

*Protected Areas in a Changing Environment  
Are Protected Areas passive passengers of climate  
change or drivers of sustainability?*

Ignace Schops





**[automatic answering machine] "I am not in the office at the moment.  
Send any work to be translated"**

**FIFTY GRADES OF HAY**




**THE TRAILER.....**

FEB 6 2006

ADDTXT.COM







ONE DAY, SON,  
THIS WILL ALL  
BE YOURS...

© 2011  
WALT DISNEY PICTURES  
TNA

# LOSS OF SPECIES BIODIVERSITY

EVERY **20** MINUTES  
THE WORLD ADDS  
**3,500** HUMAN LIVES  
AND LOSES  
**1 OR MORE** SPECIES

**27,000 SPECIES** LOST A YEAR

EVERY **60** MINUTES  
**240 ACRES** OF NATURAL HABITAT ARE  
**DESTROYED**

↑ = 15 ACRES

**70%** OF THE WORLD'S KNOWN SPECIES RISK EXTINCTION IF THE GLOBAL TEMPERATURE RISES BY MORE THAN 3.5°C

**75%** OF GENETIC DIVERSITY IN AGRICULTURAL CROPS HAS BEEN LOST



**20%** OF THE WORLD'S SPECIES COULD BE GONE IN 30 YEARS



**80%** OF THE DECLINE IN BIOLOGICAL DIVERSITY IS CAUSED BY HABITAT DESTRUCTION

**1 OUT OF 4** AMPHIBIANS



**BIRDS**



**CONFIERS**



**MAMMALS &**



**6 OUT OF 7** MARINE TURTLES

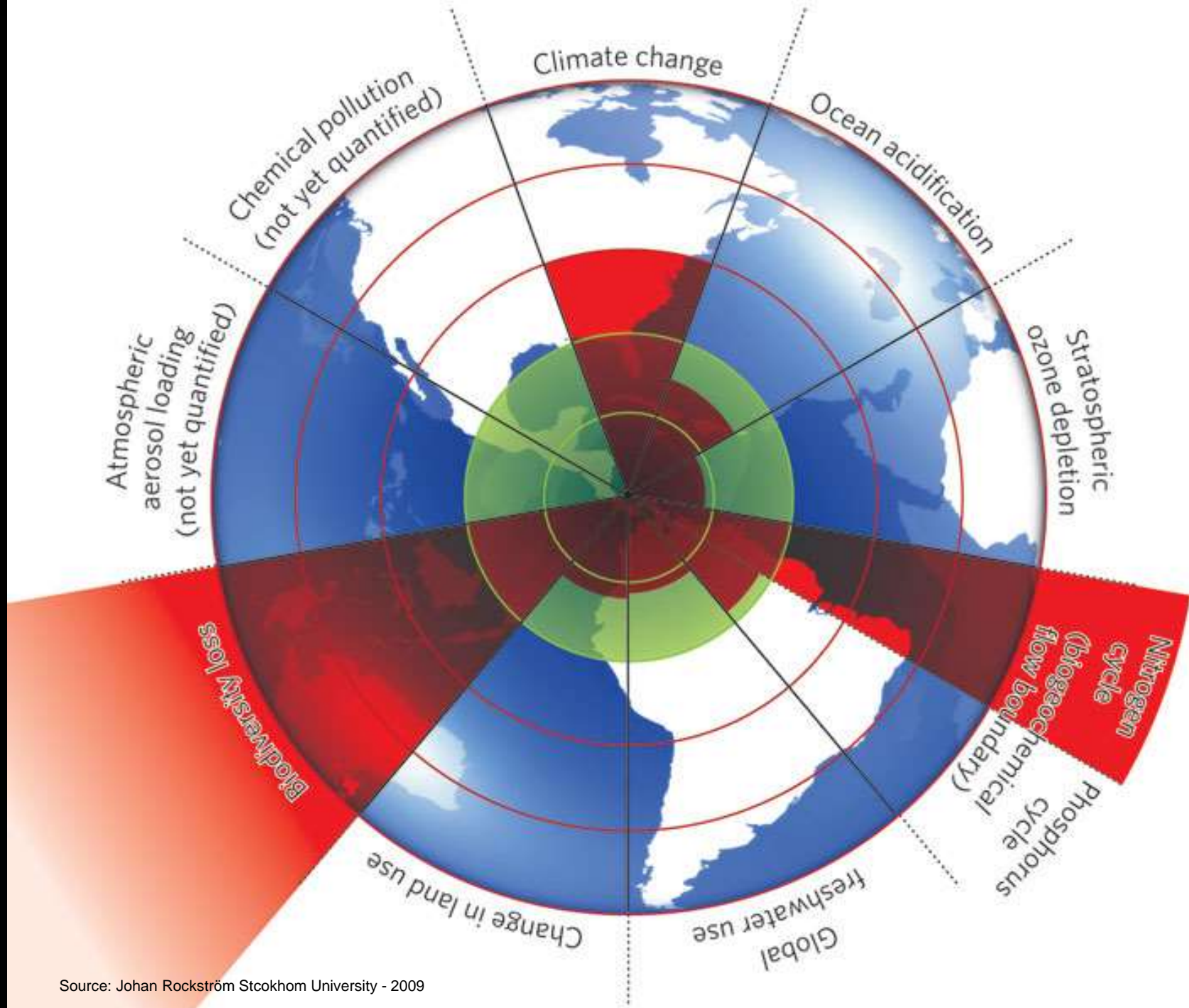


ARE THREATENED BY EXTINCTION

**75%** OF THE WORLD'S FISHERIES ARE FULLY OR OVER EXPLOITED



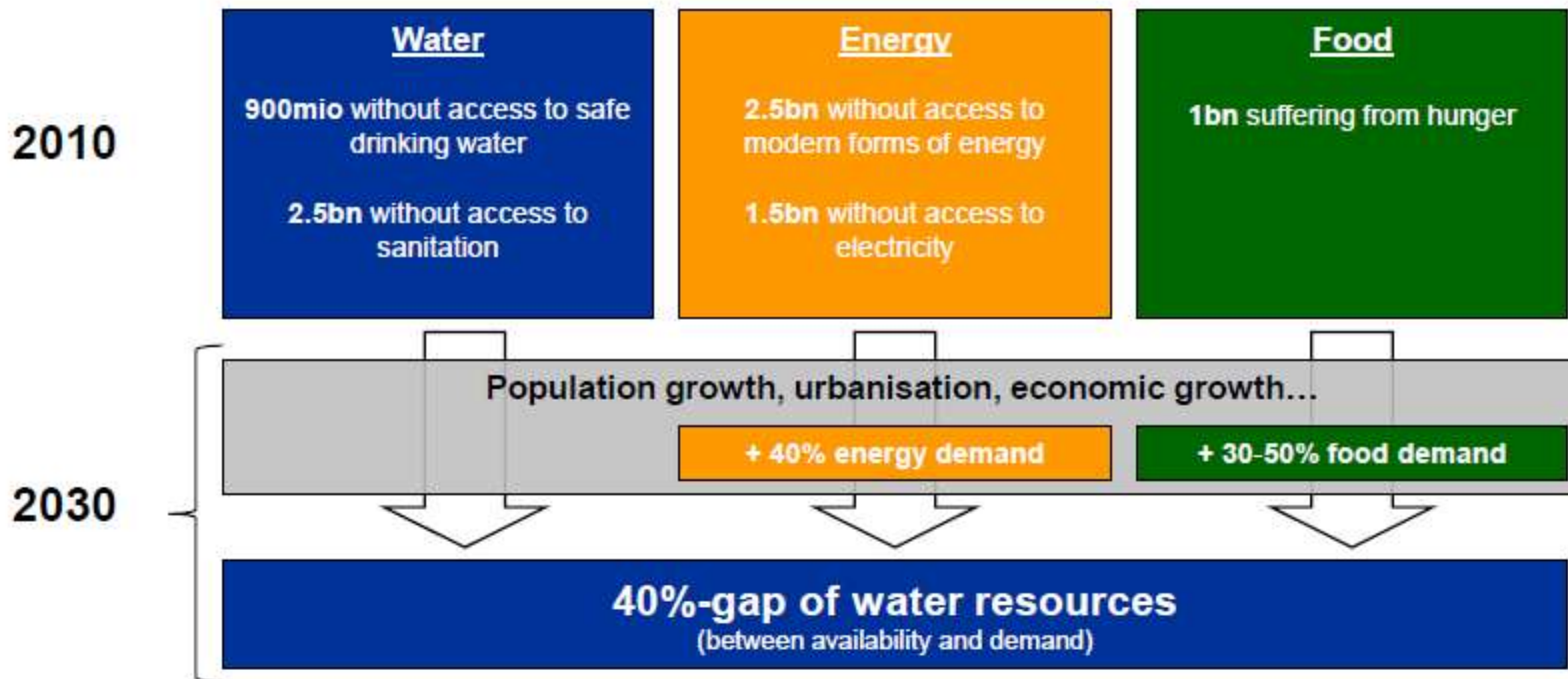
**BIODIVERSITY IS NECESSARY FOR HUMAN SURVIVAL  
HUMANS HOLD THE POWER TO STOP THE LOSS**



# AT THE TIPPING POINT

Bonn2011 Conference

The Water, Energy and Food Security Nexus  
Solutions for the Green Economy  
16-18 November 2011



