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| s | ft: | Activities in Norway to Reduce High GWP Emissions |
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By

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Norway

- Large oil producer
- Electricity from hydropower
- Large production of metals and ferro-alloys
- Import of consumer goods
- Not member of EU (but economic agreement with the EU)

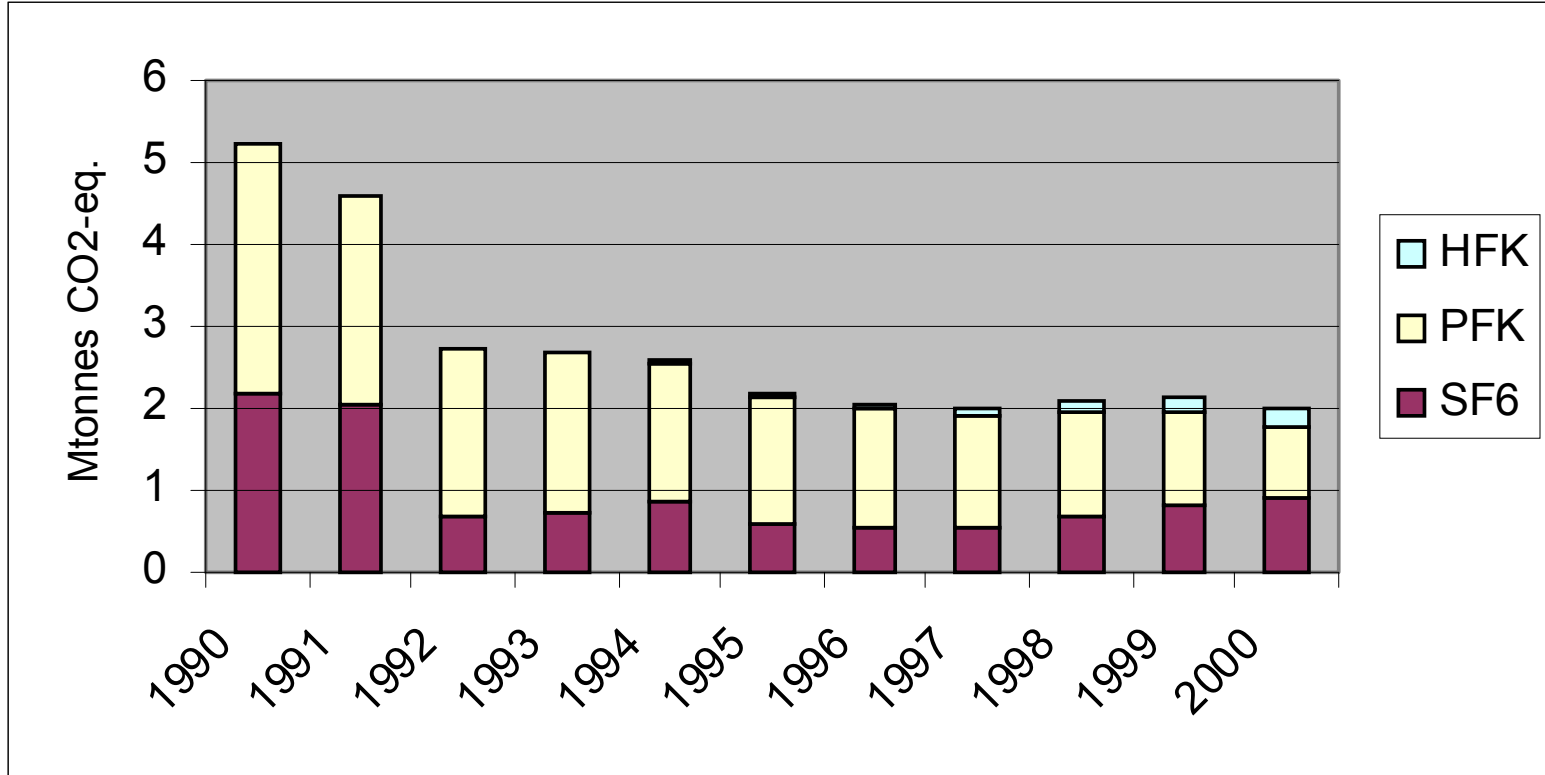
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Emissions of fluorinated gases

