

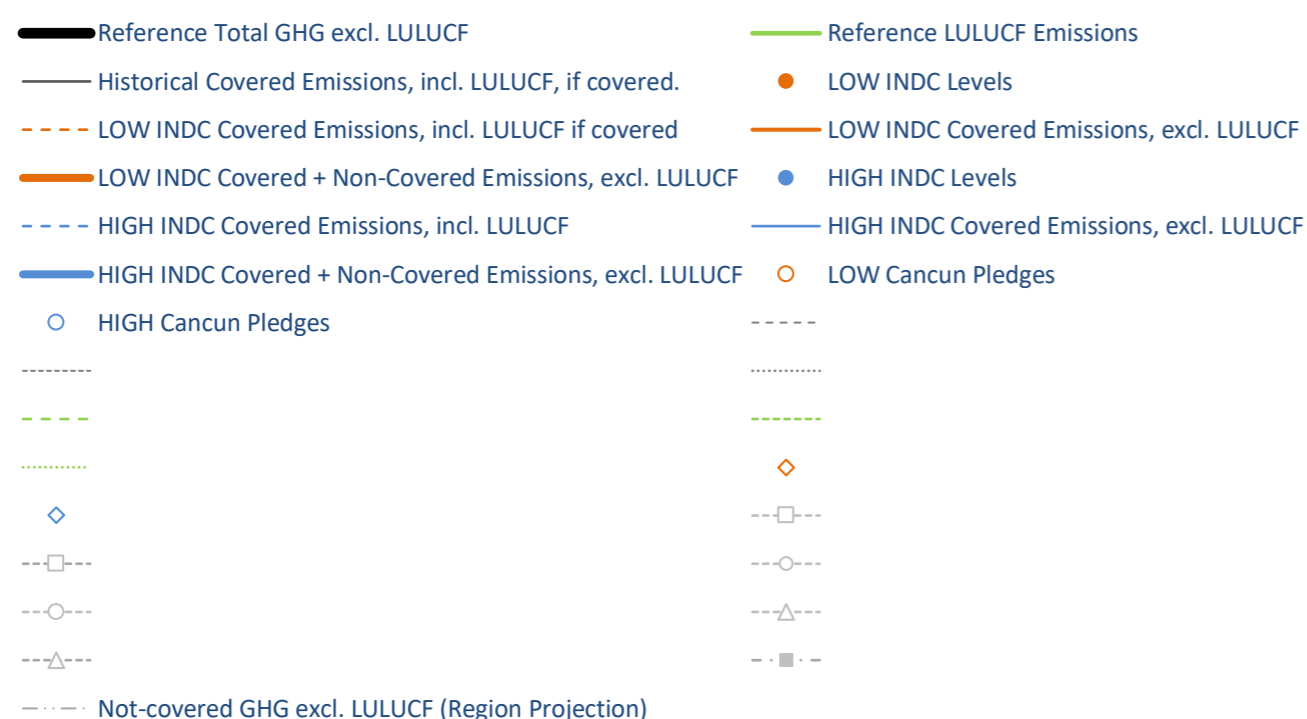
