

# **Saving the Climate @ the Speed of Light**

**Joint ETNO – WWF initiative**

# Topics

- Background
- Goals of ETNO-WWF initiative
- The roadmap for reduced CO2 emissions in EU and beyond
- About EU
- ICT and climate change actors
- Difficulties

# Background



1992: ETNO Born

1996: Environmental Charter

2002: Project on ICT's effect  
on Climate Change

2002: 'Sustainability at  
the Speed of Light'

2004: First European Conference on Telecommunications and Sustainability

2005: Joint initiative on Saving the Climate @ the Speed of Light

2006: First Roadmap

1961: WWF Born

1986: Change of name

# Goals

1. ICT is recognised as an important part of the solution for combating climate change in Europe
2. Key actors have a climate change strategy for ICT
3. Concrete „ICT-Climate change” programmes are initiated in Europe by 2007



# The Roadmap

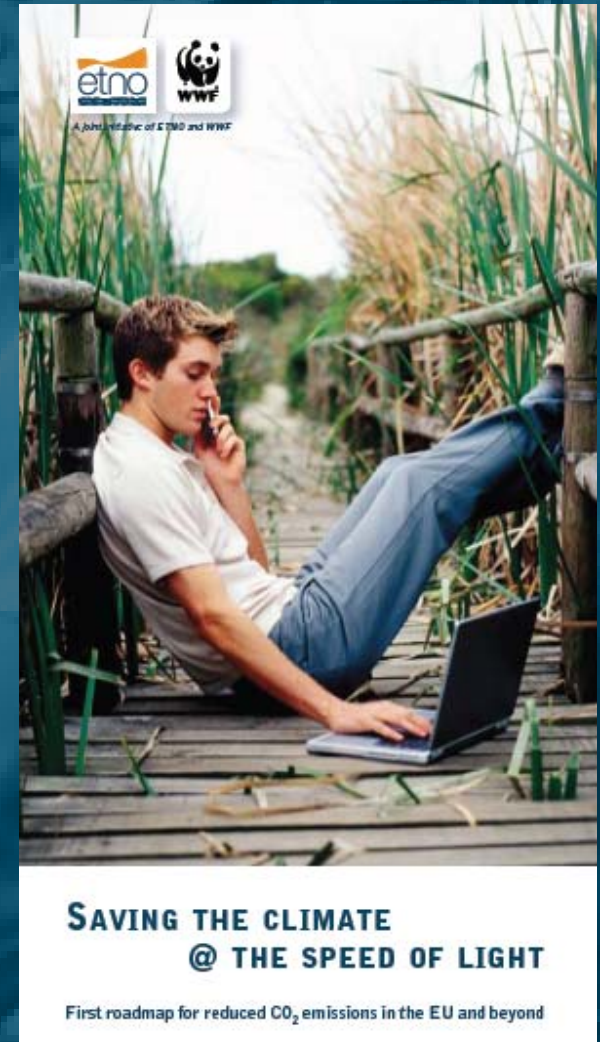
„This initiative is driven by the urge to find solutions, recognising the need for new targets and incentive structures.”  
(Margot Wallström)

## The opportunity of ICT services to reduce CO<sub>2</sub> emission

- A new and more efficient meeting culture: Travel replacement
- Sustainable consumption: De-materialisation
- Sustainable Community/City planning: Combined measures

