

**U.S. Climate Change Technology Program
Strategic Plan**

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1

Acronyms and Abbreviations

2	AFCI	Advanced Fuel Cycle Initiative
3	ANL	Argonne National Laboratory
4	AUV	Autonomous Underwater Vehicles
5		
6	BC	Black Carbon
7	BES	Office of Basic Energy Sciences, U.S. Department of Energy
8	BESAC	Basic Energy Sciences Advisory Committee
9	BP	British Petroleum
10	BTU	British Thermal Unit
11		
12	CCCSTI	Committee on Climate Change Science and Technology Integration
13	CCP	Carbon Capture Project
14	CCSP	U.S. Climate Change Science Program
15	CCTP	U.S. Climate Change Technology Program
16	CDIAC	Carbon Dioxide Information Analysis Centre
17	CEM	Continuous Emissions Monitor
18	CETC	Natural Resources Canada CANMET Energy Technology Center
19	CFC	Chlorofluorocarbon
20	CH ₄	Methane
21	CHP	Combined Heat and Power (system)
22	CMM	Coal Mine Methane
23	CO ₂	Carbon Dioxide
24	COL	Construction and Operating License
25	CSLF	Carbon Sequestration Leadership Forum
26	CSP	Competitive Solicitation Program
27		
28	DG	Distributed Generation
29	DOC	U.S. Department of Commerce
30	DoD	U.S. Department of Defense
31	DOE	U.S. Department of Energy
32	DOI	U.S. Department of the Interior
33	DOS	U.S. Department of State
34	DOT	U.S. Department of Transportation
35		
36	EIA	Energy Information Administration
37	EJ	Exajoule
38	EMF	Energy Modeling Forum, Stanford University
39	EOR	Enhanced Oil Recovery
40	EPA	U.S. Environmental Protection Agency
41	ESP	Early Site Permit
42	Euratom	European Atomic Energy Community

1	FACE	Free-Air CO ₂ Enrichment
2	FACTS	Flexible Automated Control Transmission Systems
3	FCT	Fuel Cell Turbine
4	FES	Fusion Energy Sciences, U.S. Department of Energy, Office of Science
5	FHA	Federal Highway Administration
6	FTC	Fuel Cell Turbine
7	FTIR	Fourier Transform Infrared Spectroscopy
8	FY	Fiscal Year
9		
10	Gen IV	Generation IV
11	GEO	Group on Earth Observations
12	GEO-SEQ	Geological Sequestration (project)
13	GEOSS	Global Earth Observation System of Systems
14	GHG	Greenhouse Gas
15	GIF	Generation IV International Forum (nuclear power)
16	Gt	Gigatonnes (10 ⁹ tonnes or metric tons)
17	GtC	Gigatonnes (10 ⁹ tonnes or metric tons) of Carbon
18	GtC-eq.	Gigatonnes (10 ⁹ tonnes or metric tons) of Carbon Equivalent (emissions)
19	GWP	Global Warming Potential
20		
21	H ₂	Molecular Hydrogen
22	H ₂ S	Hydrogen Sulfide
23	HCFC	Hydrochlorofluorocarbon (refrigerant)
24	HFC	Hydrofluorocarbon
25	HHS	U.S. Department of Health and Human Services
26	HNLC	High Nutrient, Low Chlorophyll
27	HTS	High-Temperature Superconductivity (e.g. wire)
28	HVDC	High Voltage Direct Current
29		
30	IAEA	International Atomic Energy Agency
31	ICF	Inertial Confinement Fusion
32	IEA	International Energy Agency
33	IEOS	Integrated Earth Observation System
34	IFE	Inertial Fusion Energy
35	IGCC	Integrated Gasification Combined Cycle
36	IMSS	Image Multi-Spectral Sensor
37	IPCC	Intergovernmental Panel on Climate Change
38	IPHE	International Partnership for the Hydrogen Economy
39	ITER	International Thermonuclear Experimental Reactor (also Latin for “the way”)
40	IWG	Interagency Working Group
41		
42	kg	Kilogram
43	kW	Kilowatt
44	kWe	Kilowatt (electric)
45	kWh	Kilowatt-hour