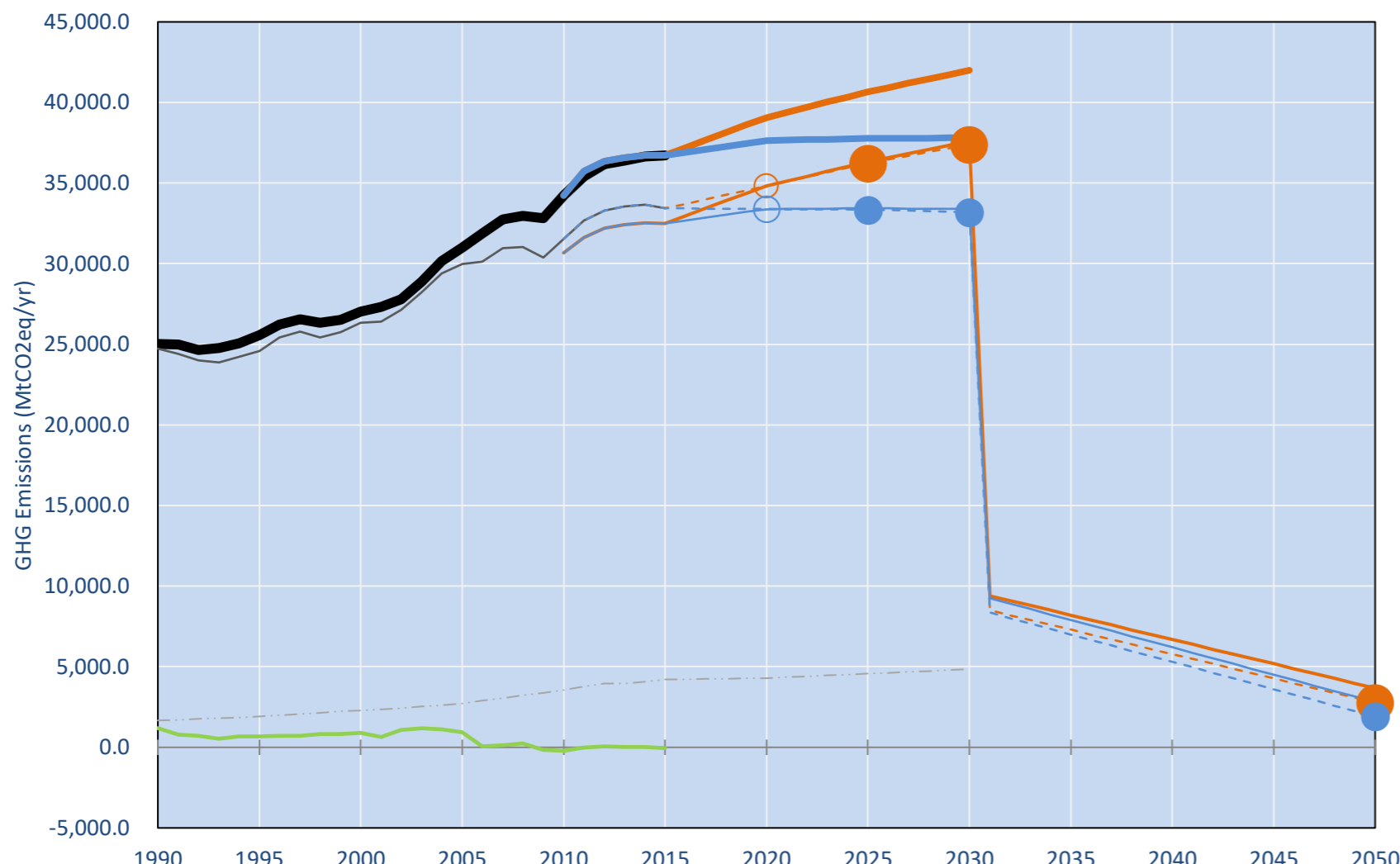
G20

