

Abbreviations

ΔT	temperature change
$^{\circ}C$	degree Celsius
$^{\circ}N$	degrees north
AAU	assigned amount unit
AAU	Addis Abeba University
ACCC	Atmosphere and Climate Competence Center
ACE	Action for Climate Empowerment
ACTRIS	Aerosols, Clouds and Trace Gases Research Infrastructure
ADAPT	Adaptation and Resilience for Sustainable Growth
AFIR	Alternative Fuels Infrastructure
AFRY	an engineering, design, and advisory services company
AGE	applied general equilibrium
AGS	Accelerated Growth for small and medium-sized enterprises in Zambia Programme
ALIISA	a road transport model to calculate the impact of policies and measures on the longer-term trend in greenhouse gas emissions
AMAP	Arctic Monitoring and Assessment Programme
AR	afforestation and reforestation
AR6	the IPCC Sixth Assessment Report
ARA	Housing Finance and Development Centre of Finland
ARD	afforestation (A), reforestation (R) and deforestation (D)
ARKTIKO	The Arctic Academy Programme
ARU	Ardhi University
AWS	automatic weather station
BC	Black Carbon
BCE	before common era
BEAC	Barents Euro-Arctic Council
BECCS	bioenergy with carbon capture and storage
Biodiversa	European Biodiversity Partnership
CAEP	ICAO Committee on Aviation Environmental Protection
Canemure	Towards Carbon Neutral Municipalities and Regions, an EU Life project
CAP	Common Agricultural Policy
CBHE	Capacity Building in Higher Education
CBSS	Council of the Baltic Sea States
CCS	Carbon Capture and Storage
CCSU	Carbon capture, utilisation and storage
CDM	Clean Development Mechanism

CE	common era
CER	certified emission reduction unit
CEWAFO	Center for Water Resources Warning and Forecast
CH ₄	methane
CHP	combined heat and power
CIECAS	Centro de Investigaciones y Estudios Superiores en Antropología Social
CIES	Centro de Investigacion de Energia Solar
CIF	Carbon Tracker Europe
CII	carbon intensity indicator
CLC	Climate Leadership Coalition
CLIDEV	Strengthening Climate Change Education for Sustainable Development in Myanmar and Vietnam
CLIHE	Climate Change and Health research programme
CLIMATE	Climate Change and Humans programme
CLRTAP	Convention on Long-range Transboundary Air Pollution
cm	centimetre
CMA3	the 3rd session of the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement
CMIP5	Coupled Model Intercomparison Project Phase 5
CMIP6	Coupled Model Intercomparison Project Phase 6
CMP	Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol
CNG	compressed natural gas
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ eq.	carbon dioxide equivalent
CORINAIR	a programme to establish an inventory of emissions of air pollutants in Europe
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
CP	commitment period
CREWS	Climate Risk and Early Warning Systems
CRF	Common Reporting Format
CTF	Common Tabular Formats
CVD	Clean Vehicles Directive
D	deforestation
DCS	Data Collection System
DEFROST	Depicting ecosystem-climate feedbacks from permafrost, snow and ice network
DES	Data Exchange Standards
DEVELOP	Academy Programme for Development Research

DG MARE	Directorate-General for Maritime Affairs and Fisheries
DHM	Department of Meteorology and Hydrology
DoURP	Department of Urban and Rural Planning of Zanzibar
Dremfia	a dynamic regional sector model of Finnish agriculture
DRR	Disaster Risk Reduction
e.g.	exempli gratia
EARLI	energy-efficient lighting and renewable energy for sustainable development
EC	European Commission
ECA&D	European Climate Assessment & Dataset
EC-Earth	European Community Earth system model
ECEC	Early childhood education and care
ECHAM-HAMMOZ	a 3-dimensional chemistry climate model jointly developed by Max Planck Institute for Meteorology, Hamburg, Jülich Research Center, Swiss Federal Institute of Technology Zurich, Center for Climate Systems Modeling, University of Oxford, Finnish Meteorological Institute
ECOSUR	Colegio de la Frontera Sur
ECRU	Environmental Change Research Unit
EDM	Electricidade de Moçambique
EEA	European Economic Area
EEA	European Environment Agency
EED	Energy Efficiency Directive
EEDI	Energy Efficiency Design Index
EEP	Energy and Environment Partnership
EEX	European Energy Exchange
EEXI	Energy Efficiency Existing Ship Index
EFDB	The Emission Factor Database
EIA	environmental impact assessment
EIG EUMETNET	Network of European Meteorological Services
EKOREM	a calculation model for energy use of building stock developed by the unit of Construction Management and Economics at Tampere University of Technology and Technical Research Centre of Finland
ELISA	the newest transport scenario model which can produce scenarios of the development of vehicle fleet and its energy consumption and greenhouse gas emissions
eLTER	Long-Term Ecosystem Research
ELY Centre	regional Centre for Economic Development, Transport and the Environment
EMBRC	European Marine Biological Resource Centre