**1** NO  
POVERTY



**2** NO  
HUNGER



**3** GOOD  
HEALTH



**4** QUALITY  
EDUCATION



**5** GENDER  
EQUALITY



**6** CLEAN WATER  
AND SANITATION



**7** CLEAN  
ENERGY



**8** GOOD JOBS AND  
ECONOMIC GROWTH



**9** INNOVATION AND  
INFRASTRUCTURE



**10** REDUCED  
INEQUALITIES



**11** SUSTAINABLE CITIES  
AND COMMUNITIES



**12** RESPONSIBLE  
CONSUMPTION



**13** PROTECT THE  
PLANET



**14** LIFE BELOW  
WATER



**15** LIFE  
ON LAND



**16** PEACE AND  
JUSTICE



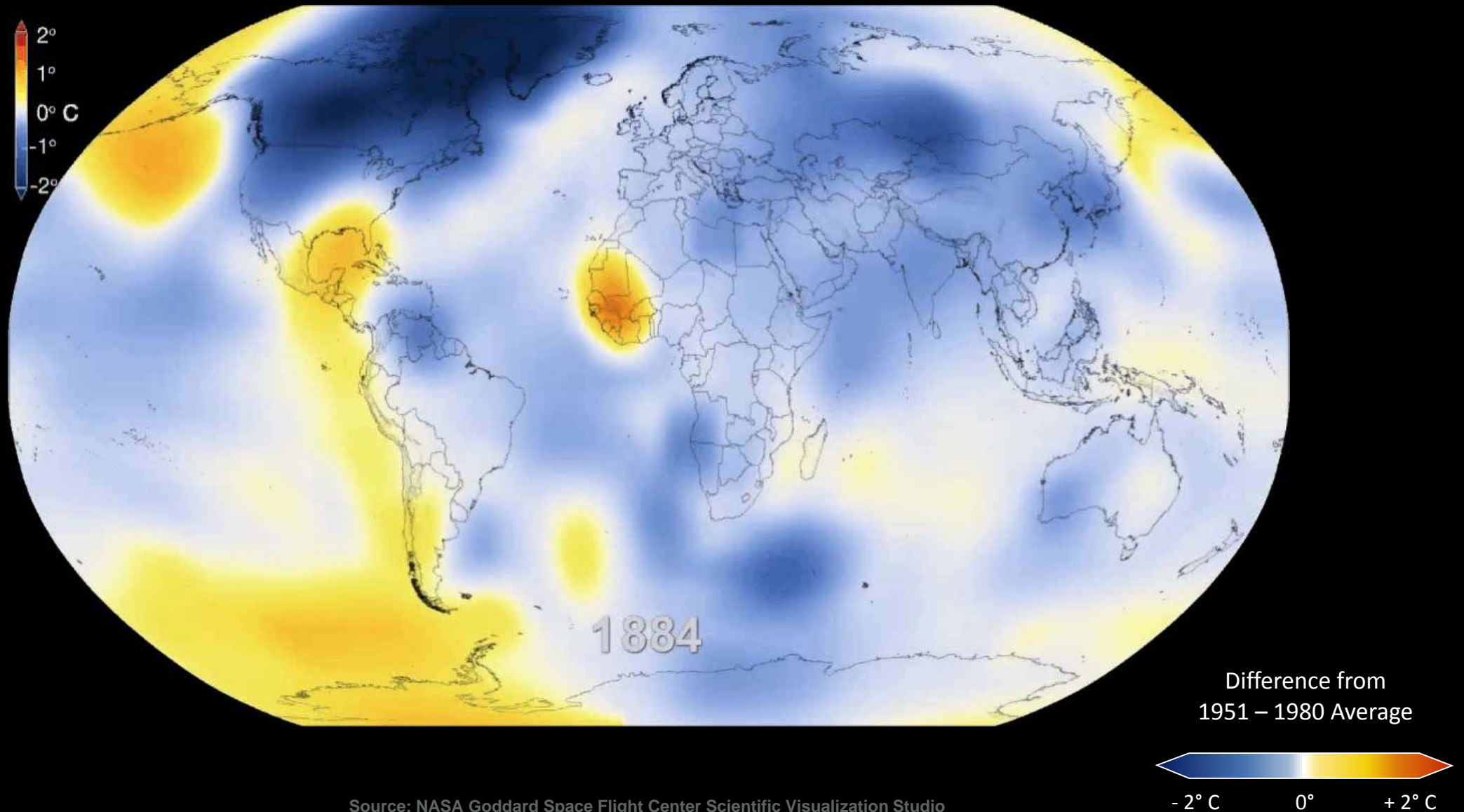
**17** PARTNERSHIPS  
FOR THE GOALS



**THE GLOBAL GOALS**  
For Sustainable Development



# Global Warming, 1884 – 2013



Source: NASA Goddard Space Flight Center Scientific Visualization Studio

**Changing Rain  
and Snow  
Patterns**

**Changes in Animal  
Migration and Life Cycles**

**Less  
Snow and Ice**

**Higher Temperatures  
and More Heat Waves**