Per-Capita Emissions in 2030 rel. 2015 (excl. LULUCF): **+0%**

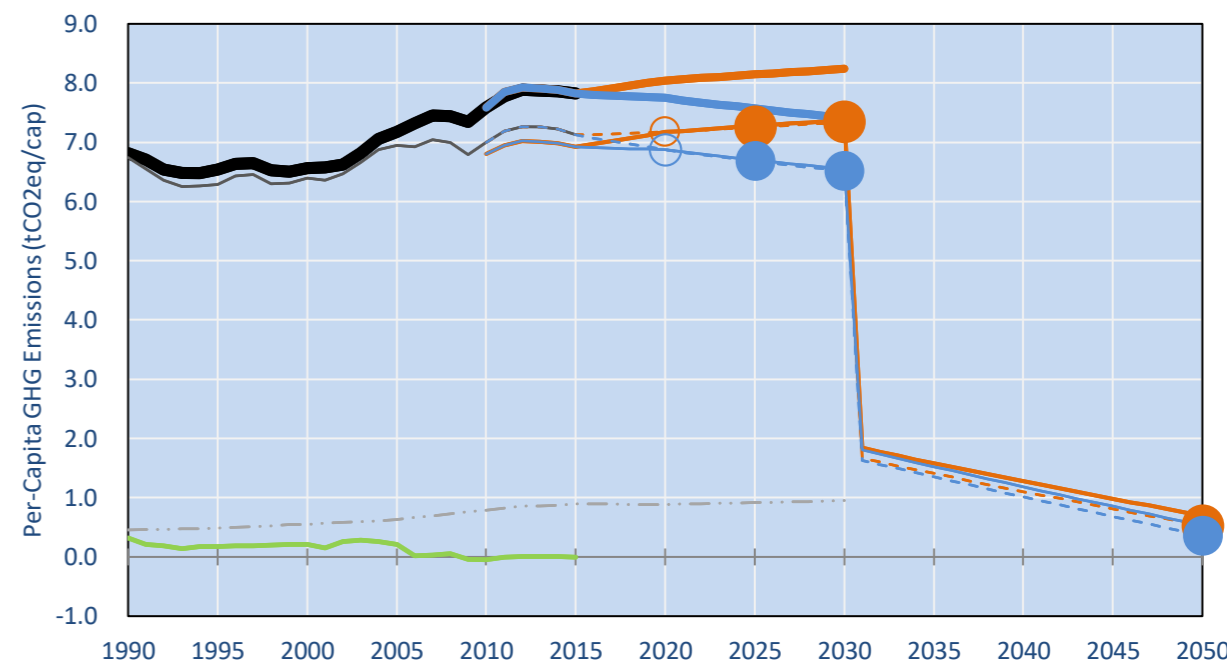
	2015	2025	2030
Share of World Emissions excl. LULUCF (Rank):	78.3%	75.0%	73.6%
Per-Capita Emissions (tCO <sub>2</sub> eq/cap)	7.8t	7.9t	7.8t