EMEP	European Monitoring and Evaluation Programme
EMODnet	European Marine Observation and Data Network
ENO	Environment Online
ENPCT	Empresa Nacional de Parques e Ciência e Tecnologia and Empresa Publica
EO	Earth Observation
EPA	Environmental Protection Agency
EPBD	Energy Performance of Buildings Directive
EPC	Energy Performance Certificate
E-PRTR	European Pollutant Release and Transfer Register
ERANET	European Research Area Networks
ERASMUS	European Region Action Scheme for the Mobility of University Students
ERDF	European Regional Development Fund
ERU	emission reduction unit
ESD	Effort Sharing Decision
ESF	European Social Fund
ESFRI	EU's European Strategy Forum on Research Infrastructures
esp.	especially
et al.	et alia, and others
ETBE	ethyl tertiary-butyl ether
etc.	et cetera, and other things
ETLA	The Research Institute of the Finnish Economy
ETS	Emissions Trading System
ETSAP TIAM	a bottom-up, technology-rich model that covers 28 regions and depicts a technologically detailed supply side of the energy system, from primary energy supply over conversion to final energy demand
EU	European Union
EU ETS	EU Emissions Trading System
EU-27	European Union of 27 member states
EUMETSAT	The European Organisation for the Exploitation of Meteorological Satellites
EUR	euro
EURO-ARGO	European Research Infrastructure Consortium for Observing the Ocean, which is the European contribution to the international Argo programme for ocean monitoring
EUROCONTROL	European Organisation for the Safety of Air Navigation
EURO-CORDEX	Coordinated Downscaling Experiment – European Domain

FACCE JPI	Agriculture, Food Security and Climate Change, Joint Programming Initiative
FAN	Department of Food and Nutrition Science in Finland
FAO	Food and Agriculture Organization
FAQ	frequently asked questions
FFFSR	Friends of Fossil Fuel Subsidy Reform
F gases	fluorinated greenhouse gases (HFCs, PFCs, SF ₆ and NF ₃)
FINAGE	a dynamic, applied general equilibrium model of the Finnish economy
Finavia	Finnish Civil Aviation Administration
FinBIF	Finnish Biodiversity Information Facility
FinELib	consortium of Finnish universities, research institutions and public libraries which promotes availability of e-resources and open publishing
FINMARI	The Finnish Marine Research Infrastructure
Finnfund	The national Development Finance Institution of Finland
FINSCAPES	Finnish Scenarios for Climate Change Research – Addressing Policies, Regions and Integrated Systems
FIRST	Finnish-Russian Student and Teacher Exchange Programme
FishEDU	Capacity Building in Fisheries and Aquaculture Education in the Kyrgyz Republic
FISS	Finnish Industrial Symbiosis System
FISU	Finnish Sustainable Communities
FM	forest management
FMI	Finnish Meteorological Institute
FMRL	Forest Management Reference Level
FOOD	Towards a Sustainable, Healthy and Climate-Neutral Food System programme
FSC	Forest Stewardship Council
FSRU	Floating Storage Regasification Unit
FTIA	Finnish Transport Infrastructure Agency
FuelEU Maritime	a legislative proposal part of the EU's proposed Fit for 55 package directed to decarbonise international shipping
FUNAE	Fundo de Energia
g	gramme
GAW	Global Atmosphere Watch
GCF	Green Climate Fund
GCOS	Global Climate Observing System
GCP	Global Carbon Project
GCV	gross calorific value

