### PUBLIC RELEASE: 21-DEC-2011

# Proposals for reducing carbon dioxide emissions must balance with development needs

**PLOS** 

Efforts to combat climate change should take into account the development levels of different countries when negotiating agreements, according to a study published in the Dec. 21 issue of the online journal *PLoS ONE*.

On an early stage, developing countries tend to rely on fossil fuels to achieve their development targets. In a world of limited technology transfer, cumulative CO2 emission necessary for development are between 20 and 30% of previously calculated budges to keep global temperature below 2°C target. The authors of the recent report, led by Luis Costa of the Potsdam Institute for Climate Impact Research in Germany, propose a new allocation framework that reserves individual emissions paths for the Development As Usual (DAU) of current developing countries until certain development standards - in the form of long, healthy life, access to knowledge, and decent living standards - are reached, at which point the countries become responsible for reducing their emissions.

Diego Rybski, a co-author, cautions that the results should not be considered predictions but rather as a possible future. Nonetheless, Juergen Kropp concludes that an integration of fair a CO2 allocations and individual carbon budgets considering development dynamics might have a better chance for acceptance in climate negotiations.

###

Citation: Costa L, Rybski D, Kropp JP (2011) A Human Development Framework for CO2 Reductions. PLoS ONE 6(12): e29262. doi:10.1371/journal.pone.0029262

Financial Disclosure: The authors acknowledge the financial support from BaltCICA (Baltic Sea Region Programme 2007-2013). They wish to thank the Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety of Germany who supports this work within the framework of the International Climate Protection Initiative. The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

Competing Interest Statement: The authors have declared that no competing interests exist.

PLEASE LINK TO THE SCIENTIFIC ARTICLE IN ONLINE VERSIONS OF YOUR REPORT (URL goes live after the embargo ends): http://dx.plos.org/10.1371/journal.pone.0029262

1 of 3 03/03/2016 05:06 PM

**Disclaimer:** AAAS and EurekAlert! are not responsible for the accuracy of news releases posted to EurekAlert! by contributing institutions or for the use of any information through the EurekAlert system.

### **Media Contact**

Jen Laloup jlaloup@plos.org 415-624-1220

http://www.plos.org €

### More on this News Release

Proposals for reducing carbon dioxide emissions must balance with development needs

**PLOS** 

JOURNAL PLOS ONE

### **KEYWORDS**

ATMOSPHERIC SCIENCE CLIMATE CHANGE

CLIMATE CHANGE CLIMATE CHANGE
CLIMATE CHANGE CLIMATE SCIENCE

DEVELOPING COUNTRIES ECOLOGY/ENVIRONMENT

**ENERGY SOURCES** 

GUIDELINES/TREATIES/AGREEMENTS NATURE

POLLUTION/REMEDIATION

TEMPERATURE-DEPENDENT PHENOMENA

# Breaking News

 Regular aspirin use found to protect against overall cancer risk MASSACHUSETTS GENERAL HOSPITAL

2 of 3 03/03/2016 05:06 PM

- Tapping into Twitter to help recruit cancer patients into #ClinicalTrials UNIVERSITY OF PENNSYLVANIA SCHOOL OF MEDICINE
- Long-term aspirin use linked to lower risk for gastrointestinal tract cancers THE JAMA NETWORK JOURNALS
- O How effective is Twitter to share cancer clinical trial information and recruit? THE JAMA NETWORK JOURNALS

View all breaking news >

## Trending Science News

- ♠ Reduce, reuse, recycle: Safe for water? AMERICAN SOCIETY OF AGRONOMY
- ♠ Molecular architectures see the light TECHNICAL UNIVERSITY OF MUNICH (TUM)
- ◆ Formaldehyde exposure from 3 e-cigarette formats tested well below WHO quality guidelines R&D AT BRITISH AMERICAN TOBACCO
- The realm of buried giants
  ESO

View all latest news >

3 of 3 03/03/2016 05:06 PM