## Hungary

### Sources of information

Hungary's Third National Communication under the United Nations Framework Convention on Climate Change, 2001

## Reporting

Two chapters in The Third National Communication of Hungary deal with projections and measures. Policies and measures to reduce greenhouse gas emissions are presented for the energy, agriculture and forestry sectors. Reporting is not very transparent. No summary tables are provided, either for measures or for projections.

Table 1: Information provided on policies and measures

Information provided	Level provided	Comments
Name of policy/measure	?	
Type of instrument	?	
Which GHGs?	CO <sub>2</sub> , CH <sub>4</sub> ,	
Status of implementation	?	
Implementation body specified	?	
Quantitative assessment of implementation	+	Estimated mitigation effect for 2012 comparing to 2001 for a few measures is quantified
Interaction with other P&Ms discussed	+	In some cases

<sup>+, ++, +++</sup> level of information available increases as the number of + signs increases

Table 2: Information provided on projections

Category of information	Level of information provided	Comments
Scenarios considered	Without measures With measures With additional measures	Scenarios are given for sectors corresponding with IPCC sectors and gases.
Expressed relative to inventory for previous years Starting year	no	
Projections	2000,2005,2010,2 015	
Split of projections	+	Projections split by Energy, Agriculture and Forestry
Presentation of results	+	Tables and figures, but not systematic
Description of model (level of detail, approach and assumptions) Discussion of uncertainty	+	Basic description of the models and further references provided Limited
Details of parameters and assumptions	+	Information on type of indicators used in scenarios provided, situation across sectors differs

<sup>+, ++, +++</sup> level of information available increases as the number of + signs increases

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## Assessment of policies and measures

Table 3: Summary of the effect of policies and measures by 2010 included in the projections (MtCO, eq.)

the projections (IVITCO <sub>2</sub> e	q.)	
	With measures <sup>a</sup>	With additional measures <sup>b</sup>
		illeasules
CO <sub>2</sub>	NA	
CH <sub>4</sub>		
$N_2O$		
F-gases		
Energy (IPCC Sector 1)		
— of which transport		
Industry (IPCC Sector 2)		
Agriculture (IPCC Sector 4)		
Forestry (IPCC Sector 5)		
Waste (IPCC Sector 6)		
Total		

a The effect of policies implemented or adopted is derived from the sum of the potentials of the individual scenarios comparing without ant with measures

# **Evaluation of projections**

Table 5: Summary of projections by gas in 2010 (MtCO<sub>2</sub> equivalent)

Table 5: Summary of projections by gas in 2010 (MtCO <sub>2</sub> equivalent)			
	Base year	With measures	With additional
			measures
CO <sub>2</sub>	80.6		
CH₄	14.0		
$N_2O$	4.0		
HFC			
PFC			
SF <sub>6</sub>			
Total	98.5		
% change relative to base			
year			

Table 6: Summary of projections by sector in 2010 (MtCO<sub>2</sub> eq.)

Table of Summary of projections by sector in 2010 (integs 2 odly					
В	Base	With	% change	With	% change
У	/ear	measures	relative to	additional	relative
			1990	measures	1990
					(additional
					measures)

**Energy (IPCC Sector 1)** 

— of which transport

**Industry (IPCC Sector 2)** 

Agriculture (IPCC

Sector 4)

Forestry (IPCC Sector 5)

Waste (IPCC Sector 6)

b The effect of planned policies is derived from the difference between the with measures and the with additional measures scenarios

#### **TOTAL**

Note: No summary tables were provided in the 3<sup>rd</sup> NC on projections

Table 7: Assessment of the target

rable 7. Assessment of the target		
	$MtCO_2$ equiv.	% of 1990 level (six gas basket)
	Ref. scenario	
Base year emissions (from projections)	98.5	
Commitment ( base year emissions)	92.6	6.0%
2010 emissions with measures		
2010 emissions with additional measures		
Gap between with measures and commitment (-ve means no gap)		
Effect of additional P&Ms		

## Description of modelling approach

The forecast for non-GHGs and  $\mathrm{CO}_2$  in the energy sector and for transport is provided for 2000, 2010 and 2020, based on reduced fuel consumption. Scenarios A, B, C for agriculture are provided related to different production quotas related to EU accession. In forestry the CASMOR model was used, three basic afforestation scenarios were assessed.

## **Country conclusions**

The GHG emission target value accepted in Kyoto protocol is 92.6 MtCO<sub>2</sub>. The linear trend from 1994 predicts an annual GHG emission of 100.6 MtCO<sub>2</sub> for the period of 2008–2012. This means that the reduction target for Hungary is 8 MtCO<sub>2</sub>. The baseline scenario results in reduction of 6.8 MtCO<sub>2</sub>, but the country can reach 11.3 MtCO<sub>2</sub> by the scenario with measures.