

WORLDWATCH INSTITUTE

È ANCORA POSSIBILE LA SOSTENIBILITÀ?

Edizione italiana a cura di Gianfranco Bologna







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Background

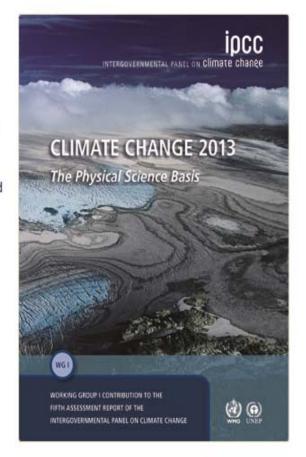
Contacts

IPCC WGI AR5

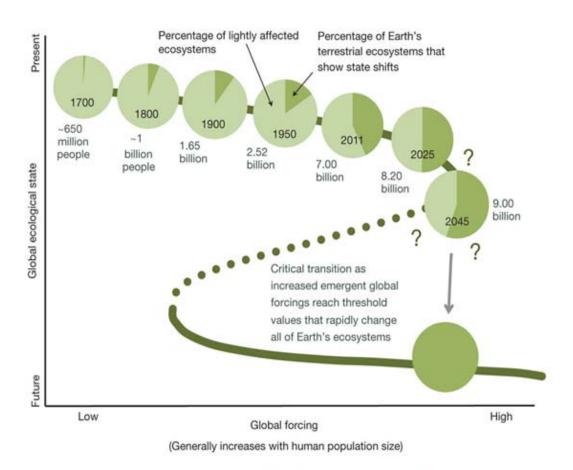
Climate Change 2013: The Physical Science Basis

The Twelfth Session of Working Group I (WGI-12) will take place from 23 to 26 September 2013 in Stockholm, Sweden. This Session of WGI is being convened to approve the Summary for Policymakers (SPM) of the Working Group I contribution to the IPCC Fifth Assessment Report (WGI AR5) and accept the underlying scientific and technical assessment.

The WGI AR5 Summary for Policymakers will be available here on 27 September 2013.

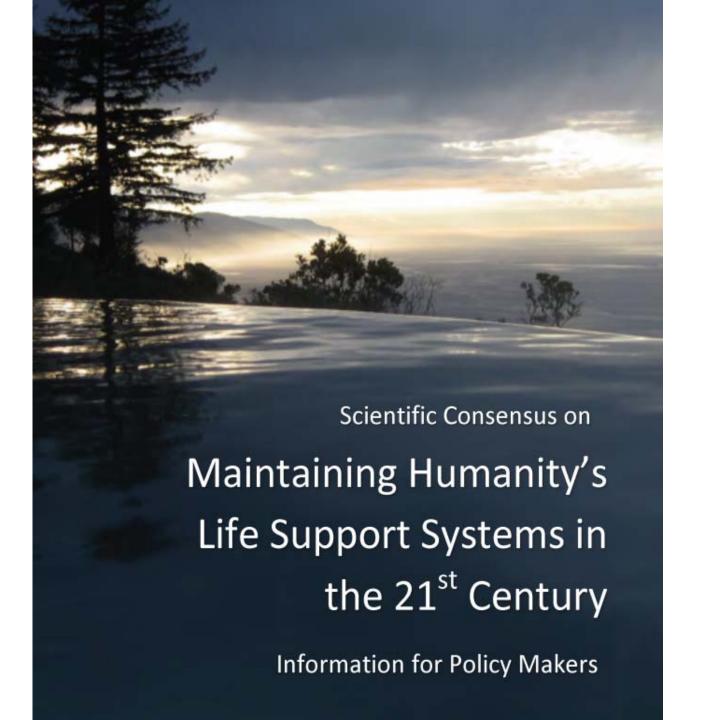


Quantifying land use as one method of anticipating a planetary state shift.



A D. Barnosky et al. Nature 486, 52-58 (2012) doi:10.1038/nature11018







Approaching a state shift in Earth's biosphere

Anthony D. Barnosky^{1,2,3}, Elizabeth A. Hadly⁴, Jordi Bascompte⁵, Eric L. Berlow⁶, James H. Brown⁷, Mikael Fortelius⁸, Wayne M. Getz⁹, John Harte^{9,10}, Alan Hastings¹¹, Pablo A. Marquet^{12,13,14,15}, Neo D. Martinez¹⁶, Arne Mooers¹⁷, Peter Roopnarine¹⁸, Geerat Vermeij¹⁹, John W. Williams²⁰, Rosemary Gillespie⁹, Justin Kitzes⁹, Charles Marshall^{1,2}, Nicholas Matzke¹, David P. Mindell²¹, Elov Revilla²² & Adam B. Smith²³





Does the terrestrial biosphere have planetary tipping points?

Barry W. Brook¹, Erle C. Ellis², Michael P. Perring³, Anson W. Mackay⁴, and Linus Blomqvist⁵

Forum



Focus Issue: Is there a global tipping point for planet Earth?