GDP	gross domestic product
GEF	Global Environment Facility
Geo-ICT	Geospatial and ICT Capacities in Tanzanian Higher Education Institutions
GHG	greenhouse gas
GIPL	Gas Interconnection Poland–Lithuania
GJ	gigajoule
GNI	gross national income
GOSCOMGEOLOGY	State Committee of the Republic of Uzbekistan on Geology and Mineral Resources
GPCC	The Global Precipitation Climatology Centre
GRUAN	GCOS Reference Upper-Air Network
GSN	Surface Network
GTK	The Geological Survey of Finland
GUAN	GCOS Upper-Air Network
GW	gigawatt
GWh	gigawatt hour
GWP	global warming potential
ha	hectare
HARMONIE-CLIM	regional climate models for climate studies in Nordic countries, developed by the Finnish Meteorological Institute
HC	hydrocarbons
HCT	High Capacity Transport
HDD	heating degree days
HEI-ICI	Higher Education Institutions Institutional Cooperation Instrument
HELCOM	Baltic Marine Environment Protection Commission or the “Helsinki Commission”
HELCOM COMBINE	the joint Baltic Sea environmental monitoring programme
Helmi	a programme that aims to strengthen biodiversity led by the Ministry of the Environment
HFC	hydrofluorocarbon
HIISI	“Carbon neutral Finland 2035 – measures and impacts of the climate and energy policies” project
Hinku	Towards Carbon Neutral Municipalities
HLM-LTAG	High-Level Meeting on the Feasibility of a Long-Term Aspirational Goal for International Aviation CO ₂ Emissions Reductions

HSY	Helsinki Region Environmental Services Authority
HWP	harvested wood products
i.e.	id est, other words
IAM	integrated assessment model
IASC	International Arctic Science Committee
ICAO	International Civil Aviation Organisation
ICES	International Council for the Exploration of the Sea
ICI	Institutional Cooperation Instrument
ICOS	Integrated Carbon Observation System
ICP M&M	International Cooperative Programme on the Modelling & Mapping
ICT	information and communication technology
ICT	Cambodian Institute for Technology
ICZM	Integrated Coastal Zone Management
IE	included elsewhere
IEA ETSAP TIMES	The TIMES model generator developed as part of the IEA-ETSAP (Energy Technology Systems Analysis Program of the International Energy Agency), an international community which uses long term energy scenarios to conduct energy and environmental analyses
IFC	International Finance Corporation
IFI	International Financial Institution
IGO	intergovernmental organizations
IIAM	Agrarian Research Institute of Mozambique
ILTER	International Long-Term Socio-Ecological network
IMO	International Maritime Organization
IMP	Illustrative Mitigation Pathway
IMPAKTI	a calculation tool for emission mitigation impact of measures promoting the use of renewable energy
INAR	Institute for Atmospheric and Earth System Research
incl.	including
INSPIRE	Infrastructure for Spatial Information in the European Community
IPCC	Intergovernmental Panel on Climate Change
IRIS	Integration of Renewable Intermittent Sources in the Power Systems
IRSAT DTA	Institut de Recherche en Sciences Appliquées et Technologies
IT	information technology
ITL	Independent Transaction Log
JI	Joint Implementation

JPI	Joint Programming Initiative
JPI Climate	Connecting Climate Knowledge for Europe, Joint Programming Initiative
JSBACH	Jena Scheme for Biosphere-Atmosphere Coupling in Hamburg – the land component of the atmospheric component ECHAM and part of the Max Planck Institute Earth System Model
KantarTNS	Global market research and market information company
KAUTE	A foundation which supports research in economics and technical sciences and the dissemination of research results
KEINO	Competence center for Sustainable and Innovative public procurement
kg	kilogramme
km	kilometre
km ²	square kilometre
KOKOSOPU	Implementation of the National Policy on Climate Change Adaption project
KP LULUCF	Land Use, Land Use Change and Forestry activities under the Kyoto Protocol
kt	kilotonne
KUFF	Kasetsart University
KUITTI	Assessment of the Cost of Inaction Regarding Climate Change project
KUJA	“The continuity management of municipalities” project (2017 to 2019)
KUJA2	“The continuity management of local and regional authorities” project (2014 to 2016)
LC	The Laboratory of Chronology
LDC	least developed countries
LDCF	Least Developed Countries Fund
LDNDC	ecosystem model developed by the Finnish Meteorological Institute
LEAP-Agri	Long-Term EU-Africa Research and Innovation Partnership on Food and Nutrition Security and Sustainable Agriculture
LEAP-RE	Long-Term Joint European Union - African Union Research and Innovation Partnership on Renewable Energy
LHV	Lower Heating Value
LIISA	a road traffic sub-model to the LIPASTO calculation system
LIKES	Research Centre for Physical Activity and Health

