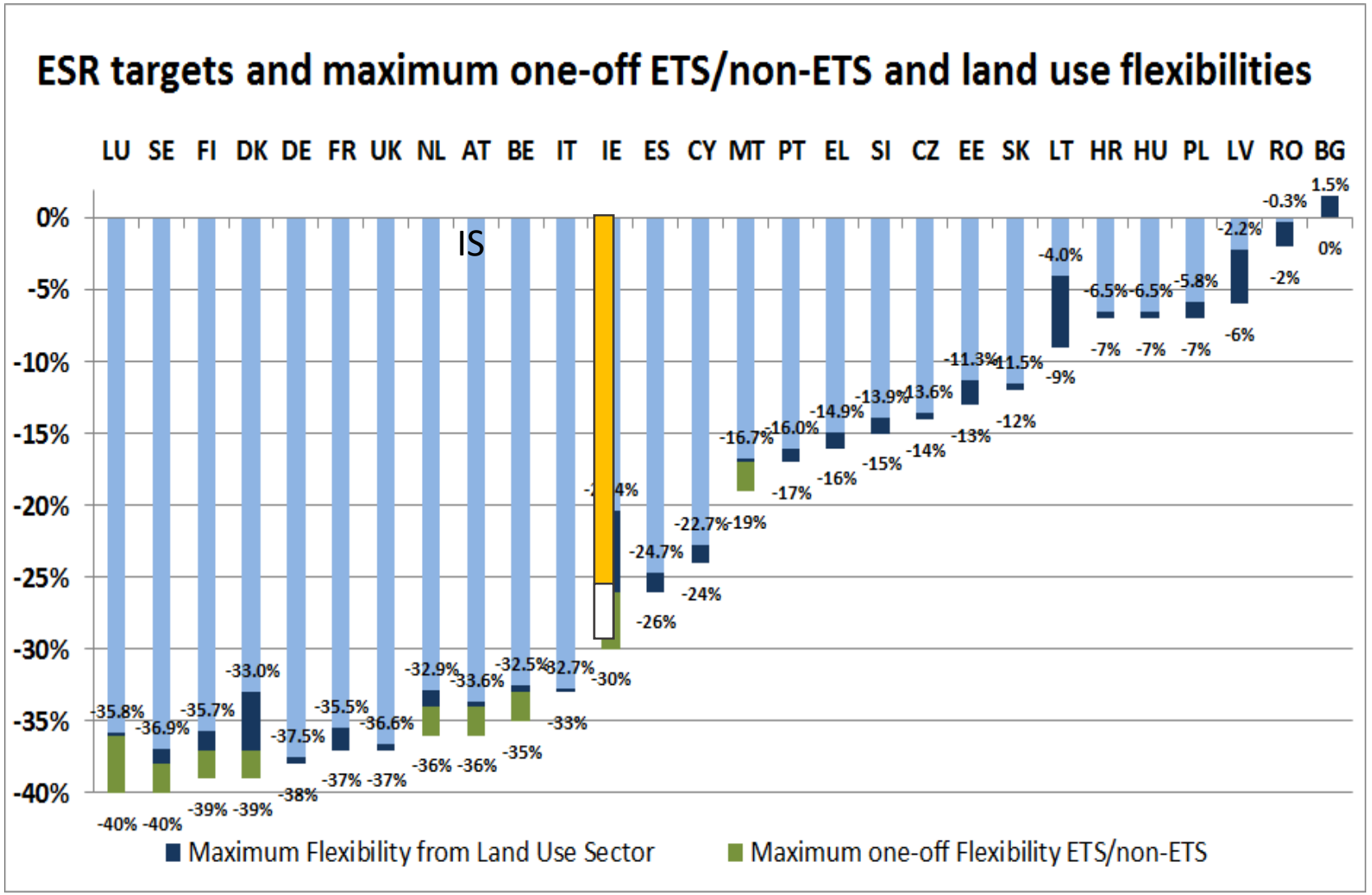
Assumptions:

- Emissions 2018-2020 estimated with average 2013-2017 emissions
- Removal units 2018-2020 estimated with average 2013-2017 RMUs
- Removals and therefore estimated emissions are dependent on method of estimation of removal units (linear increase vs. average)

* Each allowance is equal to 1t CO_2e

Contribution under the Paris Agreement

- Iceland, Norway and EU countries, joint fulfilment of -40% GHG emissions to 2030, compared to 1990
- Iceland, Norway and EU countries will share effort based on common rules: EU-ETS, Effort sharing decision, LULUCF-rules etc.
- Discussions between EU and Iceland and Norway on practical and legal issues of joint implementation in final stages, expected to be finalized this year
- Pledge for carbon neutrality 2040



