

The new Swedish National Air Quality Plan

and

Swedish 2018 IAM developments

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information



SWEDEN'S NATIONAL AIR POLLUTION CONTROL PROGRAM

Sweden's NEC Directive commitments

base year 2005

	NO _x	SO ₂	NMVOC	NH ₃	PM2,5
2020	36 %	22 %	25 %	15 %	19 %
2025	-	-	-	-	-
2030	66 %	22 %	36 %	17 %	19 %

Gap analysis

	NO _x	SO ₂	NMVOC	NH ₃	PM2,5
2020				- 1 kt	
2025				- 0,5 kt	
2030	- 13 kt				

National air pollution control program – strategy for cleaner air

Action areas

- *Ammonia in the agricultural sector (2 kton)*
- *Nitrogen oxides in industry, and electrical and district heating (3-9 kton)*
- *Nitrogen oxides in the transportation sector (6-7 kton)*

Focus areas

- *Improved air quality in urban areas*
- *Better synergies between climate and air*
- *Reduced negative effects on ecosystems*
- *International cooperation*

Action area 1 – Ammonia, agriculture

	kiloton/year	Cost, M€/year
<i>Bandspreading of manure instead of broadcasting</i>	0.7	2.4
<i>Incorporation of surface applied manure within the same day</i>	0.5	0.6
<i>Tight lid on storage for urine-based manure</i>	0.6	1.0
Total	1.8	4.0

Action area 2 – Nitrogen oxides, industry

	kiloton/ year	Cost, M€/ year
<i>Improved flue gas cleaning at existing combustion plants</i>	2 (1 – 3)	25.5*
<i>Installation of abatement technology, soda boilers</i>	0,8 (0,2 – 1,4)	(3.5 – 23.5)*
<i>Installation of abatement technology, lime kilns</i>	0,7 (0,5 – 0,9)	
<i>Installation of abatement technology, gas boilers</i>	0,4 (0,3 – 0,5)	
<i>Installation of abatement technology, sulfite boilers</i>	0,4 (0,3 – 0,6)	
<i>Energy efficiency and lignin recovery</i>	1,3 (0,6 – 2,1)	
Total	5,6 (2,9 – 8,5)	

Action area 3 – Nitrogen oxides, transport

	kiloton/ year	Cost, M€/year
<i>Measures to reach the climate objective for domestic transport by 2030 *</i>	5 (4 – 5)	
<i>Phasing out older cars, diesel</i>	1,7	
<i>Phasing out older lite trucks, diesel</i>	0,3	
Total	7 (6 – 7)	

SCAC 2 – Swedish Clean Air and Climate Research Programme Phase 2

Hemispheric transport of air pollutants, impacts and abatement strategies

2017 – 2020



Methods and models for identifying cost-effective abatement strategies (WP4)

- Robustness check of IAM and CBA models (and model input) used for international air pollution policies
- How much of the Swedish decoupling of SO₂ emissions from economic growth was due to dedicated SO₂ control options?
- Is the relative cost-effectiveness of SLCP control options (i.e. ranking) affected by the choice of climate metric used when calculating cost-effectiveness?
- To what extent will differences in economic perspectives affect the modelled costs of reducing emissions?
- Comparing the cost-effectiveness of land-based emission reductions and emission reductions from international shipping.

Exampels of robust IAM & CBA results

Examples of sensitive IAM & CBA results

Thank you for your attention

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