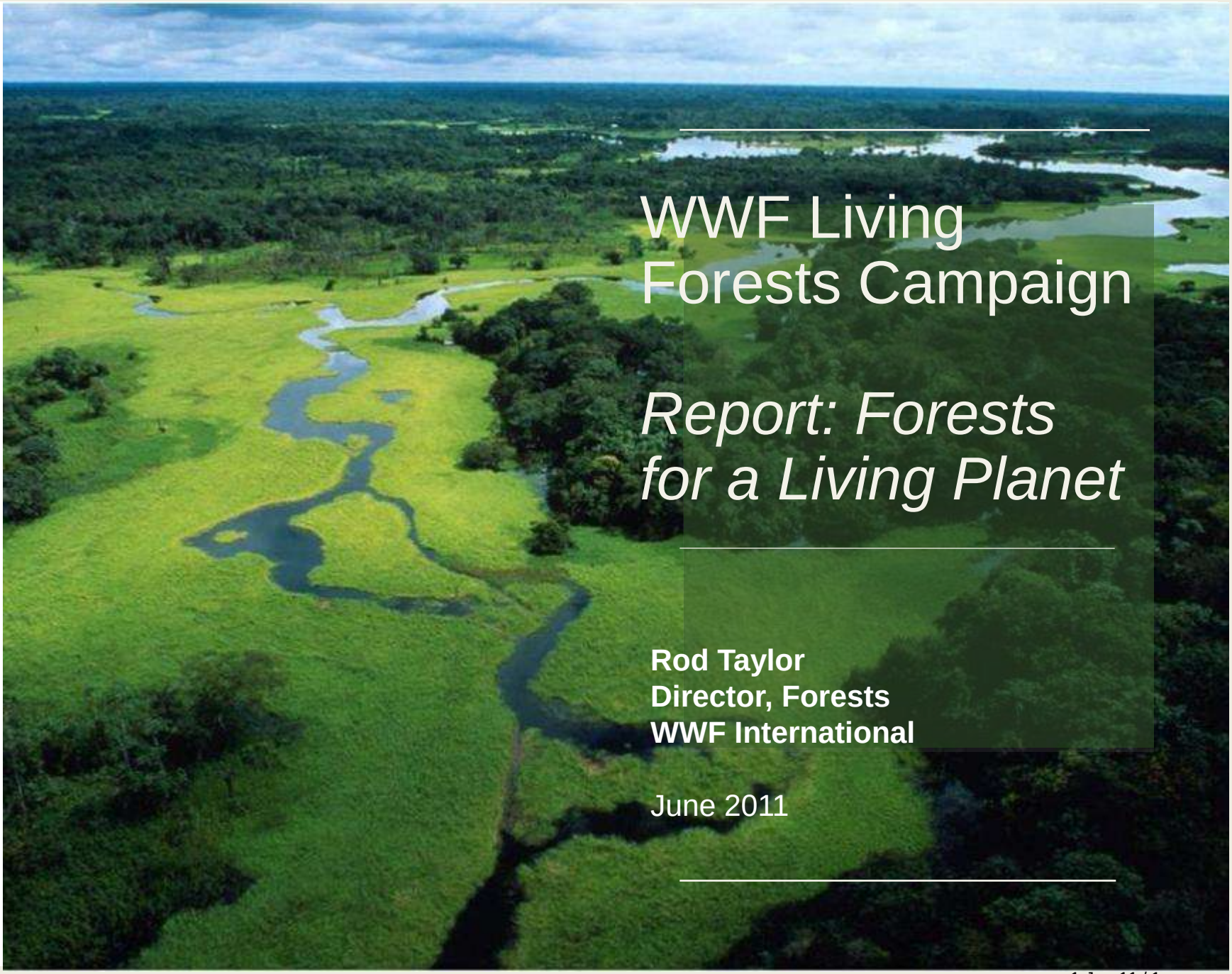


WWF Living Forests Campaign

Report: Forests for a Living Planet

Rod Taylor
Director, Forests
WWF International

June 2011

Living Forests Report

The Living Forests Report.

- Released chapter by chapter throughout 2011
- Aims to catalyse debate on **the future role and value of forests** in a world where humanity is living within the Earth's ecological limits and sharing its resources equitably.
- Zero Net Deforestation and Forest Degradation (ZNDD) by 2020 presented as a critical milestone on the road toward this goal.

Living Forests Report
Chapters

1. Forests for a Living Planet (Scene-setting chapter)
2. Forest ecosystems and biodiversity
3. Forests and energy
4. Forests and wood, paper and biomaterials
5. Forests and food (most likely via a symposium)
6. Forests and carbon

The Living Forests Model

WWF drew on two of IIASA's existing, tested models to show geographically explicit land-use change under different scenarios.

The first **projects future deforestation and land-use change** by extrapolating from historical trends and taking into account future projections for population, GDP and infrastructure.

