REPORTING ON TARGETS: U.S. EXPERIENCE AND LESSONS LEARNED

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REPORTING ON TARGETS: US REPORTING

Note: The United States intends to submit its NC7, BR3, and BR4 for COP26

REPORTING ON TARGETS: US APPROACH

- The U.S. 2020 target is absolute, economy-wide
- Progress is assessed using national GHG inventory data
- The United States will apply a net-net accounting approach.
  - Net emissions in the 2020 will be compared against net emissions in 2005 (from the most recent inventory) to calculate the percentage emissions reductions achieved.

REPORTING ON TARGETS: NATIONAL GHG INVENTORY (2021)

Table ES-2: Recent Trends in U.S. Greenhouse Gas Emissions and Sinks (MMT CO_2 Eq.)

Gas/Source	1990	2005	2015	2016	2017	2018	2019
CO_2	**5,113.5**	**6,134.5**	**5,371.8**	**5,248.0**	**5,207.8**	**5,375.5**	**5,255.8**
Fossil Fuel Combustion	4,731.5	5,753.5	5,008.3	4,911.5	4,854.5	4,991.4	4,856.7
Transportation	*1,469.1*	*1,858.6*	*1,719.2*	*1,759.9*	*1,782.4*	*1,816.6*	*1,817.2*
Electric Power	*1,820.0*	*2,400.1*	*1,900.6*	*1,808.9*	*1,732.0*	*1,752.9*	*1,606.0*
Industrial	*853.8*	*852.9*	*797.3*	*792.5*	*790.1*	*813.6*	*822.5*
Residential	*338.6*	*358.9*	*317.3*	*292.8*	*293.4*	*338.1*	*336.8*
Commercial	*228.3*	*227.1*	*244.6*	*231.6*	*232.0*	*245.7*	*249.7*
U.S. Territories	*21.7*	*55.9*	*29.2*	*26.0*	*24.6*	*24.6*	*24.6*
Non-Energy Use of Fuels	112.8	129.1	108.5	99.8	113.5	129.7	128.8
Petroleum Systems	9.7	12.1	32.4	21.8	25.0	37.1	47.3
Iron and Steel Production & Metallurgical Coke Production	104.7	70.1	47.9	43.6	40.6	42.6	41.3
Cement Production	33.5	46.2	39.9	39.4	40.3	39.0	40.9
Natural Gas Systems	32.0	25.2	29.1	30.1	31.2	33.9	37.2
Petrochemical Production	21.6	27.4	28.1	28.3	28.9	29.3	30.8
Ammonia Production	13.0	9.2	10.6	10.2	11.1	12.2	12.3
Lime Production	11.7	14.6	13.3	12.6	12.9	13.1	12.1

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NF_3	**+**	**0.5**	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
Electronics Industry	+	0.5	0.6	0.6	0.6	0.6	0.6
Unspecified Mix of HFCs, PFCs, SF_6, and NF_3	**+**	**+**	**+**	**+**	**+**	**+**	**+**
Electronics Industry	+	+	+	+	+	+	+
Total Emissions (Sources)	**6,442.7**	**7,423.0**	**6,671.1**	**6,520.3**	**6,483.3**	**6,671.4**	**6,558.3**
LULUCF Emissions[c]	**7.9**	**16.8**	**27.8**	**13.2**	**26.0**	**23.4**	**23.5**
LULUCF CH_4 Emissions	5.0	9.3	16.6	7.7	15.3	13.8	13.8
LULUCF N_2O Emissions	3.0	7.5	11.3	5.5	10.6	9.7	9.7
LULUCF Carbon Stock Change[e]	**(908.7)**	**(804.8)**	**(791.7)**	**(856.0)**	**(792.0)**	**(824.9)**	**(812.7)**
LULUCF Sector Net Total[f]	**(900.8)**	**(788.1)**	**(763.8)**	**(842.8)**	**(766.1)**	**(801.4)**	**(789.2)**
Net Emissions (Sources and Sinks)	**5,541.9**	**6,635.0**	**5,907.3**	**5,677.5**	**5,717.2**	**5,870.0**	**5,769.1**

REPORTING ON TARGETS: DESCRIPTION OF TARGET (BR2)

