



JRC publications related to climate change

Support to climate policy

Climate and air quality impacts of combined climate change and air pollution policy scenarios

JRC Scientific and Technical Report (2010):

http://ccu.jrc.ec.europa.eu/Publication/Poles_report_final_October2010.pdf

Research at JRC in support of EU climate change policy making

The 3rd Meeting of the Parties to the Kyoto Protocol COP15 (2009):

http://ec.europa.eu/dgs/jrc/downloads/jrc_climate_change_policy_making.pdf

Economic assessment of post-2012 global climate policies – Analysis of gas greenhouse emission reduction scenarios with the POLES and GEM-E3 models

JRC Scientific and Technical Report (2009): <http://ftp.jrc.es/EURdoc/JRC50307.pdf>

Global climate policy scenarios for 2030 and beyond – Analysis of greenhouse gas emission reduction pathways scenarios with the POLES and GEM-E3 models

JRC Reference Report (2007): <http://ftp.jrc.es/EURdoc/eur23032en.pdf>

Impacts of climate change

Impacts of Europe's changing climate – 2008 indicator-based assessment

JRC Reference Report (2008):

http://ec.europa.eu/dgs/jrc/downloads/jrc_reference_report_2008_09_climate_change.pdf

Economics of climate change

Climate change impacts in Europe

Final report of the PESETA research project (2009): <http://ftp.jrc.es/EURdoc/JRC55391.pdf>

Impacts of climate change in human health in Europe

PESETA – Human health study (2009): <http://ftp.jrc.es/EURdoc/JRC55393.pdf>

Impacts of climate change in coastal systems in Europe

PESETA Coastal systems study (2009): <http://ftp.jrc.es/EURdoc/JRC55390.pdf>

Impacts of climate change in tourism in Europe

PESETA – Tourism study (2009): <http://ftp.jrc.es/EURdoc/JRC55392.pdf>

Impacts of climate change in agriculture in Europe

PESETA – Agriculture study (2009): <http://ftp.jrc.es/EURdoc/JRC55386.pdf>

Biofuels

Indirect land use change from increased biofuels demand – comparison of models and results for marginal biofuels production from different feedstocks

JRC Scientific and Technical Report (2010): http://re.jrc.ec.europa.eu/bf-tp/html/documents_main.htm

Biofuels: a new methodology to estimate GHG emissions due to global land use change. A methodology involving spatial allocation of agricultural land demand and estimation of CO₂ and N₂O emissions

JRC Scientific and Technical Report (2010): http://re.jrc.ec.europa.eu/bf-tp/html/documents_main.htm

Peer reviewed papers

Climate change and air pollution: two entwined issues

Atmospheric chemistry-climate feedbacks

Journal of Geophysical Research (2010) Vol. 115, D12121, doi:10.1029/2009JD013300.

A GCM study of future climate response to aerosol pollution reductions

Climate Dynamics (2010) Vol. 34, pp. 1177-1194, doi:10.1007/s00382-009-0573-0.

A European aerosol phenomenology – 3: Physical and chemical characteristics of particulate matter from 60 rural, urban, and kerbside sites across Europe

Atmospheric Environment (2010) Vol. 44, no. 10, pp. 1308-1320.

New Directions: Climate change and air pollution abatement: a bumpy road

Atmospheric Environment (2009) Vol. 43, no. 32, pp. 5132-5133.

Toward a standardised thermal-optical protocol for measuring atmospheric organic and elemental carbon: the EUSAAR protocol

Atmospheric Measurement Techniques (2009) Vol. 2, pp. 2321-2345.

Influence of future air pollution mitigation strategies on total aerosol radiative forcing

Atmospheric Chemistry and Physics (2008) Vol. 8, pp. 5563-5627.

A multi-model assessment of pollution transport to the Arctic

Atmospheric Chemistry and Physics (2008) Vol. 8, no. 17, pp. 5353-5372.

Climate assessment: what's next?

Science 30 November 2007, Vol. 318, no. 5855, p. 1386, doi: 10.1126/science.1147873.

Biogenically driven organic contribution to marine aerosol

Nature 7 October 2004, Vol. 431, pp. 676-680, doi:10.1038/nature02959.

The role of the carbon and nitrogen cycle

Carbon and nitrogen cycle demands in the O-CN land surface model: 2. Role of nitrogen cycle in the historical terrestrial carbon balance

Global Biogeochemical Cycles (2010) Vol. 24, GB1006, doi:10.1029/2009GB003522.

Impacts of Atmospheric Anthropogenic Nitrogen on the Open Ocean

Science 16 May 2008, Vol. 320, no. 5878, pp. 893-897, doi: 10.1126/science.1150369.

Biosphere – Climate interaction

Global convergence in the temperature sensitivity of respiration at ecosystem level

Science 13 August 2010, Vol. 329, no. 5993, pp. 838-840, doi: 10.1126/science.1189587.

Terrestrial gross carbon dioxide uptake: global distribution and covariation with climate

Science 13 August 2010, Vol. 329, no. 5993, pp. 834-838, doi: 10.1126/science.1184984.

Climatic impact of land use in LCA-carbon transfers between vegetation/soil and air

The International Journal of Life Cycle Assessment (2010), Vol. 15, no. 2, pp. 172-182, doi:10.1007/s11367-009-0144-y.

Carbon accumulation in European forests

Nature Geoscience 22 June 2008, pp. 425-429, doi:10.1038/ngeo233.

Making deforestation pay under the Kyoto protocol?

Science 14 March 2003, Vol. 299, no. 5613, p. 1669, doi: 10.1126/science.1079024.

Determination of deforestation rates of the world's humid tropical forests

Science 9 August 2002, Vol. 297, no. 5583, pp. 999-1002, doi: 10.1126/science.1070656.

Human role in Russian wild fires

Nature 23 March 2006, Vol. 440, pp. 436-437, doi:10.1038/440436a.

Impacts of climate change

Recent decline in the global land evapotranspiration trend due to limited moisture supply

Nature 10 October 2010, doi:10.1038/nature09396.

Flood hazard in Europe in an ensemble of regional climate scenarios

Journal of Geophysical Research (2009) Vol. 114, D16108, doi:10.1029/2008JD011523.

Impact of global warming on streamflow drought in Europe

Journal of Geophysical Research (2009) Vol. 114, D17116, doi:10.1029/2008JD011438.