**More Droughts  
and Wildfires**

**Thawing  
Permafrost**

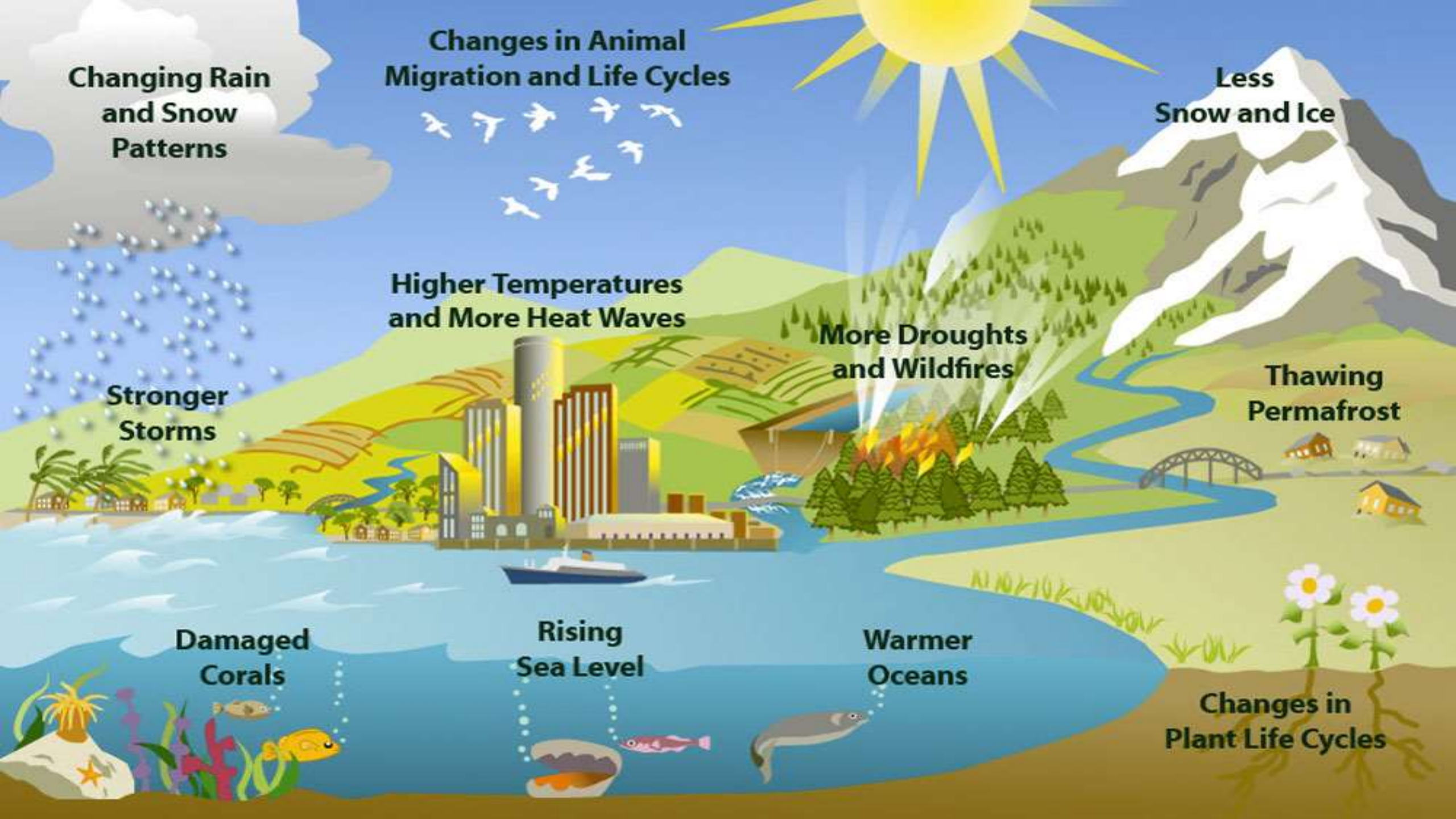
**Stronger  
Storms**

**Damaged  
Corals**

**Rising  
Sea Level**

**Warmer  
Oceans**

**Changes in  
Plant Life Cycles**



# Effects of Climate Change

delay of effects

## Current warming effect

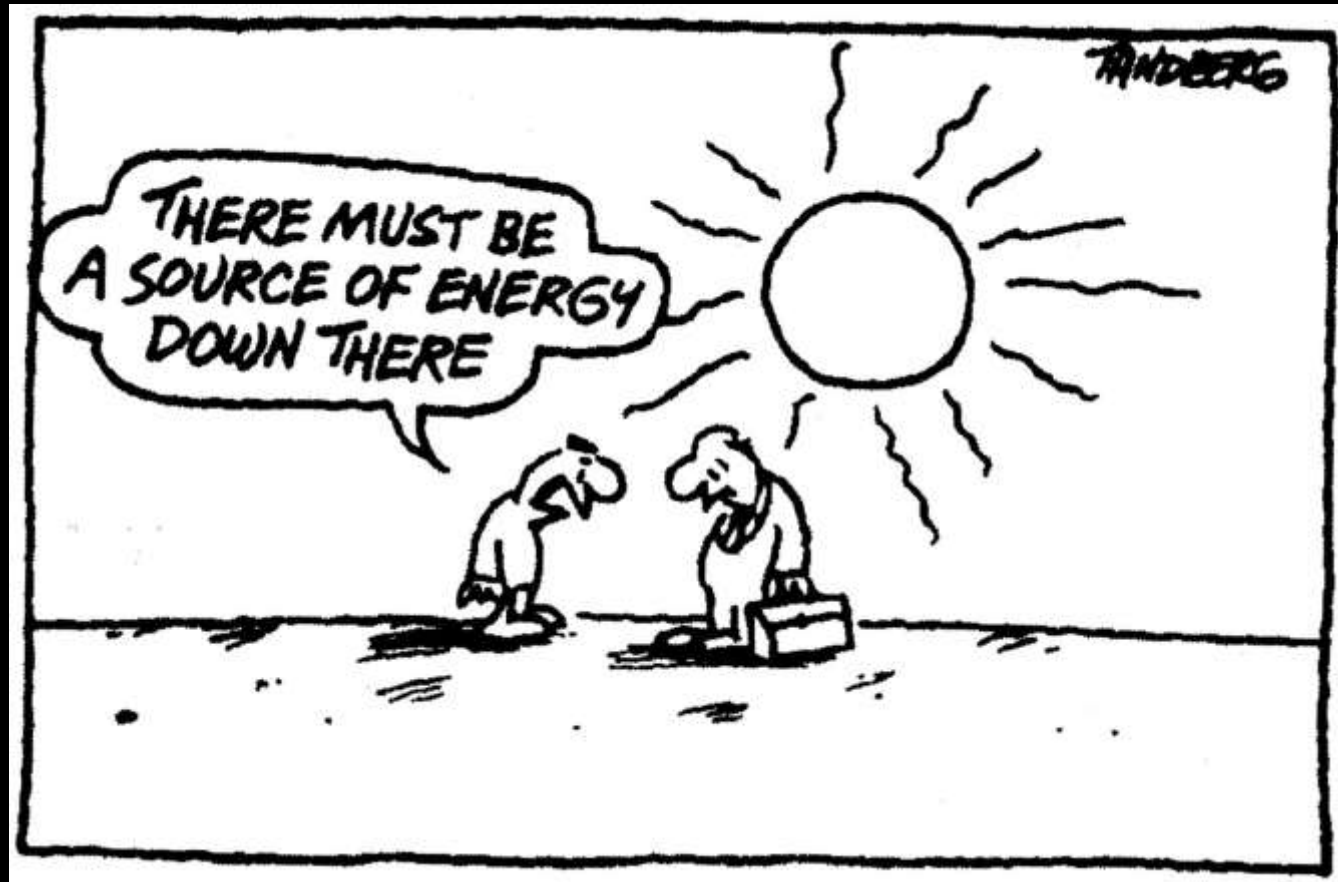
- Emissions up to 1980

## Warming still to come

- Emissions 1980 - now

## ... also yet to come

- Emissions now until the end of energy transition





## IMF AND REFORMING ENERGY SUBSIDIES



WP/15/105

# IMF Working Paper

How Large Are Global Energy Subsidies?

by David Coady, Ian Parry, Louis Sears, and Baoping Shang

5600 billion dollar  
every year!

(!) More than  
global health care

UNITED NATIONS

CLIMATE CHANGE CONFERENCE

COP19 / CMU 19

WARSAW 2013





# CLIMATE SUMMIT

WHAT IF IT'S  
A BIG HOAX AND  
WE CREATE A BETTER  
WORLD FOR NOTHING?