Table 1 **Key Parameters of the U.S. 2020 Economy-wide Emission Reduction Targets**

Parameters	Targets
Base Year	2005
Target Year	2020
Emission Reduction Target	In the range of 17% below 2005 levels.
Gases Covered	CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, and NF_3.
Global Warming Potential	100-year values from the IPCC Fourth Assessment Report (IPCC 2007).
Sectors Covered	All IPCC sector sources and sinks, as measured by the full annual inventory (i.e., energy, transport, industrial processes, agriculture, LULUCF, and waste).
Land Use, Land-Use Change, and Forestry (LULUCF)	Emissions and removals from the LULUCF sector are accounted using a net-net approach and a 2005 base year, including a production approach to account for harvested wood products. The United States is considering approaches for identifying the impact of natural disturbances on emissions and removals.
Other	To be in conformity with U.S. law.

Notes:

- The United States does not currently intend to use international market-based mechanisms to meet our target.
- The United States is fully committed to reducing emissions in the range of 17 percent below 2005 levels in 2020. The set of actions the President outlined in the *Climate Action Plan* will put us on a path to achieve this ambitious goal. We have not ascribed a specific margin to the range on one side or the other. The range recognizes the important effect of external factors in determining emissions in a single year. The range is not a conditional commitment, and there are no underlying assumptions.
- The *Inventory of U.S. Greenhouse Gas Emissions and Sinks* coverage of sectors and use of global warming potential values is consistent with the formal United Nations Framework Convention on Climate Change inventory reporting guidelines for developed countries (UNFCCC 2013).
- CH_4 = methane; CO_2 = carbon dioxide; HFCs = hydrofluorocarbons; IPCC = Intergovernmental Panel on Climate Change; N_2O = nitrous oxide; NF_3 = nitrogen trifluoride; PFCs = perfluorocarbons; SF_6 = sulfur hexafluoride.

REPORTING ON TARGETS: HISTORICAL, PROJECTED EMISSIONS (BR2)

Table 3 **Historical and Projected* U.S. Greenhouse Gas Emissions under *Current Measures*, by Sector: 2000–2030 (*Current Measures* only, Mt CO_2e)**

Sectors (2)		Historical GHG Emissions (1)				Projected GHG Emissions			
		2000	2005	2010	2013	2015	2020	2025	2030
Energy		4,280	4,345	4,097	3,898	4,004	3,860	3,816	3,657
Transportation		1,862	1,929	1,758	1,739	1,701	1,680	1,622	1,578
Industrial processes		397	367	354	359	388	430	477	497
Agriculture		460	494	525	516	512	504	499	494
Forestry and land use		32	26	20	23	28	28	28	28
Waste		182	189	145	138	138	138	138	137
Total Gross Emissions		**7,213**	**7,350**	**6,899**	**6,673**	**6,772**	**6,641**	**6,580**	**6,392**
Forestry and land use (sinks) (3)	High sequestration	-641	-912	-872	-882	-970	-1,191	-1,201	-1,118
	Low sequestration					-928	-1,044	-908	-689
Total Net Emissions	**High sequestration**	**6,571**	**6,438**	**6,027**	**5,791**	**5,802**	**5,451**	**5,379**	**5,274**
	Low sequestration					**5,844**	**5,597**	**5,672**	**5,703**

Notes:

*Projections are for the current measures and do not reflect the impact of additional measures.

(1) Historical values are from U.S. EPA/OAP 2015.