EU targets 2021-2030

New climate action plan in 2018

34 Government measures

<u>Two main target areas:</u>

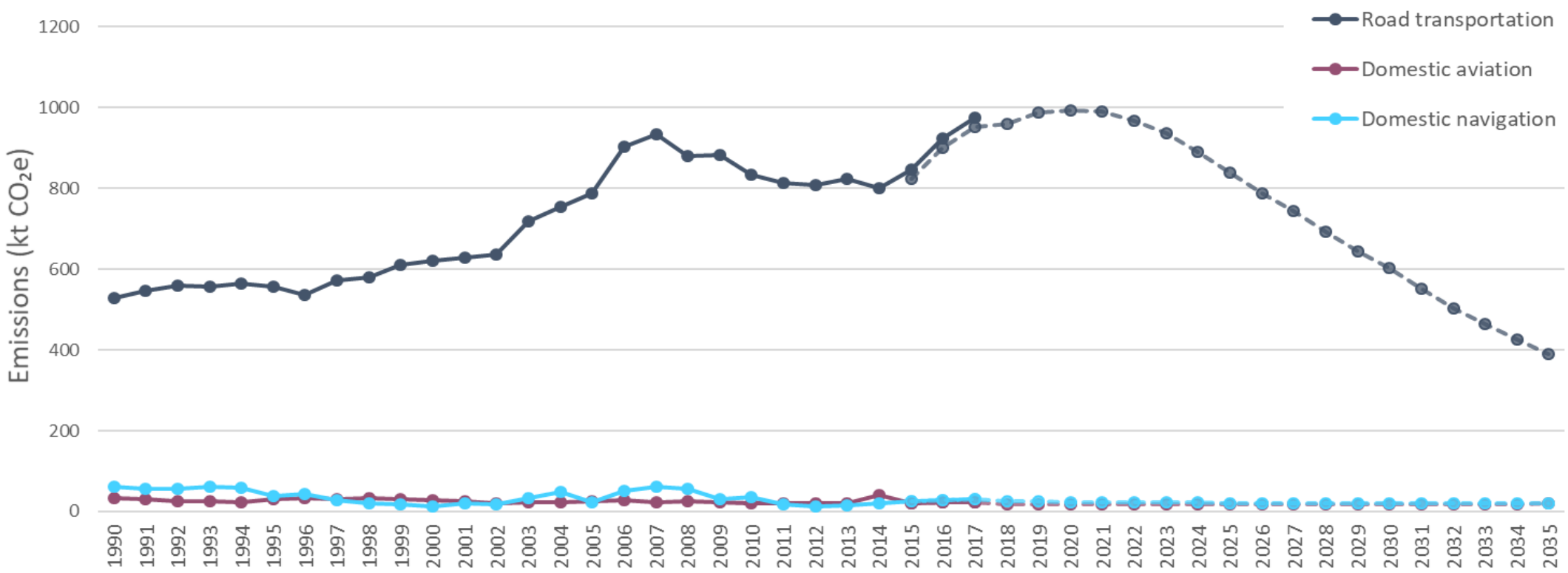
1. **Clean transport** - phase out fossil fuels in transport and fisheries
2. Increased **carbon sequestration** in land use