- ENERGY INDEPENDENCE
- PRESERVE RAINFORESTS
- SUSTAINABILITY
- GREEN JOBS
- LIVABLE CITIES
- RENEWABLES
- CLEAN WATER, AIR
- HEALTHY CHILDREN
- etc. etc.



12/19 USA TODAY

YOUNG  
PIT

Copenhagen  
Nopenhagen

A graphic on the left side of the logo, featuring a green and yellow gradient shape that resembles a stylized leaf or a drop. At the bottom of this shape is a small, white silhouette of the Eiffel Tower.

PARIS 2015

UN CLIMATE CHANGE CONFERENCE

COP21·CMP11



2°C



40% by 2030 >< 90% by 2050





## Attitudes of Europeans towards biodiversity [Euro Barometer 436 – 2015]

- 80% Biodiversity loss is serious
- 76% Mankind has a responsibility & stop biodiversity loss
- 67% Nature is essential to tackle Climate Change
- 60% Nature has positive effect on Wellbeing & Health
- 93% Need for better information from EU

- Value cultivated crops:  
153 billion euro/year/world  
(Gallai et al., 2008)
- Value wildlife: ?  
A plurality!



-3% GDP

8 Billion  
600 Billion



**Jonathan Patz,**  
professor & director of  
the **Global Health  
Institute**

*“It is my opinion that  
protected areas can  
save more lives,  
promote more health  
and deal with more ill  
health than the public  
health sector can  
achieve”*



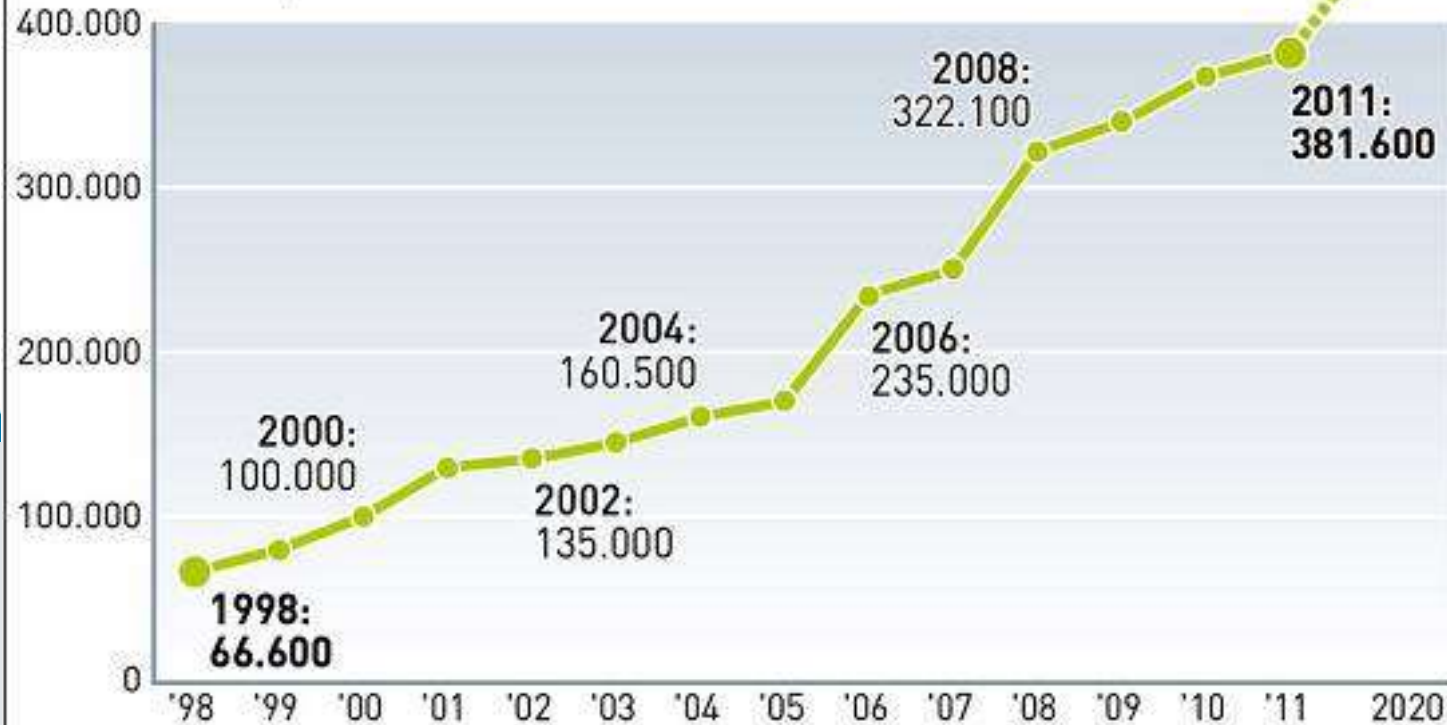


## Entwicklung der Arbeitsplätze im Bereich Erneuerbare Energien in Deutschland

Branchenziel  
2020: 500.000

Die Zahl der Beschäftigten in der Branche steigt kontinuierlich.