The second is **an economic model that allocates land and resources optimally** based on projected commodity and ecosystem service demands under future GDP, population and policy scenarios.

The Living Forests Model projects potential scenarios,
It doesn't predict the future.

The Scenarios

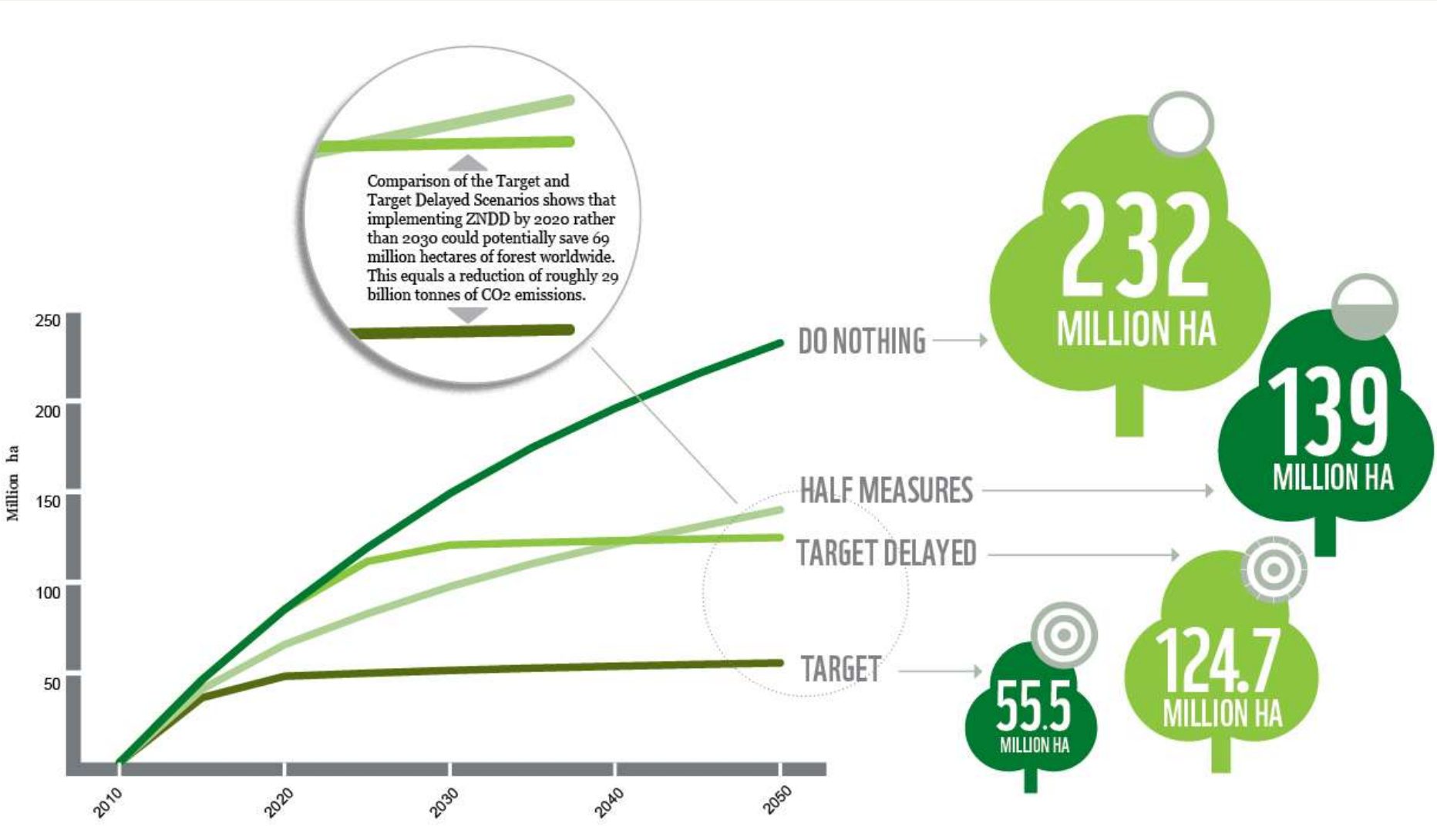
Do Nothing – Business as usual continues for the next several decades; global population grows and with it consumption; energy use increases; no new incentives for forest protection or climate change mitigation

Target Scenario – Zero net deforestation and forest degradation (with near zero gross rate of loss of natural and semi-natural forest) by 2020 and maintained at that level indefinitely

Target Delayed – Zero net deforestation and forest degradation (with near zero gross rate of loss of natural and semi-natural forest) by 2030 and maintained at that level indefinitely

Half Measures – Gross deforestation rate declines by at least 50% from the reference rate by 2020 and is maintained at that level indefinitely