LIPASTO	a calculation system for transport exhaust emissions and energy use in Finland
LNG	liquefied natural gas
LPG	liquefied petroleum gas
LPJ-Guess	Lund–Potsdam–Jena General Ecosystem Simulator – a process-based dynamic vegetation-terrestrial ecosystem model designed for regional or global studies
LTAG	long-term global aspirational goal
LTER Finland	Finnish Long-Term Socio-Ecological network
LTRS	long-term renovation strategy
LTS	long-term strategy
Luke	Natural Resource Institute Finland
LULUCF	Land Use, Land Use Change and Forestry
LUMA	Finland’s Science Education Centre
Luomu 2.0	National organic farming programme
Luomus	Finnish Museum of Natural History
m	metre
m/s	metre per second
m ²	square metre
m ³	cubic metre
MaaS	Mobility-as-a-Service
MAL	land use, housing and transport
MAPPA	The central Material Bank and search service for environmental and sustainability education and outdoor learning in Finland
MARPOL	International Convention for the Prevention of Pollution from Ships
MATO	Research Programme for Environmental impacts of agriculture
MCCF	Multilateral Carbon Credit Fund
MDB	Multilateral development banks
MDG	Main Department of Geology under the Government of the Republic of Tajikistan
MEA	Multilateral Environmental Agreements
MEAE	Ministry of Economic Affairs and Employment
MEERI	a water-borne traffic sub-model to the LIPASTO calculation system
MELA	a forest decision support system tool generated for Finnish conditions
MELA2012/2016	the 2012/2016 version of a forest decision support system tool generated for Finnish conditions
MEPC	Marine Environment Protection Committee

METSO	Forest Biodiversity Programme for Southern Finland
MEUR	million euros
MFA	Ministry for Foreign Affairs
MJ	megajoule
mm	millimeter
MODEST	Modernization of Doctoral Education in Science and Improvement Teaching Methodologies
MONASH	a large-scale economic model originally developed at Victoria University, Australia
Motiva	state owned sustainable development company in Finland
MRV	monitoring, reporting and verification
MSDI	Marine Spatial Data Infrastructure
MSP	Maritime Spatial Planning
MSR	Market Stability Reserve
Mt	million tonnes
MTBE	methyl tertiary-butyl ether
MW	megawatt
MWh	megawatt hour
N ₂ O	nitrous oxide
NA	not available
na	not assessed
NAP	National Adaption Plan
NAS	national climate adaption strategy
NC7	Finland's Seventh National Communication under the United Nations Framework Convention on Climate Change
NC8	Finland's Eighth National Communication under the United Nations Framework Convention on Climate Change
NCV	net calorific value
NDC	Nationally Determined Contribution
NECP	National Energy and Climate Plan
NECPR	National Energy and Climate Plan Progress Report
NEDC	New European Driving Cycle
NEFCO	Nordic Environmental Financing Corporation
NEMO	Nucleus for European Modelling of the Ocean, ocean component of the earth system model
NF ₃	nitrogen trifluoride
NFI	National Forest Inventory
NFI12	National Forest Inventory 2014 to 2018
NFP	National Forest Programme Facility