Zahl der Arbeitsplätze



Quellen: BMU/AGEE-Stat, DLR/DIW/ZSW/GWS/Prognos, UBA, BEE; Stand: 3/2012

www.unendlich-viel-energie.de



## JOBS IN 2012

= fifty-thousand

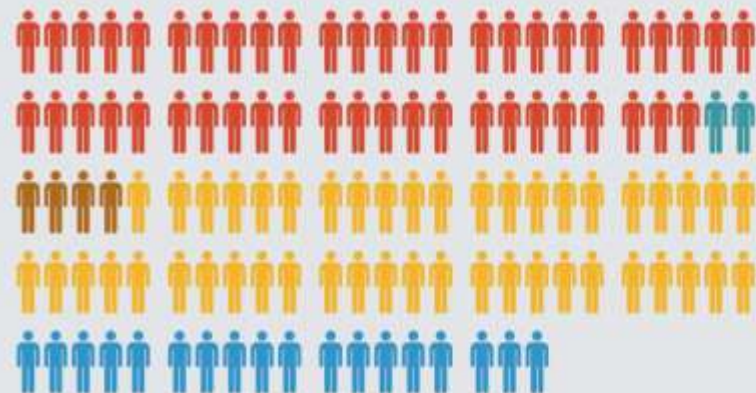
**BIOENERGY**  
(Biomass, Biofuels, Biogas)

**HYDROPOWER**  
(Small-scale)

**GEO THERMAL**

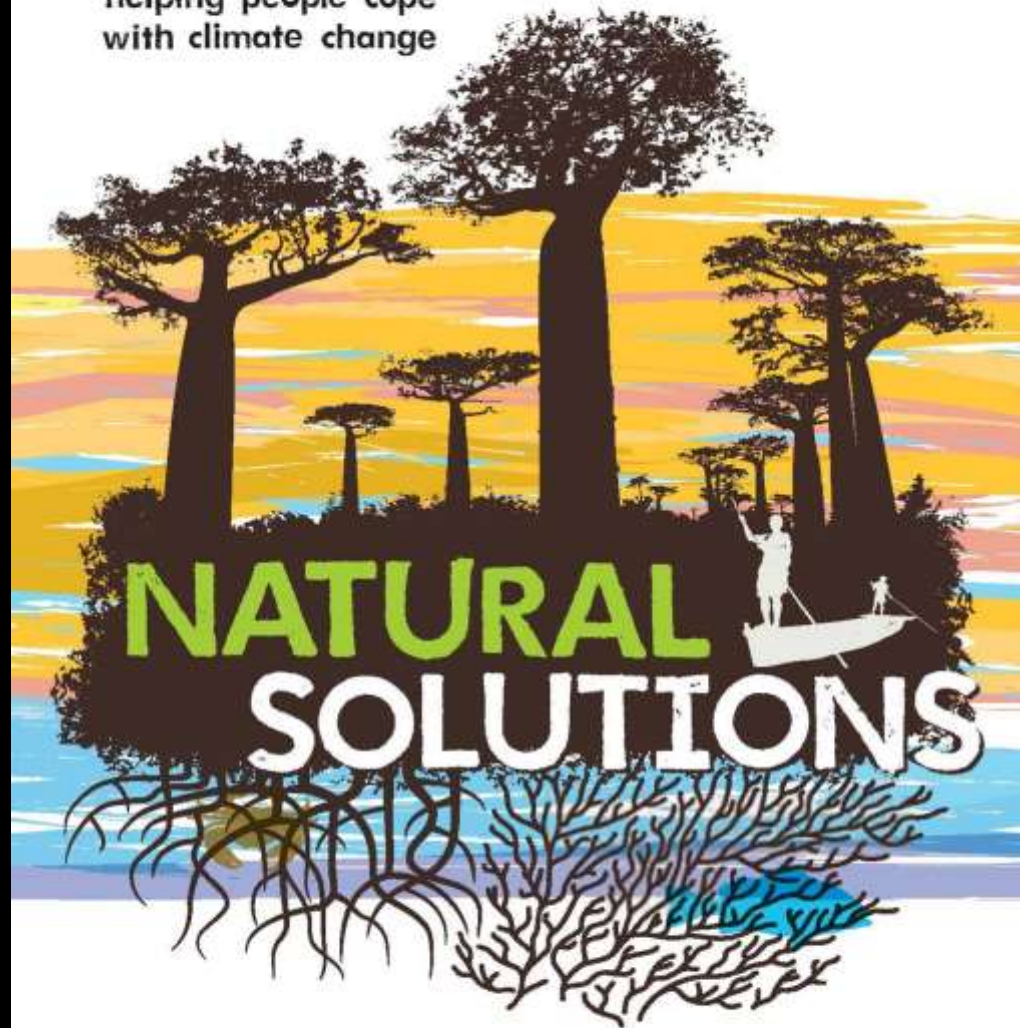
**SOLAR ENERGY**  
(Solar PV, CSP, Solar Heating/Cooling)

**WIND POWER**



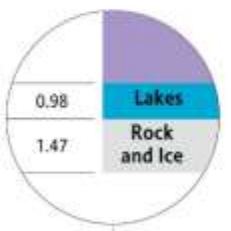
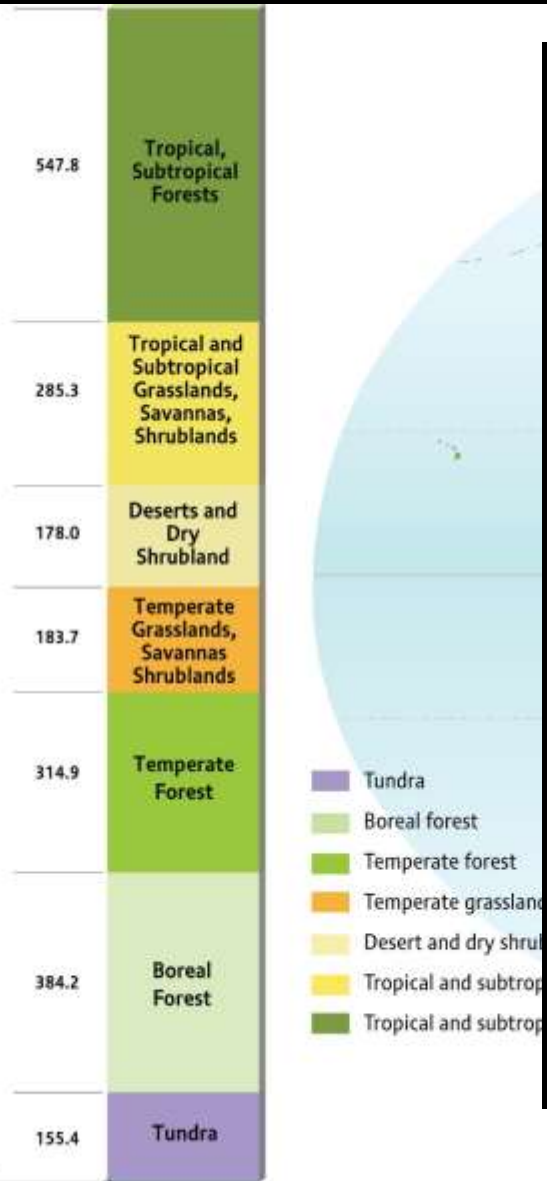
i Employment information for large-scale hydropower is incomplete and not included.