There's no time to waste



Forest Loss under different scenarios

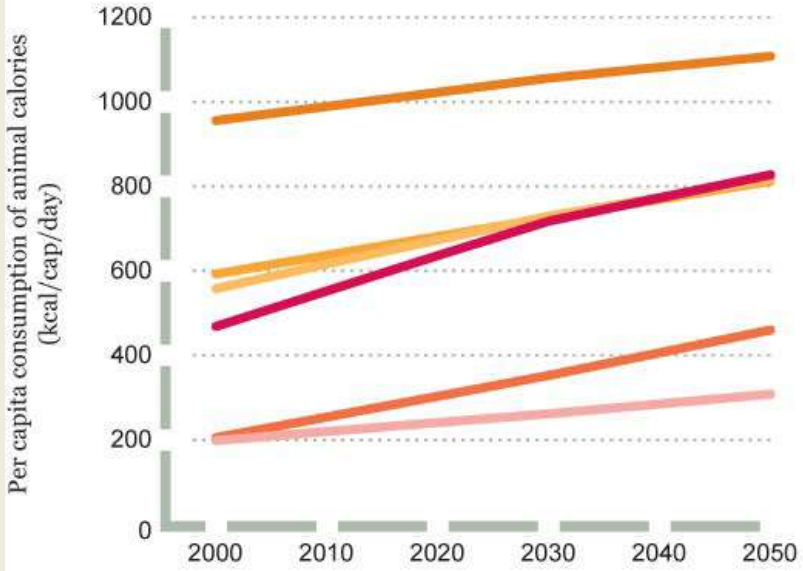
The Variables

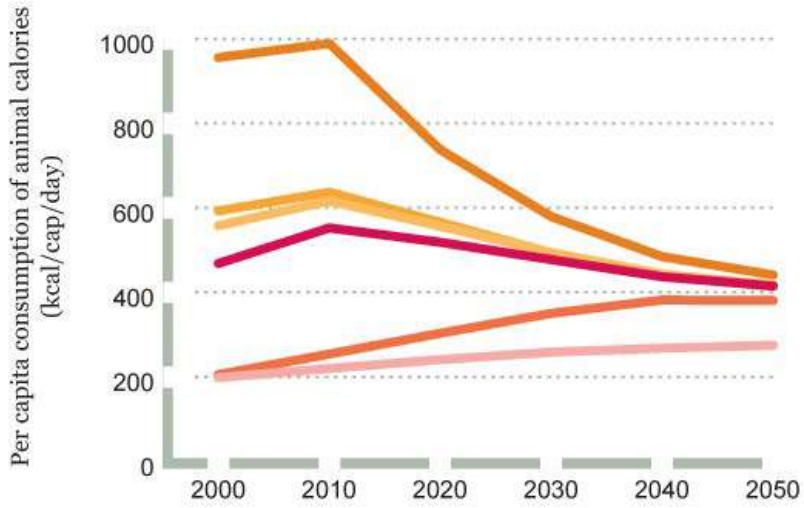
Diet Shift – The total global consumption of animal calories is maintained at the 2010 global average with convergence in per capita consumption across regions. This means less future demand for animal calories than the Do Nothing scenario

Bioenergy Plus – Bioenergy feedstock demand consistent with the 100% renewable energy vision calculated by the Ecofys Energy Model

Pro-nature – Natural ecosystems are protected (i.e., no further conversion of these ecosystems to cropland, grazing land, plantations or urban settlement) in areas identified as important for biodiversity by at least three credible conservation mapping processes

Pro-nature Plus – Natural ecosystems are protected (as defined in the Pro-Nature scenario) in areas identified by any one of the conservation mapping processes