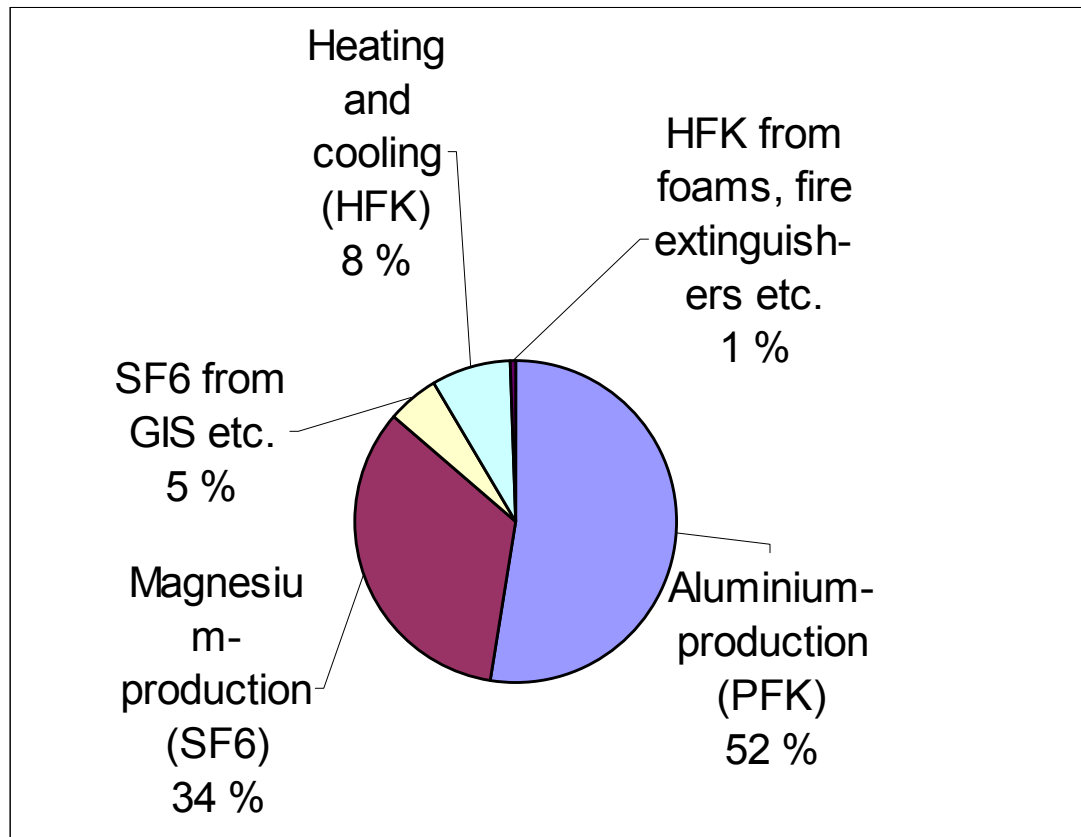
- PFK from aluminium (7 plants)
- SF₆ from magnesium foundry
- Widespread use of GIS
- One producer of GIS
- Gas imported in bulk and products (no production)
- Total emissions: 2,0 Mtonnes CO₂-eq. (3,5 % of total)