NFS	National Forest Strategy
NGO	non-governmental organization
NKL	Nordic Working Group for Climate and Air
NMHS	National Meteorological and Hydrological Services
N Model	Nitrogen Model, a simulation model of cropping systems to track nitrogen as it cycles between stocks
NMVOC	Non-Methane Volatile Organic Compounds
NOAK	Nordic Working Group for Global Climate Negotiations
NorESM	Norwegian Earth System Model
NO _x	nitrogen oxides
NSIDC	National Snow and Ice Data Center
NUoL	National University of Laos
O3SAF	Satellite Application Facility on Ozone & Atmospheric Chemistry Monitoring
OA	open access
ODA	official development assistance
ODS	ozone-depleting substances
OECD	Organisation for Economic Cooperation and Development
OECD DAC	OECD Development Assistance Committee
OECD DAC CRS	OECD Development Assistance Committee's Creditor Reporting System
OKKA	Foundation for Teaching, Education and Personal Development
Open-IFS	Open Integrated Forecasting System
OSCE	Organization for Security and Co-operation in Europe
P	paraffinic diesel
PAHs	polycyclic aromatic hydrocarbons
PAM	post-authorisation measures
PaMs	Policies and Measures
PARFORM	Partnership for Forestry Higher Education Cooperation in Mekong Region
PBL-BioAfrica	Problem-based-learning bioeconomy entrepreneurship and capacity building programme in Africa
PCF	Prototype Carbon Fund
PEcAn	Predictive Ecophysiological Carbon Flux Analyzer - modelling and data assimilation platform
PECOLO	Native Crops for Innovative and Sustainable Food Futures in Peru and Colombia
PEEX-AC	Pan-Eurasian EXperiment – Academic Challenge
PEEX-FRESReN	Pan-Eurasian EXperiment – Finnish-Russian Earth System Research Network

PEFC	Programme for the Endorsement of Forest Certification
PFC	perfluorocarbons
PITKO	Long-Term Development of Total Emissions project
PJ	petajoule
PM	particles
PMI	Partnership for Market Implementation
PMR	Partnership for Market Readiness
POLIREM	calculation model for energy use of building stock
POW	Protect Our Winters
POWERGRAIN	Superior Grain Safety with Designed Mycotoxin Binding Properties research programme
PSLifestyle project	an EU Green Deal project to create a tool European citizens can use to build Positive and Sustainable Lifestyles
PSO	Public Service Obligations
PTT	Pellervo Economic Research Institute
PV	photovoltaic system
QA	quality assurance
QC	quality control
R	Biofuel that meets the sustainability criteria decreed in the act on biofuels and bioliquids (393/2013).
R&D	research and development
RAILI	a railway traffic emission sub-model of LIPASTO calculation system
RC	Regional Council
RCE	Regional Centre of Expertise on Education for Sustainable Development
RCP	Representative Concentration Pathway
RDI	research, development and innovation
RECOFTC	Joint IUFRO-IFSA task force on Forest Education and the Center for People and Forests
RED II	EU's Renewable Energy Directive
REF	recovered fuels
ReFuel EU	Aviation a legislative proposal part of the EU'S proposed Fit for 55 package for sustainable air transport
RMU	Removal Units under the Kyoto Protocol, given from net removals from land use, land-use change and forestry activities
ROADS	Roadmap for Arctic Observing and Data Systems
RRF	Recovery and Resilience Facility
RRP	Recovery and Resilience Plan

RUFORUM	Regional Universities Forum for Capacity Building in Agriculture
SAEPF	State Agency of Environmental Protection and Forestry of the Kyrgyz Republic
SAF	sustainable aviation fuel
SAON	Sustaining Arctic Observing Networks
SCIESU	State Committee of Industry, Energy and Subsoil Use of the Kyrgyz Republic
SDGs	Sustainable Development Goals
SEF	standard electronic format
SELECT	Environmental Pathways for Sustainable Energy Services master's degree programme
SF ₆	sulphur hexafluoride
SF-GTM	a forest sector model
SGT	Sustainable Global Technologies
SIDS	Small Island Developing States
SIHYMECC	The Sub-Institute of HydroMeteorology and Climate Change
Sitra	Finnish Innovation Fund
SKU	Savannakhet University
SMA	Sudan Meteorological Authority
SMARTLAND	Environmental sensing of ecosystem services for developing climate smart landscape framework to improve food security in East Africa
SmartMet	Meteorological data visualization and automated forecast production system
SMEAR	Stations Measuring Ecosystem-Atmosphere Relationship
SMEs	small and medium-sized enterprises
SMHI	Swedish Meteorological and Hydrological Institute
SO ₂	sulphur oxide
SOFF	Systematic Observations Financing Facility
Sofi	Science Advice Initiative of Finland
SOOP	Ship-of-Opportunity monitoring system
SOTKA	a project part of the Helmi habitats programme to improve the status of waterfowl populations
SPA	Shared Climate Policy Assumption
SRC	Strategic Research Council
SSMD	South Sudan Meteorological Department
SSP	Shared Socioeconomic Pathway
STI	science, technology and innovation
SU	Souphanouvong University

