Appendix I: Main drivers and assumptions for baseline emissions of non-CO_2 gases. The table also shows the sector-wise baseline emissions for the years 2020, 2050 and 2100.

Emission Sources	Drivers	Assumptions		Baseline Emissions		
				2000	2050	2100
CH_4			Unit			
1. Energy	Coal, Oil & Gas extraction; Mobile & Stationary sources		$MTCH_4$	73	107.4	193
2. Enteric Fermentation	Agricultural GDP	1% annual decline in emissions factor		83.1	214.6	179.7
3. Rice Cultivation	Total Population	1% annual decline in emissions factor		30.8	54.35	45.05
4. Manure Management	Agricultural GDP	1% annual decline in emissions factor		10	19.3	16
5. Solid Waste	IPCC methodology (IPCC, 2000)	Increase in waste generation rates, more recycling etc.		36	105	173
6. Wastewater	Population			27	35	41
7. Biomass Burning	Constant			13	13	13
8. Other Agricultural Sources	Constant			0.5	1	1
N_2O			MTN_2O			
1. Agricultural Soil	Agricultural GDP	1% annual decline in emissions factor		8.3	15	7.5
2. Other Agricultural Sources	Constant			0.5	0.5	0.5
3. Nitric & Adipic Acid	Industrial GDP			0.5	1.6	3.2
4. Energy	Mobile & Stationary sources			0.82	0.80	0.49
5. Manure Management	Agricultural GDP	1% annual decline in emissions factor		0.7	1.16	0.78
6. Other Non-Agricultural Sources	Constant			0.04	0.04	0.04
7. Human Sewage	Total Population			0.26	0.36	0.39
SF_6			$KTSF_6$			
1. Electric GIS	Electric Transmission & Distribution	1% annual decline in emissions factor, developed countries		1.8	3.26	6.04
2. Magnesium Production	Light vehicle transport			0.4	0.48	0.31
CF_4			$KTCF_4$			
1. Aluminum Production	Light vehicle transport			10	7.5	5.5
2. Semiconductors	Constant after 2020*			5.78	2.25	1.2
HFCs			KTHFC-134e			
1. Refrigeration & air-conditioning (includes mobile A/C)	Electricity use, Transportation demand			20	614	915
2. Insulation foams	Residential heating			5	69	46
3. Other sources (Aerosols, Fire Extinguishers, etc.)	Population, GDP etc.	Developing countries converge to industrialized levels based on GDP/capita		29	175	230

*Due to the announcement of voluntary phase out of emissions by World Semiconductor Association.

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Appendix II: Current costs and technical characteristics of some important non-CO_2 mitigation technologies. We assume that with rising income, the current low labor costs in many developing countries increase gradually over the century. The reduction efficiencies represent the pure technical applicability of a respective option and are not reduced by any associated economic applicability.

Emission Sources	**Mitigation Technologies**	**Costs & Reduction Efficiency**		
		Capital Costs* $/TCE	O&M costs* $/TCE	Efficiency** %
CH_4				
1. Manure Management	Farm-scale digesters	1000-5000	20-500	100
	Centralized digesters	1300	30-200	25-50
2. Solid Waste	Anaerobic digesters	1200-2800	40-400	95-100
	Composting	1300-1500	50-500	95-100
	Heat/Electricity Production	25-600	6-35	70-75
	Flaring	100-150	2-20	75
N_2O				
1. Nitric & Adipic Acid	High temperature catalytic reduction	8-25	8-10	90
	Low temperature catalytic reduction	10-12	≈1	95
	Thermal destruction	2	≈1	95
SF6				
1. Electric T&D	Recycling	10-30	≤ 1	90
	Leak detection	0	1-5	50
2. Magnesium Production	Replacing SF6 with SO2	75-300	2-12	100
CF_4				
1. Aluminum Production	Soderberg	360	25-135	50
HFC				
1. Refrigeration &A/C	Refrigerant recovery	0	5-20	99
	Leak repair	95	0	100
	Ammonia secondary systems	166	12-60	100
	CO_2 systems for motor vehicle A/C	3500	0	100
2. Insulation foams	Replacement with Hydrocarbon	95	3-15	100

* The cost and technical data for the various mitigation options is mainly based on the technology-specific data sets from Delhotal et al., (2004), and Schaefer et al., (2004).

** The reduction efficiencies represent the pure technical applicability of a respective option and are not reduced by any associated economic applicability.

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