protected areas  
helping people cope  
with climate change



A report funded and commissioned by IUCN-  
WCPA, TNC, UNDP, WCS, The World Bank and  
WWF

Carbon stored by biome  
(Gigatonnes of C)



Source: UNEP - WCMC, 2009.

Terrestrial and Marine ecosystems store

# 50%

of CO<sub>2</sub> Emissions





# Ecosystem Services

ECOSYSTEM

**Supporting**

- NUTRIENT CYCLING
- SOIL FORMATION
- PRIMARY PRODUCTION
- ...

LIFE ON EARTH

## ECOSYSTEM INVOICE



Period

Mid 2016

### Watch out!

The globe is running out of resources ...

We have a choice!

Think Globally,

Act locally and

Change personally

*FREE*

*As long as  
supplies last*

Free of charge

**Earth company (c)**

## WELL-BEING

**Freedom  
of choice  
and action**

OPPORTUNITY TO BE  
ABLE TO ACHIEVE  
WHAT AN INDIVIDUAL  
VALUES DOING  
AND BEING

Human Ecosystem Assessment

Nature does not fit in a USB-stick



The background of the slide is the European Union flag, featuring a blue field with twelve five-pointed gold stars arranged in a circle. The flag is shown with a slight wave, giving it a sense of movement.

Take responsibility & Give voice  
EU policy (REFIT/Biodiversity strategy)  
Climate Cop Paris