1	LCCP	Life-Cycle Climate Performance
2	LFG	Landfill Gas
3	LH ₂	Liquefied Hydrogen
4	LIBS	Laser Induced Breakdown Spectroscopy
5	LIDAR	Light Detection and Ranging
6	LNLC	Low Nutrient, Low Chlorophyll
7		
8	MFE	Magnetic Fusion Energy
9	MiniCAM	Mini Climate Assessment Model (Pacific Northwest National Laboratory)
10	MM	Measuring and Monitoring
11	MOF	Microporous Metal Organic Frameworks
12	mpg	miles per gallon
13	mph	miles per hour
14	MtC	Megatonnes Carbon
15	MWe	Megawatt electric
16		
17	N ₂ O	Nitrous Oxide
18	NACP	North American Carbon Program
19	NAE	National Academy of Engineering
20	NAS	National Academy of Sciences
21	NASA	National Aeronautics and Space Administration
22	NEPO	Nuclear Energy Plant Optimization (Program)
23	NERAC	Nuclear Energy Research Advisory Committee
24	NETL	National Energy Technology Laboratory
25	NH ₃	Ammonia
26	NIF	National Ignition Facility
27	NNSA	National Nuclear Security Administration, U.S Department of Energy
28	NO _x	Nitrogen Oxides
29	NOAA	National Oceanic and Atmospheric Administration
30	NRC	National Research Council or Nuclear Regulatory Commission
31	NRCan	Natural Resources Canada
32	NREL	National Renewable Energy Laboratory
33	NSCR	Non-Selective Catalytic Reduction
34	NSF	National Science Foundation
35	NSTX	National Spherical Torus Experiment
36	NVFEL	National Vehicle and Fuels Emission Laboratory
37		
38	OC	Organic Carbon
39	ODS	Ozone-Depleting Substance
40	OMB	Office of Management and Budget
41	ORNL	Oak Ridge National Laboratory
42		
43	PEM	Polymer Electrolyte Membrane
44	PFC	Perfluorocarbons
45	PM	Particulate Matter
46	PNNL	Pacific Northwest National Laboratory

1	PPPL	Princeton Plasma Physics Laboratory
2	PV	Present Value
3		
4	Quad	Quadrillion BTUs
5		
6	R&D	Research and Development
7	RD&D	Research, Development, and Demonstration
8	RDD&D	Research, Development, Demonstration, & Deployment
9	RFI	Request for Information
10		
11	SCR	Selective Catalytic Reduction
12	SF ₆	Sulfur Hexafluoride
13	SOFeX	Southern Ocean Iron Fertilization Experiment
14	SOIREE	Southern Ocean Iron Enrichment Experiment
15	SO _x	Sulfur Oxides
16	SRES	Special Report on Emissions Scenarios
17		
18	T&D	Transmission and Distribution
19	TgC	Teragrams of Carbon
20	Tg CO ₂	Teragrams Carbon Dioxide
21	Tg CO ₂ -eq.	Teragrams Carbon Dioxide Equivalent (emissions)
22		
23	UN	United Nations
24	UNDP	United Nations Development Program
25	UNEP	United Nations Environmental Program
26	UNFCCC	United Nations Framework Convention on Climate Change
27	USAID	U.S. Agency for International Development
28	USDA	U.S. Department of Agriculture
29		
30	VAM	Ventilation Air Methane
31	VOC	Volatile Organic Compounds
32		
33	W/m ²	Watts per Square Meter
34	WCRP	World Climate Research Program
35	WG	Working Group
36	WMO	World Meteorological Organization
37	WOCE	World Ocean Circulation Experiment
38	WRE	T. Wigley, R. Richels, and J. Edmonds (researchers who developed emissions
39		trajectories that were projected to lead toward stabilization of CO ₂ emissions
40		over the next several hundred years at minimum economic cost)