INDC Submitted: 16/02/6744

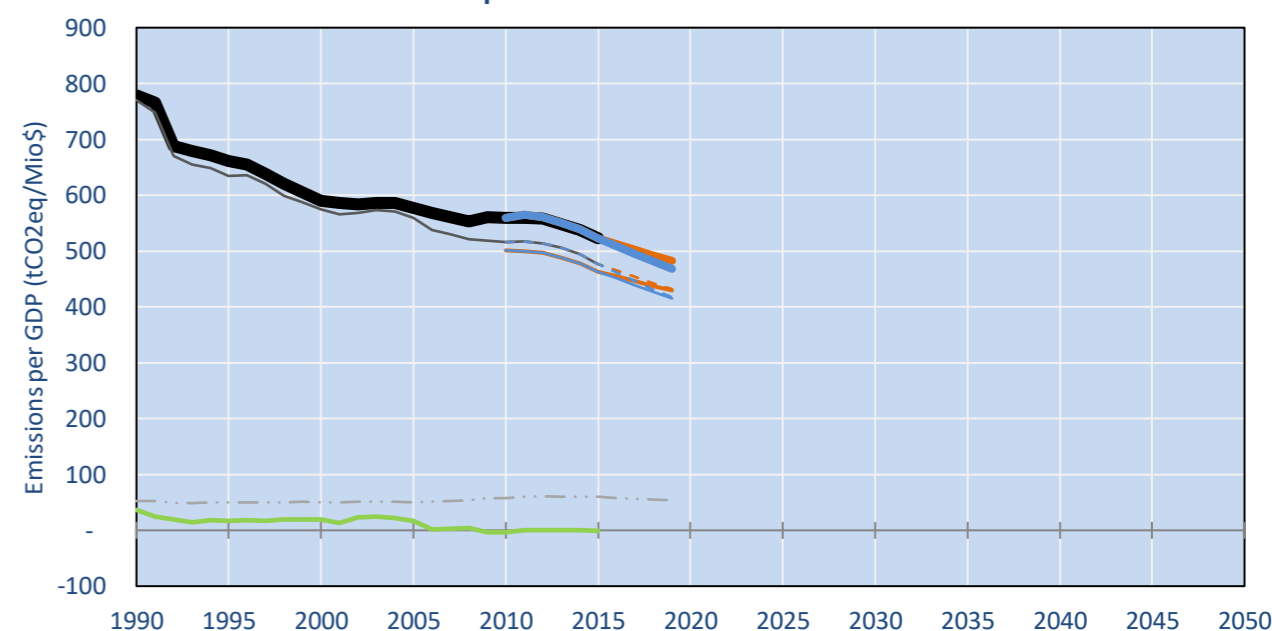
GHG Emissions



Per-Capita Emissions



GHG Emissions per GDP



2015 Total GHG Emissions excl. LULUCF

By Gas:	By Sector:
CO <sub>2</sub> 80.6%	Cat. 1 Energy 78.4%
CH <sub>4</sub> 12.2%	Cat. 2, 3, 6 & 7 10.5%
N <sub>2</sub> O 5.5%	Cat. 4. Agriculture 9.4%
F-gases 1.7%	F-gases 1.7%

GHG Emissions

	1990	2000	2005	2010	2015	2020		2025		2030	
						low	high	low	high	low	high
(MtCO <sub>2</sub> eq/yr in GWP SAR)											
Assumed LULUCF Accounting Credits (-)/Debits (+)						- 430	- 458	- 632	- 621	- 621	- 621
NDC/INDC covered LULUCF Emissions	1,392	1,590	1,706	884	925	1	1	95	95	192	192
NDC/INDC covered Emissions excl. LULUCF	23,344	24,750	28,279	30,675	32,509	34,829	33,388	36,320	33,439	37,594	33,396
Total GHG excl. LULUCF	25,016	27,028	30,985	34,232	36,717	39,073	37,633	40,654	37,772	42,000	37,803
Total GHG incl. LULUCF	26,188	27,921	31,909	34,016	36,678	37,541	36,100	39,057	36,176	40,330	36,132

Relative GHG Emissions

	1990	2000	2005	2010	2015	2020		2025		2030	
						low	high	low	high	low	high
Total excl. LULUCF											
Relative 1990	100%	108%	124%	137%	147%	156%	150%	163%	151%	168%	151%
Relative 2000	93%	100%	115%	127%	136%	145%	139%	150%	140%	155%	140%
Relative 2005	81%	87%	100%	110%	118%	126%	121%	131%	122%	136%	122%
Relative 2010	73%	79%	91%	100%	107%	114%	110%	119%	110%	123%	110%
Relative 2015	68%	74%	84%	93%	100%	106%	102%	111%	103%	114%	103%

Per-Capita Emissions

	1990	2000	2005	2010	2015	2020		2025		2030	
						low	high	low	high	low	high
Total excl. LULUCF											
Population (Mio)	3,669	4,117	4,315	4,511	4,694	4,856	4,856	4,989	4,989	5,096	5,096
Per-Capita Emissions (tCO <sub>2</sub> eq/cap)	6.8	6.6	7.2	7.6	7.8	8.0	7.8	8.1	7.6	8.2	7.4
Relative 1990	100%	96%	105%	111%	115%	118%	114%	120%	111%	121%	109%
Relative 2000	104%	100%	109%	116%	119%	123%	118%	124%	115%	126%	113%
Relative 2005	95%	91%	100%	106%	109%	112%	108%	113%	105%	115%	103%
Relative 2010	90%	87%	95%	100%	103%	106%	102%	107%	100%	109%	98%
Relative 2015	87%	84%	92%	97%	100%	103%	99%	104%	97%	105%	95%

Data Sources:

Cat1_CO2	Def: PRIMAPHIST17	Cat5A1_CO2	Def: UNFCCC CRF + Nat. Comms.
Cat2367_CO2	Def: PRIMAPHIST17	Cat5A2_CO2	Def: UNFCCC CRF + Nat. Comms.
Cat4_CO2	Def: PRIMAPHIST17	Cat5LtoNonFL_CO2	Def: UNFCCC CRF + Nat. Comms.
Cat5_CO2	Def: PRIMAPHIST17	Cat5GMCMWWM_C	Def: UNFCCC CRF
Cat1_CH4	Def: PRIMAPHIST17	Cat5A1ForestFires	Def: UNFCCC Cat5 + EDGAR(IPCC Database)
Cat2367_CH4	Def: PRIMAPHIST17	Cat5A1HWP_CO2	Def: UNFCCC CRF + Nat. Comms.
Cat4_CH4	Def: PRIMAPHIST17	Cat5bisA_CO2	Def: UNFCCC CRF + NATCOMM.
Cat5_CH4	Def: PRIMAPHIST17	Cat5bisB_CO2	Def: UNFCCC CRF + NATCOMM.
Cat1_N2O	Def: PRIMAPHIST17	Cat5bisC_CO2	Def: UNFCCC CRF + NATCOMM.
Cat2367_N2O	Def: PRIMAPHIST17	Cat5bisD_CO2	Def: UNFCCC CRF + NATCOMM.
Cat4_N2O	Def: PRIMAPHIST17	Cat5bisE_CO2	Def: UNFCCC CRF + NATCOMM.
Cat5_N2O	Def: PRIMAPHIST17	PRO_WM_Cat5_G	Def: UNFCCC Annex I Reports
Cat0_HFCs	Def: PRIMAPHIST17	Metric	GWP SAR
Cat0_PFCs	Def: PRIMAPHIST17		
Cat0_SF6	Def: PRIMAPHIST17		
Population	Def: UN 2015 Population Projections MEDIUM		
GDP	Def: IMF WEO 2015, PPP adjusted GDP, constant 2009 prices...		
IPCC WG3 Scenario	IMAGE   AMPERE2-550-FullTech-HST		
PRIMAPHIST16 description:	www.pik-potsdam.de/primap-live/primap-hist/		
Gratefully acknowledged in particular: PRIMAP, CAIT, CDIAC, EDGAR, IPCC, IEA, UNEP Gap Team, AMPERE Team and comments on earlier versions, in particular by Giacomo Grassi. Errors and misjudgements are our own. Malte Meinshausen & Ryan Alexander; The "Fiji COP23" Edition was enabled through support via the BMUB project UM14 41 4060			
This Factsheet is available at <a href="http://www.climatecollege.unimelb.edu.au/indc-factsheets">www.climatecollege.unimelb.edu.au/indc-factsheets</a> . Check out as well: <a href="http://www.climateactiontracker.org">www.climateactiontracker.org</a> , <a href="http://www.mitigation-contributions.org">www.mitigation-contributions.org</a> , <a href="http://cait.wri.org">cait.wri.org</a> , <a href="http://infographics.pbl.nl/indc/">infographics.pbl.nl/indc/</a> , <a href="http://live.primap.org">live.primap.org</a> , <a href="http://www.unep.org/climatechange/pledgepipeline">www.unep.org/climatechange/pledgepipeline</a> , and our twitter feed @ClimateCollege			
<a href="http://climatecollege.unimelb.edu.au">climatecollege.unimelb.edu.au</a>			

Meinshausen, Alexander et al., www.climatecollege.unimelb.edu.au/indc-factsheets, The University of Melbourne



Various 'fair' contributions for a global 'least-cost' 2°C path (total incl. LULUCF):

	2025 rel. 2010:	2030 rel. 2010:
LEADER	#N/A	LEADER
CDC	#N/A	CDC
ECPC50	#N/A	ECPC50
ECPC90	#N/A	ECPC90
GDR	#N/A	GDR
INDC HIGH	6%	INDC HIGH
INDC LOW	15%	INDC LOW

More info on [www.mitigation-contributions.org](http://www.mitigation-contributions.org)

"Fair" contributions for a global 'least-cost' 2°C track:

LEADER	Leader
CDC	Common-but-diff. per-cap. convergence
ECPC50	Eq. cum. Per-capita since 1950
ECPC90	Eq. cum. Per-capita since 1990
GDR	Greenhouse Development Rights
#N/A	No available data