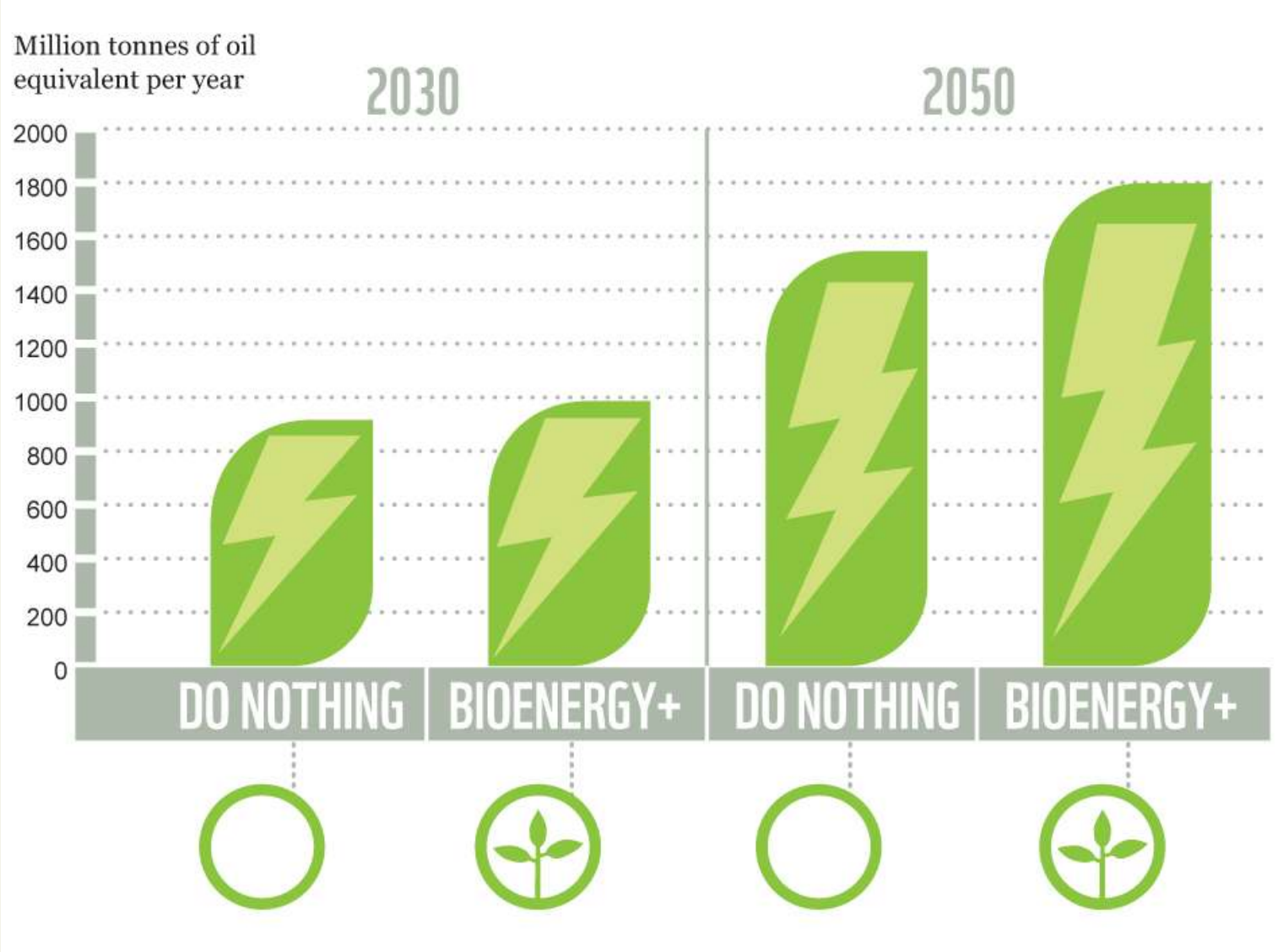




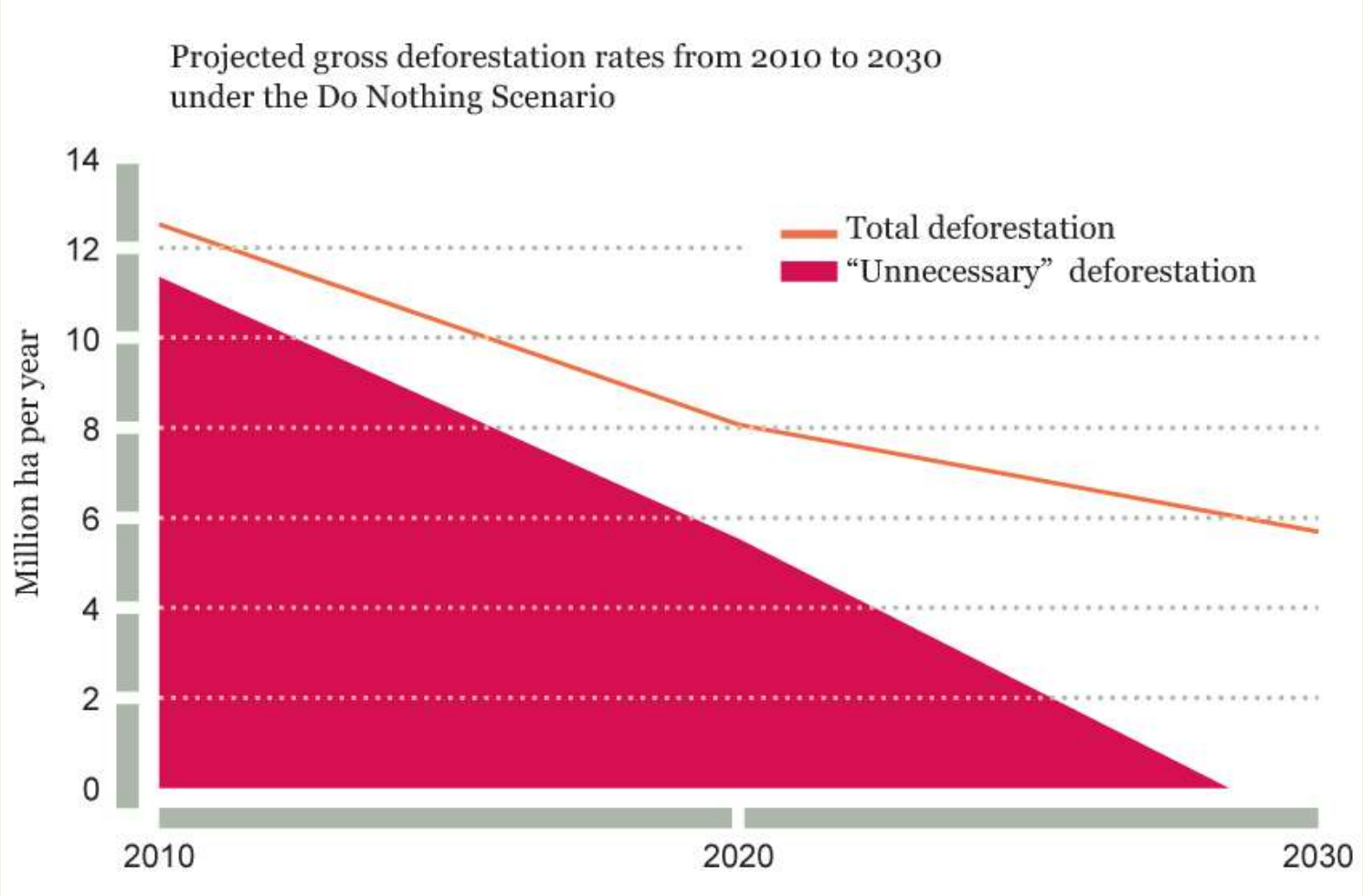
Projected animal calorie consumption per day between now and 2050 in different regions under the Do Nothing Scenario (left graph), where per capita consumption continues to follow the current path predicted by the FAO and the Diet Shift Scenario (right graph), where in OECD countries a gradual reduction is achieved through dietary changes and waste reduction, while allowing per capita consumption in other regions, such as South Asia and Sub-Saharan Africa, to increase.