## An E-strategy for CO<sub>2</sub> reductions in Europe

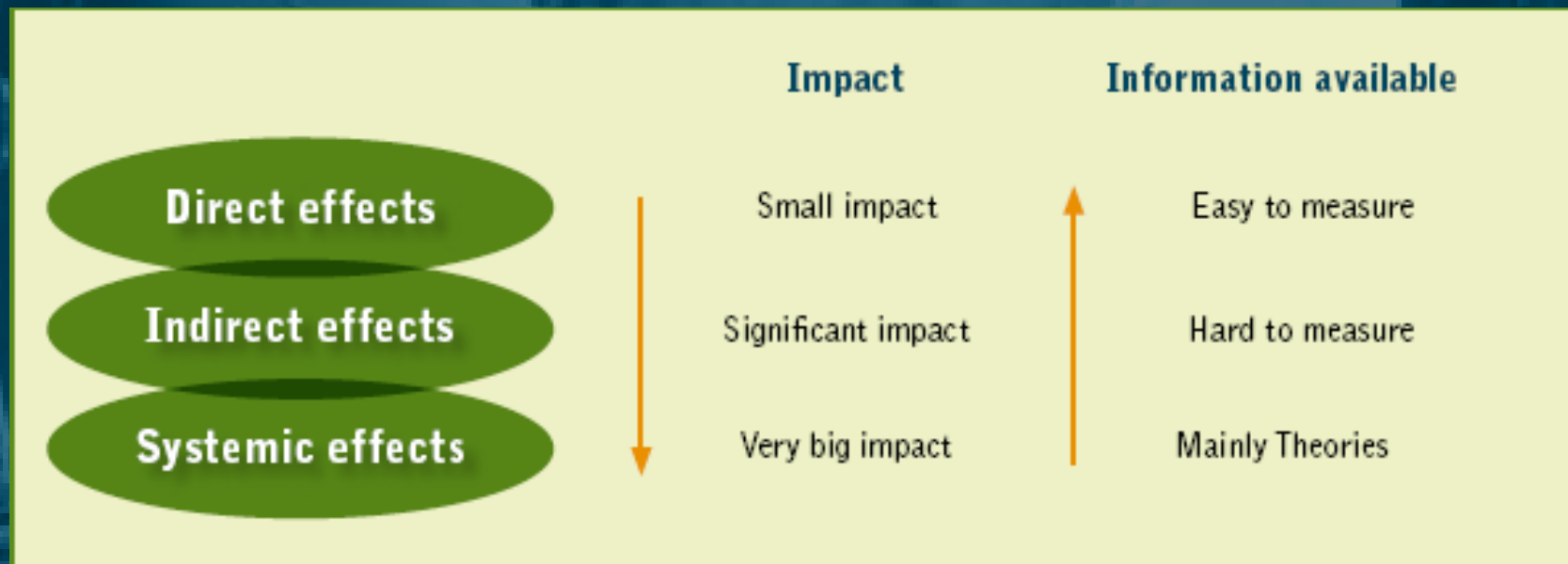
- First steps for 2010: 50 million tonnes CO<sub>2</sub> reduction per year with ICT
- Second step for 2010: ICT-Climate change target for 2020
- Creating a robust strategy



# The Bases of the Results

- Essential data & information: ETNO SWG
- Researches about services
  - Video-conference
    - Deutsche Telekom & Potsdam Institute for Climate Impact Research
  - Audio-conference
    - British Telecom & SustainIT
  - Flexi-work
    - British Telecom & SusTel
  - Virtual answering machine
    - Deutsche Telekom & Öko-Institut
  - Online billing
    - Deutsche Telekom & Öko-Institut
  - Web-based taxation
    - Magyar Telekom & Pannon University

# The Bases of the Results



# 50 M tonnes CO<sub>2</sub>/year - How? (1)

A new and more efficient meeting culture: Travel replacement

→ 24 million tonnes CO<sub>2</sub> / year

- Video-conference
  - 20% business travels: 22 million tonnes CO<sub>2</sub>
- Audio-conference
  - 1 replaced meeting/year: 2.1 million tonnes CO<sub>2</sub>
- Other areas
  - tele-monitoring
  - tele-education
  - tele-medicine, tele-care, tele-assistance





# 50 M tonnes CO<sub>2</sub>/year - How? (2)

Sustainable consumption: e-dematerialisation

→ 4 million tonnes CO<sub>2</sub> / year

- Virtual answering machine  
20% households: 1.03 million tonnes CO<sub>2</sub>
- Online billing  
At least 492,000 tonnes CO<sub>2</sub>
- Web-taxation  
At least 196,000 tonnes CO<sub>2</sub>
- Other areas
  - video and music on demand
  - electronic paper
  - paperless offices
  - e-governance