SUA	Sokoine Agricultural University
SuMNatuRe	Sustainable Management of Natural Resources in Mozambique
SUOMI	“Climate change adaptation: regional aspects and policy instruments” project
SUZA	State University of Sansibar
SWDS	solid waste disposal site
SYKE	Finnish Environment Institute
T	Biofuel that is produced of waste or residues, or inedible cellulose material or lignocellulose.
t	tonne
TAAE	tert-Amyl ethyl ether
TAFORI	Tanzanian Forest Research Institute
TAITAGIS	Geoinformatics Teaching, Research and Daily Application in Taita Taveta County, Kenya
TAME	tert-Amyl methyl ether
TCCF	Teachers’ Climate Change Forum
TED-Ed	TED’s youth and education initiative
Tekes	Finnish Funding Agency for Technology and Innovation
TEM	Ministry of Economic Affairs and Employment of Finland
TERI	Energy and Resources Institute
TFS	Tanzania Forest Services
TGF	Testing Ground Facility
THL	Finnish Institute for Health and Welfare
TIMES-VTT	an energy system model, which is based on the IEA-ETSAP TIMES energy system modeling framework and the global ETSAP-TIAM model
TJ	terajoule
TPES	total primary energy supply
Traffic12	National Transport System Plan
Traficom	Finnish Transport and Communications Agency
TTU	Taita Taveta University
TWh	terawatt hour
TYKO	a calculation model for non-road mobile machinery
UAS	university of applied science
UCLALES-SALSA	Large-Eddy Simulation Code and the Sectional Aerosol module for Large-Scale Applications – large eddy simulation model for aerosol-climate interactions
UDSM	University of Dar es Salaam
UEF	University of Eastern Finland
UEM	Eduardo Mondlane University

UEM-FAEF	Faculty of Agronomy and Forest Engineering of Eduardo Mondlane University
UHMC	Ukrainian Hydrometeorological Center
UHMC-FMI	Meteorology Project Meteorology cooperation in Ukraine
UK	United Kingdom of Great Britain and Northern Ireland
UN	United Nations
UN DESA	United Nations Department of Economic and Social Affairs
UNCTAD	United Nations Conference on Trade and Development
UNECE	United Nations Economic Commission for Europe
UNECE ICP	UNECE International Cooperative Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UniPID	Finnish University Partnership for International Development
URGENT	“Urban and regional planning with the young generation – collective and intergenerational learning encouraging sustainability transformations” project
USD	United States dollar
U-value	the thermal transmittance of a material
UVic	University of Victoria
VATTAGE	a dynamic, applied general equilibrium model of the Finnish economy
VITRI	Viikki Tropical Resources Institute
VNTEAS	Government’s Joint Analysis, Assessment and Research Activities
VR	Finnish State Railways
VTT	Technical Research Centre of Finland
WAM	With Additional Measures
WASH	Water, Sanitation and Hygiene
WATVUL	Water and Vulnerability in Fragile Societies
WCRP	World Climate Research Programme
WDCGG	World Data Centre for Greenhouse Gases
WEM	With Existing Measures
WGE	Working Group on Environment
WLTP	Worldwide Harmonized Light Vehicle Test Procedure
WM	With Measures
Wm ⁻²	watt per square metre
WMO	World Meteorological Organization
WOM	Without Measures

WTO	World Trade Organization
WWF	Worldwide Fund for Nature
Yasso07	A model of the cycling of organic carbon in soil
YKR	Community Structure Monitoring
YLVA	Compliance Monitoring Data System, a tool for processing and monitoring environmental permits in Finland