- OECD
- Former Soviet Union
- Latin America
- Rest of Asia
- South Asia
- Africa

Bioenergy use is projected to roughly double by 2030, and more than triple by 2050.



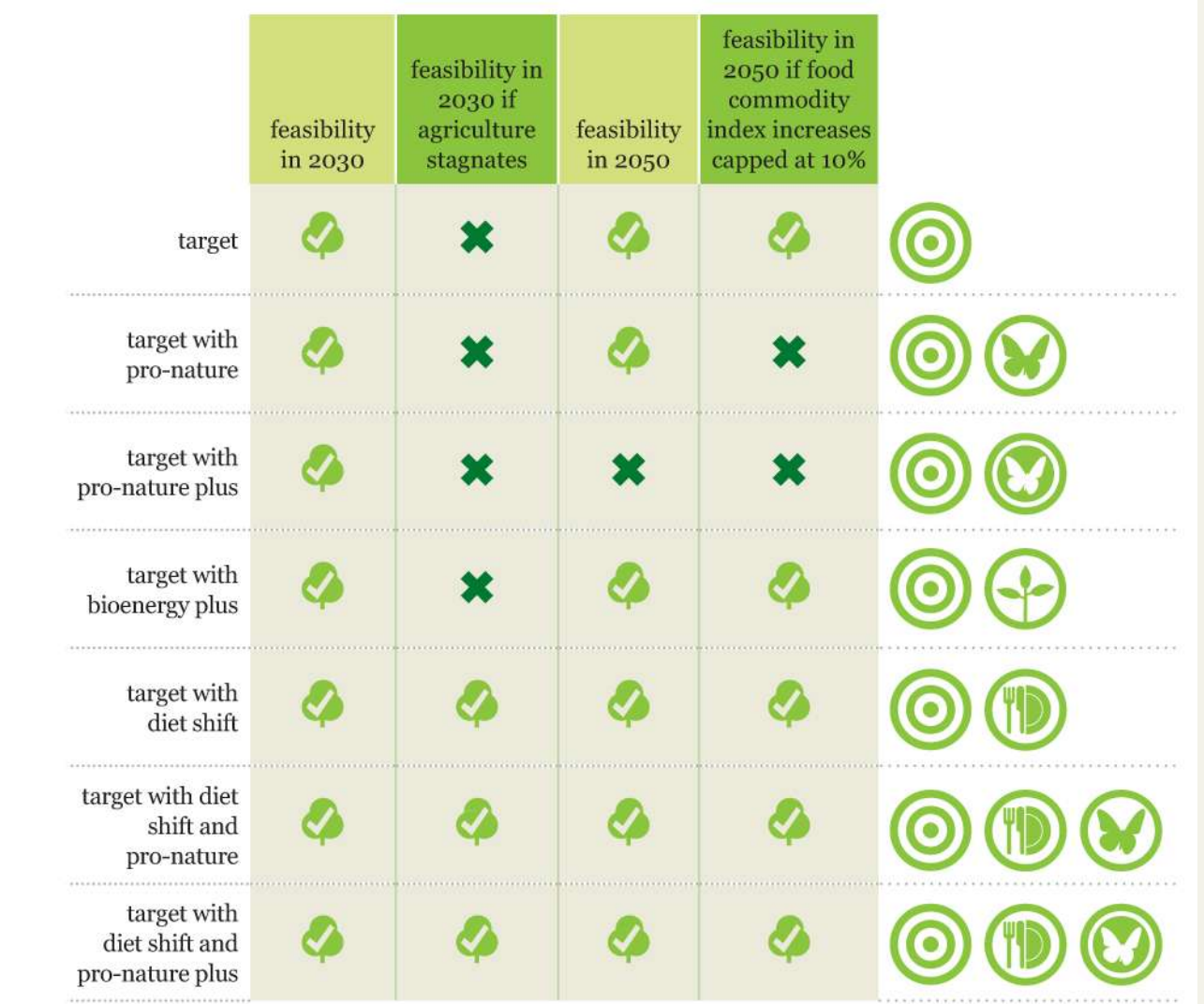
Valuable forests are being squandered today due to poor governance.



