

Table 5.5 Effects of selected policy and measures that have been implemented or adopted. Million tonnes CO₂ equivalents

	1995	2000	2005	2007	2010	2020
Policy and measures directly related to climate change						
- CO ₂ tax offshore ¹	0.6	3.0	3.0	4.5	5.2 ¹⁰	6.9 ¹⁰
- CO ₂ tax onshore ²		0.8	0.8	0.85	0.85	0.85
- Requirement to collect landfill gas	0.2	0.4	0.4	0.4	0.4	0.4
- Other measures in the waste sector	-	0.01	0.1	0.1	0.1	0.5
- Climate change agreement with aluminium industry ³	0-1.3 ³	0.5-2.7 ³	1.6-4.5 ³	1.6-4.5 ³	1.5-4.2 ³	1.8-4.5 ³
- Agreement on SF ₆ emissions	-	-	0.06	0.06	0.06	0.06
- Tax and recycling schemes on HFCs	-	-	0.3	0.5	0.5	0.5
- Requirement of 2.5% bio fuels of fuel consumption in road transport from 2009 ⁴	-	-	-	-	0.3	0.3
- CO ₂ dependent tax for new passenger cars from January 1 2007 ⁴	-	-	-	0.04	0.1	0.4
Other regulations						
- VOC regulation offshore	-	-	0.2	0.2	0.3	0.1
- VOC regulation at the Stura terminal	-	0.01	0.02	0.02	0.005	0.005
Voluntary reductions:						
- SF ₆ reduction, production of magnesium	1	1.4	1.8	- ⁸	- ⁸	- ⁸
- N ₂ O reduction, production of nitric acid	0.7	0.6	0.5	1.2	1.2-1.6 ⁹	1.2-1.6 ⁹
- Use of bio carbon in the cement production ⁵	-	0.03	0.13	0.13	0.13	0.13
New policy and measures post 2008⁶						
- Emission trading scheme (EU ETS 2008-2012)	-	-	-	-	0-0.3 ¹¹	0-0.3 ^{11, 12}
- Consensus with the processes industry 2009 ⁷	-	-	-	-	0.2	0.2
Sum effects of implemented policy and measures	2.5-3.8	6.8-9	8.9-11.8	9.6-12.5	10.8-14.2	13.3-16.7

¹ Estimates based on KonKraft report 5 and analyses by the Norwegian Petroleum Directorate.

² Based on an equilibrium analyses for 1990-1999. Bruvoll A. and B.M. Larsen (2004) "Greenhouse gas emissions in Norway. Do carbon taxes work" Energy Policies 32 (4), 493-505, and assessment for the Third National Communication. In addition the effects of the increased rate of the tax for domestic air transport and shipping in 2006 is included.

³ Lowest number reflects direct effect of the agreement, while highest estimate include voluntary measures taken before adopting the agreement in 1997 and after the agreement 2005. Estimates by the Norwegian Pollution Control Authority.

⁴ The effect is included in the White Paper on Long-term Perspectives 2009.

⁵ The emissions are estimated by the producers.

⁶ These effects are not in the reference scenario in the White Paper on Long-term Perspectives 2009.

⁷ Includes the effect of the agreement from 2009 for the years 2009-2012 between the process industry and the authorities.

⁸ The magnesium plant was closed down in 2006, and emission reductions are not included in the estimated effects of policies and measures after this.

⁹ Lowest number reflect direct effects of measure included in the White Paper on Long-term Perspectives 2009, while the highest number reflects the effect of measure after per 2008 and is not included in the reference scenario White Paper on Long-term Perspectives 2009.

¹⁰ The CO₂ tax for the petroleum sector was substantially reduced in 2008 as a consequence of the extension of the EU-ETS for 2008-2012. The petroleum sector has to pay for all their allowances. The effects in the table therefore show the combined effect of the CO₂ tax and the price of the CO₂ allowances.

¹¹ Based on calculations by Statistics Norway. The N₂O emission reduction from nitric acid production is excluded.

¹² A revised emission trading scheme from 2013 may include other effects.