On the origin of planetary-scale tipping points

Timothy M. Lenton and Hywel T.P. Williams

College of Life and Environmental Sciences, University of Exeter, Hatherly Laboratories, Prince of Wales Road, Exeter, Devon, EX4 4PS, UK

¹ Environment Institute and School of Earth and Environmental Sciences, University of Adelaide, Adelaide, SA 5095, Australia

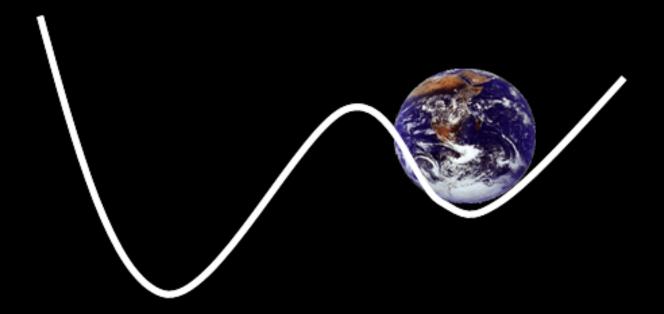
²Geography and Environmental Systems, University of Maryland, Baltimore County, MD 21250, USA

School of Plant Biology, The University of Western Australia, Crawley, WA 6009, Australia

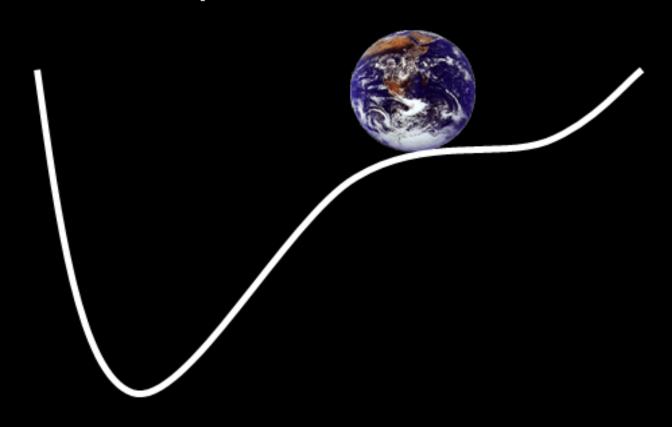
⁴Environmental Change Research Centre, Department of Geography, University College London, London, UK

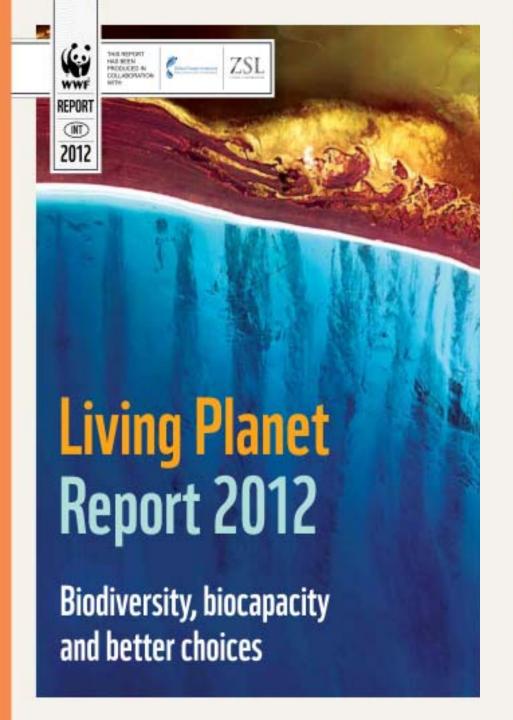
Conservation and Development Program, Breakthrough Institute, Oakland, CA 94612, USA

A resilient Earth System



Reduced resilience – our precarious predicament





LIVING PLANET REPORT 2012

BIOCAPACITY

It takes 1.5 years for the

Earth to regenerate the renewable resources that

BIODIVERSITY

Biodiversity, ecosystems and ecosystem services - our natural capital - must be preserved as the foundation



of well-being for all.



BETTER CHOICES

Living within ecological boundaries requires a global consumption and production pattern in balance with the Earth's biocapacity.

EQUITABLE SHARING

100% RECYCLED

Equitable resource governance is essential to shrink and share our resource use.

The Economics of Ecosystems & Biodiversity



TEEB's approach



 Recognizing value: a feature of all human societies and communities





Demonstrating value: in economic terms, to support decision making







3. Capturing value: introduce mechanisms that incorporate the values of ecosystems into decision making











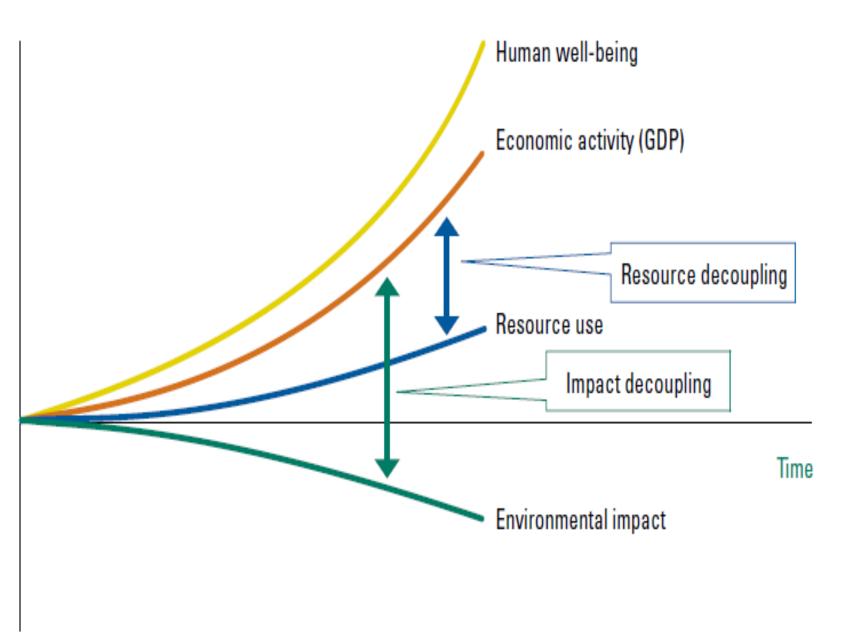








Figure 1. Two aspects of 'decoupling'





Priority actions

- 1. Preserve natural capital
- 2. Produce better
- 3. Consume more wisely
- 4. Redirect financial flows
- 5. Equitable resource governance





Biodiversity conservation

Food, water and energy security