The area shaded in red represents the portion of projected deforestation that results from failing to optimise land-use in ways the Model suggests are technically possible.

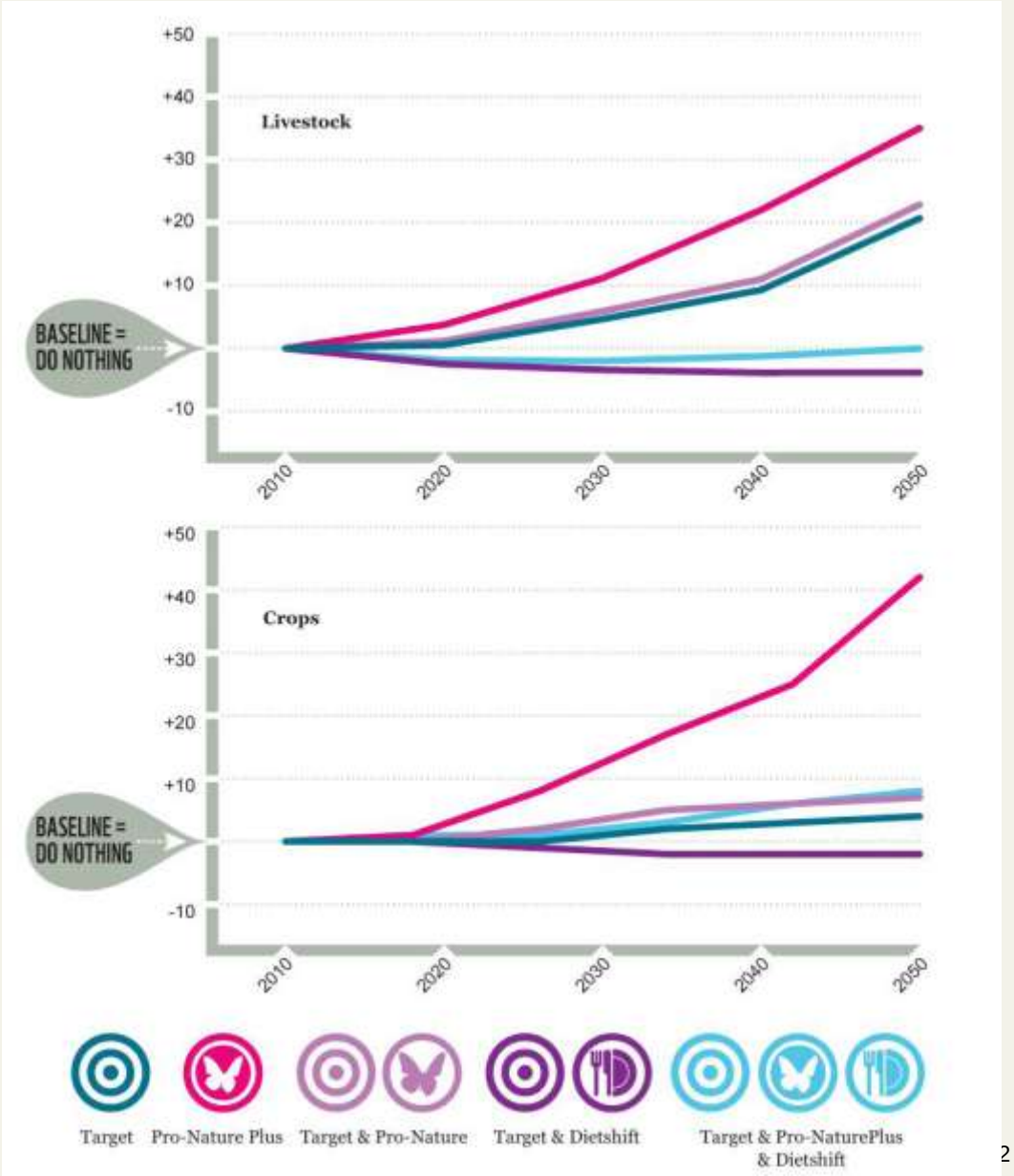
Agricultural productivity and a shift in consumption patterns are critical to how much forest and biodiversity can be protected.