Substancial increase in funding

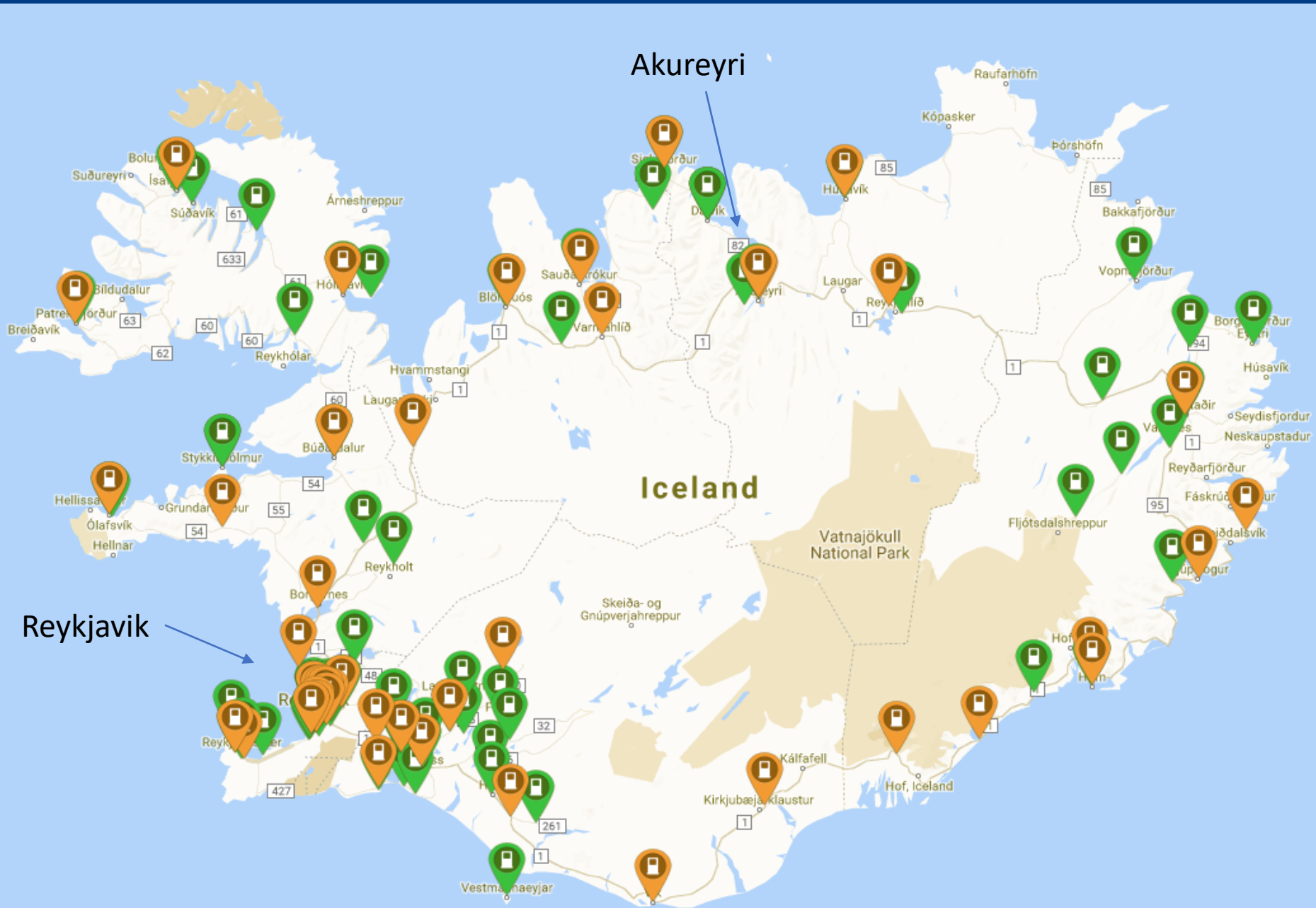
Clean transport

- Strengthening
  - subsidies for electric cars and other clean vehicles
- Support
  - infrastructure / EV charging stations
  - biofuel production
  - public transport and bicycling
- Ban
  - on new registration of fossil fuel cars by 2030

Projection – transport sector



Charging stations



Carbon sequestration - LULUCF

- Plan to significantly increase afforestation and revegetation
- Efforts to reclaim drained wetlands
- Increase in government funding secured for LULUCF-activities; also private efforts (Wetland reclamation fund et. al.)
- Need to improve science and carbon accounting of land
- Nature-based solutions: Efforts in LULUCF should strengthen biodiversity and ecosystem resilience climate change, and roll back desertification

CARB-Fix

Turning CO_2 to rock

- Capture CO_2 from emission sources and permanently store as minerals in basaltic rock underground
- CO_2 is transformed to minerals in porous rock in less than two years

Declaration

The power intensive industry will strive to find a solution to use the Carb-fix method to reduce emissions from the industrial processes from aluminum and ferro silicon production.

Signed June 18th 2019

Impacts of Climate Change; Adaptation

- New Scientific Assessment on Impact of Climate Change in Iceland issued 2018
- Glaciers are retreating, may largely disappear in 100-200 years
- Vegetation cover is increasing
- Ocean acidification a big concern
- Increase in funds for research, monitoring adaptation efforts
- Work on Adaptation Strategy has started

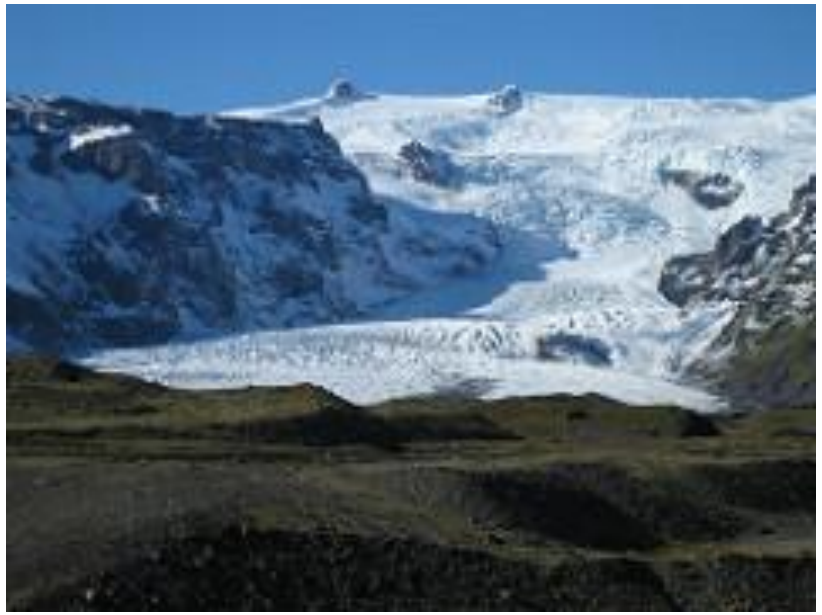


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Photo: Hugi Ólafsson