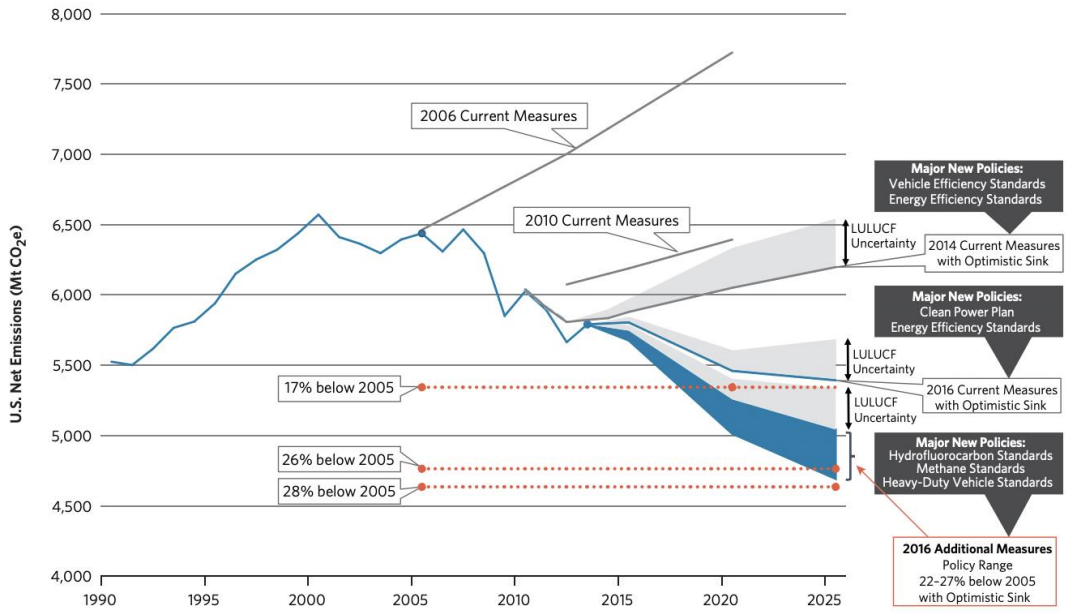
(2) Sectors correspond to inventory-reporting sectors, except that carbon dioxide, methane, and nitrous oxide emissions associated with mobile combustion have been moved from energy to transportation.

(3) Sequestration is only included in the net emissions total.

REPORTING ON TARGETS: PROJECTED PROGRESS TOWARDS TARGET (BR2)

Figure 6 **U.S. Emissions Projections—2016 *Current Measures* Compared with Potential Reductions from *Additional Measures* Consistent with the *Climate Action Plan***

Also shown are previous projections from the 2006, 2010, and 2014 U.S. Climate Action Reports, which demonstrate the dramatic ratcheting down of projected U.S. emissions over the past decade.



Notes:

- The 2016 *Policy Baseline* scenario assumes that no additional measures are implemented after 2015.
- The range for the 2016 *Current Measures* scenario (gray shaded wedges) reflects uncertainty in projected net LULUCF sequestration rates, much of which will be determined by factors that cannot be directly influenced by policies and measures.
- The *Additional Measures* scenario (blue shaded wedge) incorporates post-2015 implementation of additional measures. The range for the *Additional Measures* scenario reflects both the LULUCF sequestration range (gray shaded wedges), as well as uncertainty regarding projected emission reductions from measures that will be implemented consistent with the *Climate Action Plan* (solid shading). The solid portion labeled "policy range" illustrates the range of emission outcomes that can be directly influenced by implementation of additional measures, assuming higher land sequestration levels.

REPORTING ON TARGETS: LESSONS LEARNED FROM REPORTING, REVIEW

1) Good reporting starts with a clear description of the target, methodologies and approaches.

REPORTING ON TARGETS: LESSONS LEARNED FROM REPORTING, REVIEW

2) A lack of common tabular formats for BRs hampers an understanding of targets, and progress.

REPORTING ON TARGETS: LESSONS LEARNED FROM REPORTING, REVIEW

3) Having all information together in one report facilitates the understanding of progress.

REPORTING ON TARGETS: LESSONS LEARNED FROM REPORTING, REVIEW

4) Simple indicators, drawing on readily accessible data, are easiest to report

… but any indicator can be reported transparently.

REPORTING ON TARGETS: LESSONS LEARNED FROM REPORTING, REVIEW

5) Good reporting that is clear, transparent, easy to understand, and in a quickly-recognizable format benefits a Party.

Unclear or insufficiently-detailed information creates confusion and misunderstandings.

REPORTING ON TARGETS: LESSONS LEARNED FROM REPORTING, REVIEW

6) Reporting improves over time. The process of reporting, and reviewer suggestions, build capacity.

REPORTING ON TARGETS: U.S. EXPERIENCE

Thank you!

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