Feasibility of meeting projected global demand for food, timber and bioenergy under different scenarios in 2030 and 2050.



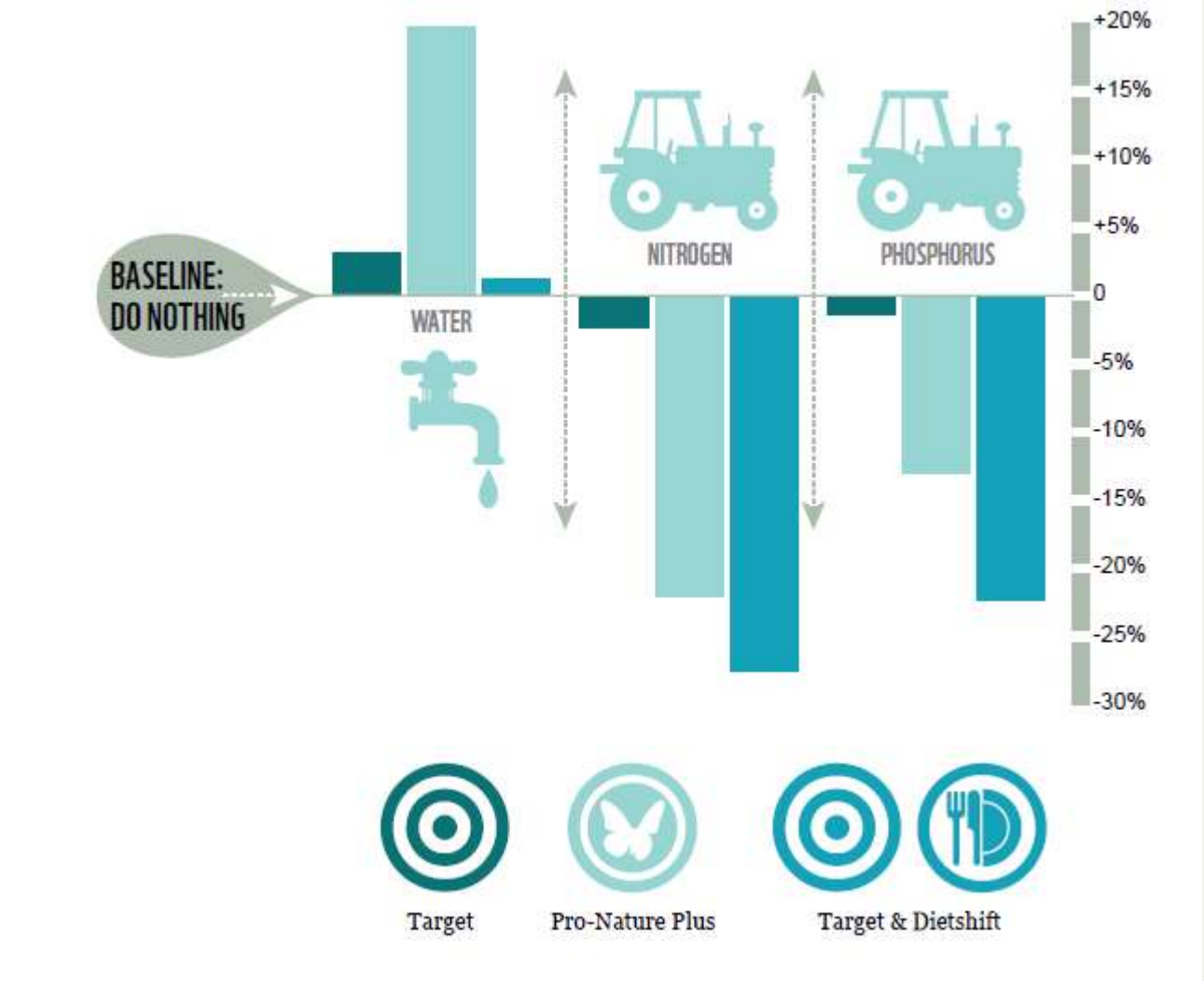
Strict conservation means high food prices, unless consumption reduces

Change in commodity price under selected scenarios
relative to the
Do Nothing Scenario.