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Emissions 1990-2000

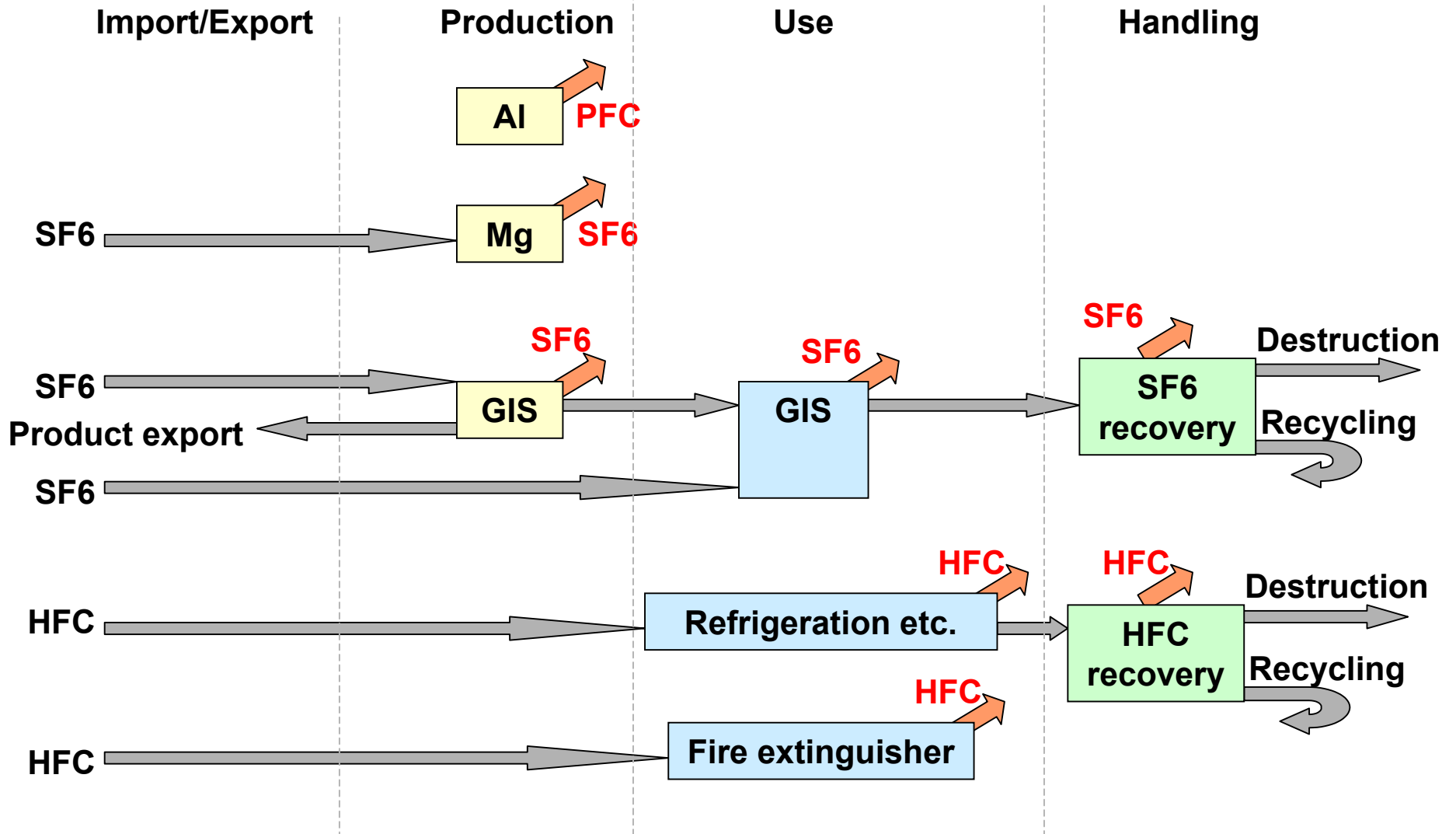


Sources



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Emission points



Aluminium production

- 7 plants (Soederberg/ prebaked)
- Voluntary agreement (1997):
 - PFC, CO₂
 - Target related to production
 - Base year 1990 (5,5 t CO₂-eq./tAl)
 - Target 2000: 50 % reduction
 - Target 2005: 55 % reduction
 - Yearly following-up

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Magnesium

- 1 plant
- Primary production closed 2002
- Now only secondary foundry (scrap metal) -> 80% reduction in SF₆
- SO₂ as cover gas has been considered

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GIS

- Widespread use (mountain halls)
- 85 big installations (>145 kV)
- 1 producer of sealed GIS (medium voltage)
- Voluntary agreement signed march 2002:
 - Base year 2000
 - 13 % reduction by 2005
 - 30 % reduction by 2010
 - Compare to 7% increase in business-as-usual scenario
 - Measures on production, installation, use and waste treatment
 - Company (Renas) will handle recovery of gas

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Emissions of HFCs

- Import in products (refrigeration, air-conditioning etc.)
- Import in bulk (refrigeration, air-conditioning, fire extinguishers)
- Tax based on CO₂-equivalents proposed:
 - Bulk: Depending on gas
 - Products: Fixed tax according to product (type, energy consumption, low/medium/high GWP on gas)
 - System for recycling/ destruction in place
 - Recycled gas omitted from taxation

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Emission quotas

- "Narrow" quota system planned for 2005 – 07
- All Kyoto-gases covered – at least in principle
- Emissions covered by taxes or voluntary agreements are omitted
- But: Aluminium and Magnesium will be included
- Wider system planned for 2008 –2012
- Links to international/EU system under consideration