30 million hectares managed – 38% Natura 2000





EUROPEAN CHARTER  
FOR SUSTAINABLE TOURISM IN  
PROTECTED AREAS

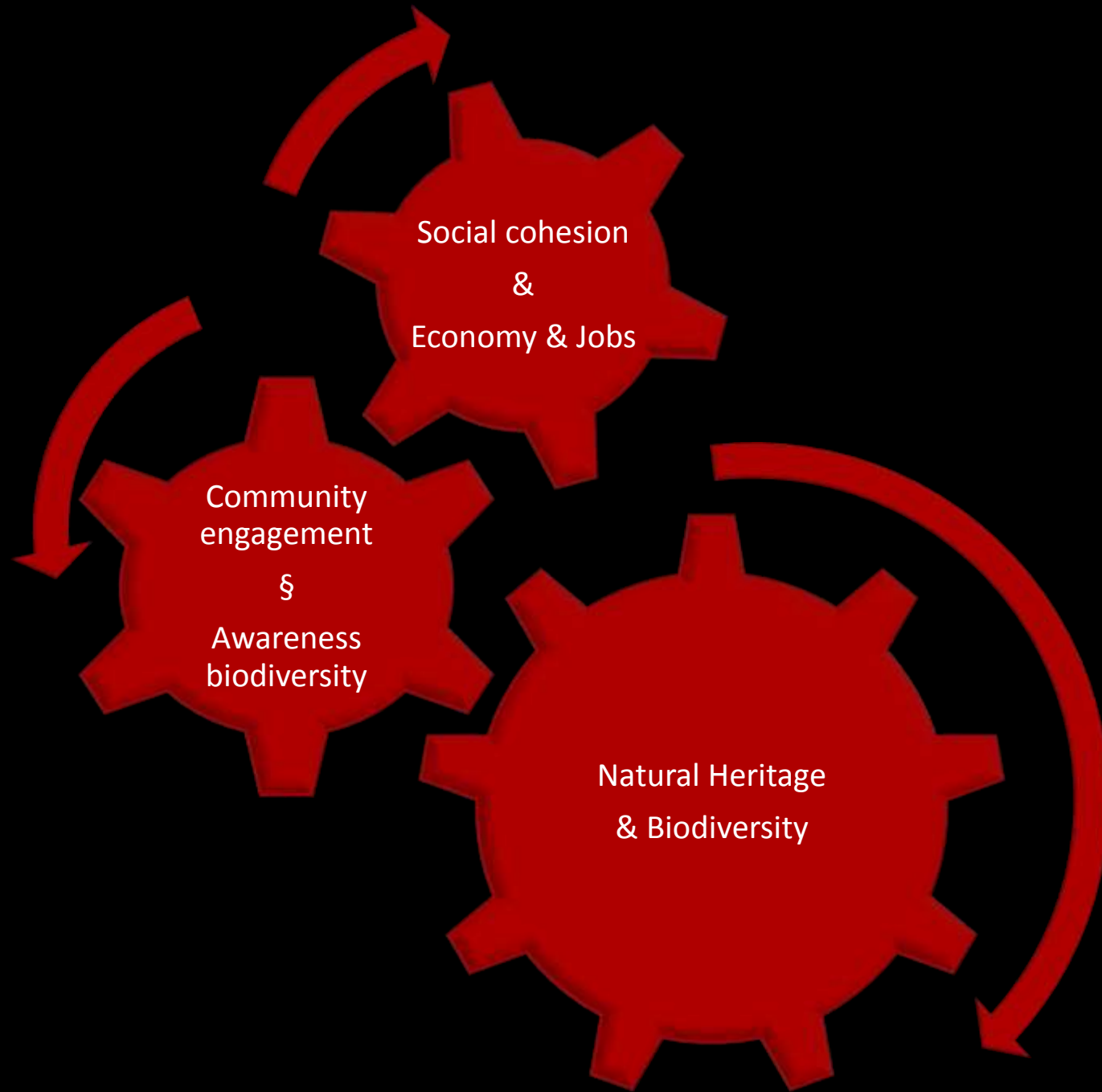


Transboundary Parks  
E U R O P A R C



EUROPARC Federation  
Strategy

2015-2021





- 145 destinations in 17 countries
- 441 million euro's invested
- 72 million visitors per year
- Annual turnover: over 1 billion



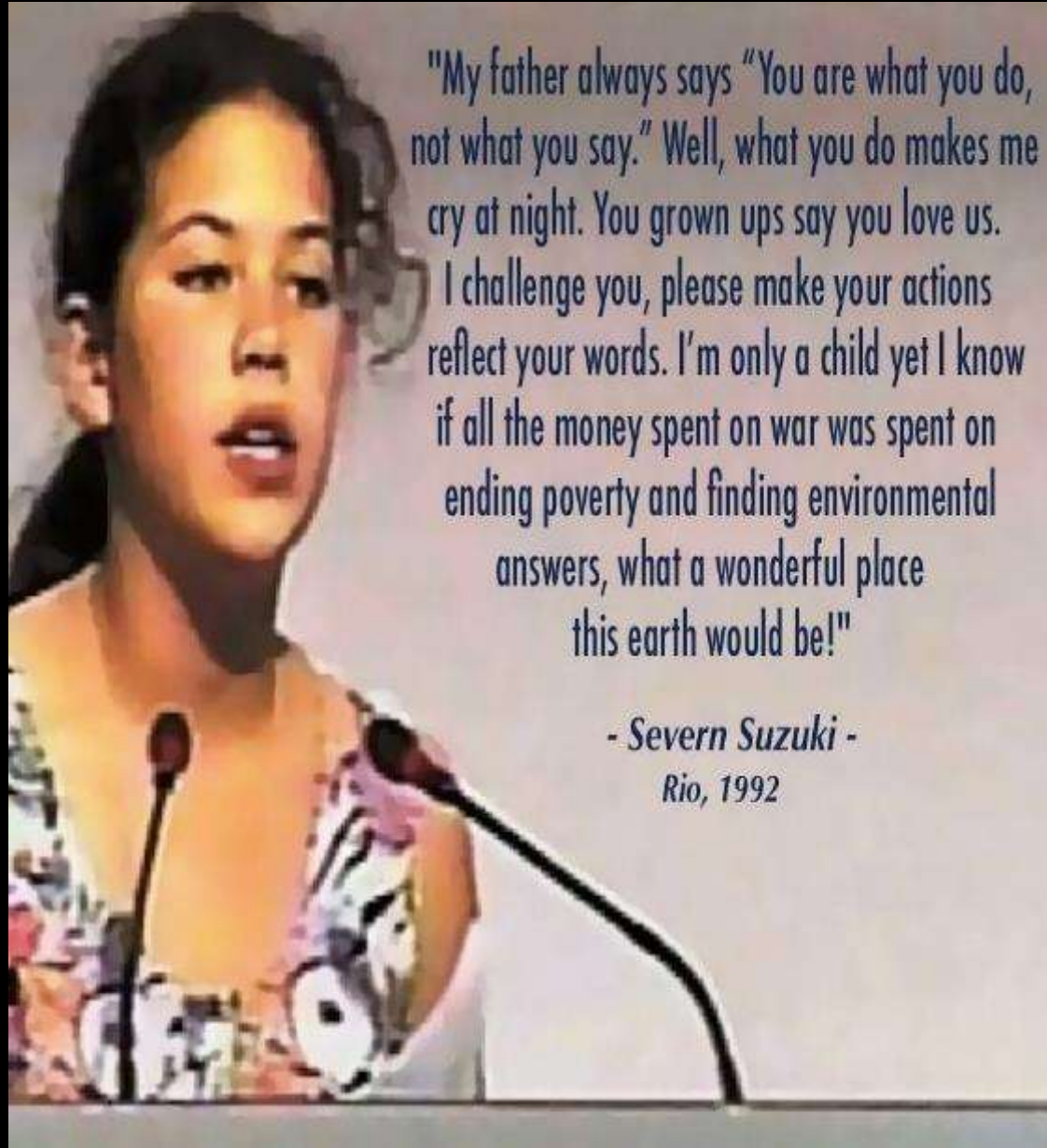
INCOMING CALL

Opportunity  
calling...

ACCEPT

REJECT





"My father always says "You are what you do, not what you say." Well, what you do makes me cry at night. You grown ups say you love us. I challenge you, please make your actions reflect your words. I'm only a child yet I know if all the money spent on war was spent on ending poverty and finding environmental answers, what a wonderful place this earth would be!"

- *Severn Suzuki* -  
*Rio, 1992*




*"Make no mistake: without concerted action, the very future of our planet is in peril ... Unless we take action on Climate Change, future generations will be roasted, toasted, fried and grilled ..."*

Christine Lagarde, managing director IMF





It is not what we say  
It is what we do!

A glowing green globe with a map of the world, surrounded by green grass. The globe is the central focus, emitting a bright green light. The map shows the continents in a lighter shade of green. The background is a dense field of green grass, with some blades in the foreground being more prominent and in focus.

Think globally, act  
locally and change  
personally!