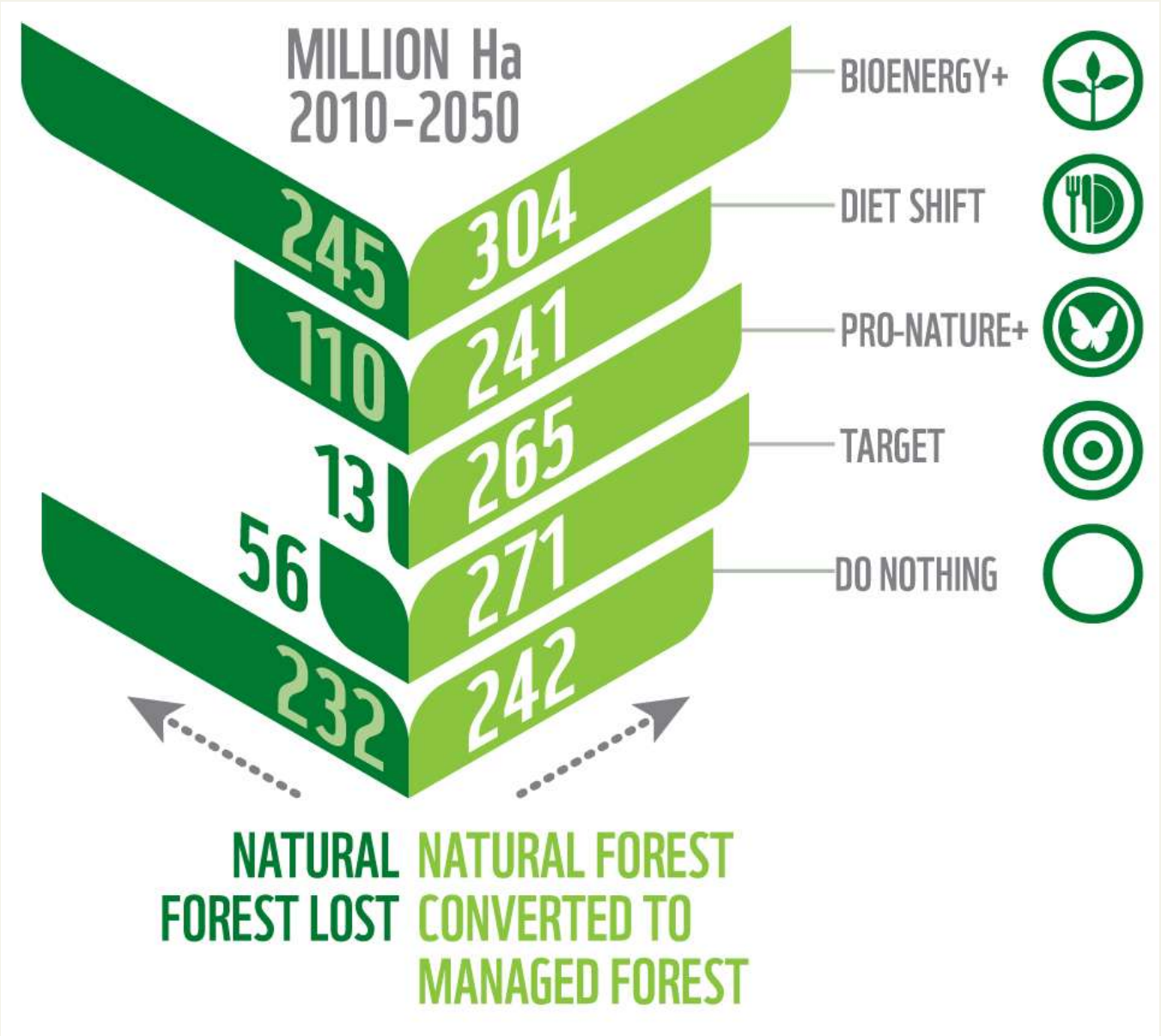


Saving more biodiversity requires more productive farms. which means more inputs per hectare, yet fewer total inputs because less land is cultivated.

Relative change in projected water, nitrogen and phosphorous use in 2030 compared to Do Nothing Scenario



Sound forestry is key to maintaining the planet's natural capital



Chapter 1

Key conclusions

Improving governance is the key to achieving ZNDD by 2020.

With better governance, the world would have enough productive forest and land available for agriculture to meet current demand for food, wood products and bio-energy without further conversion of forests.

Chapter 1

Key conclusions

Doing nothing, delaying ZNDD until 2030, or taking half-measures will:

- lead to huge and irreversible losses in biodiversity, and
- undermine the prospects of an early peak and decline in GHG emissions, thus increasing the risk of runaway climate change.

Chapter 1

Key conclusions

In the longer term, as population and incomes grow, maintaining ZNDD will require:

- forestry and farming practices that produce more with less land, water and pollution
- new consumption patterns that meet the needs of the poor while eliminating waste and over-consumption by the affluent.

Chapter 1

Key conclusions

What role for OECD countries if most forest loss occurs in developing countries?

- Reduce over-consumption and waste of food, energy and paper.
- Reduce footprint of commodity supply chains (e.g. EC legislation barring trade in illegal timber, certification (e.g. FSC, RSPO, RTRS)
- No double standard in business practices of companies that are expanding in emerging markets or producing in developing countries

Thank you

www.panda.org/livingforests


©
WWF®