# 50 M tonnes CO<sub>2</sub>/year - How? (3)

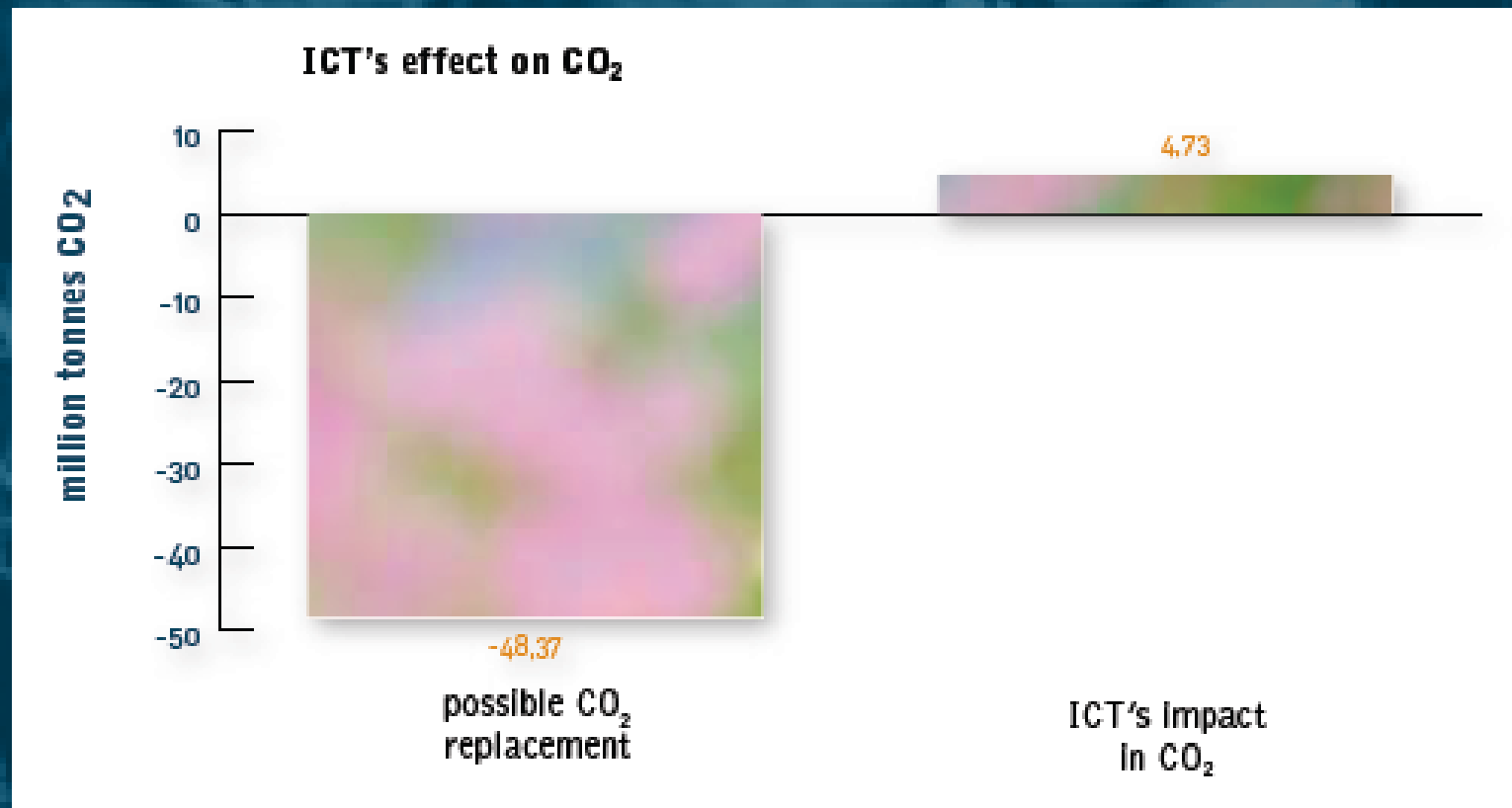
Sustainable Community/City planning:  
Combined measures

→ 22 million tonnes CO<sub>2</sub> / year

- Flexi-work  
10% of employees: 22 million tonnes CO<sub>2</sub>
- Other areas
  - e-commerce
  - intelligent buildings
  - intelligent shopping



# The Other Side



# e-Strategy / Step 1

What is needed for step 1?

Step 1: 50 million tonnes CO<sub>2</sub> reduction per year with ICT by 2010

- Policy revision
  - general energy policies
  - general tax policies
  - public procurement
  - transport policies
  - efficiency policies
  - investment policies
  - innovation policies
  - export and import policies
- Supplementary, parallel actions



# e-Strategy / Step 2

What is needed for Step 2?

Step 2: Climate change target for 2020

- Possible focus areas
  - Sustainable consumption
    - Further e-dematerialisation
    - Indirect effect on sustainable consumption by information
  - Sustainable production
    - Decentralised production
    - Production on demand
    - Converging technologies
  - Sustainable community / city planning including travel replacement



# About EU

May 13. 2008 Press Release of the Commission:  
'Commission casts ICT in green role'

Focusing first:

- Energy generation and distribution
- Buildings
- Lighting

Partnership: first cities



# ICT & Climate Change Actors

- ICT Sector
  - ETNO
    - Greenhouse gas effect of information and communication technologies, 2005
    - Saving the Climate @ the Speed of Light, 2006
  - GeSI
    - McKinsey study, 2008
  - HP
    - From coal power plants to smart buildings at the speed of light, 2008
    - Outline for the first global IT strategy for CO2 reductions, 2008
  - EICTA
    - High Tech: Low Carbon, 2008
- European Commission
  - Margot Wallström, Vice President
    - Preface, 2006
  - Viviane Reding, Commissioner
    - European Business Summit, 2008
    - May 2008 press release



# Difficulties

- Many different actors in ICT – missing one voice
- ICT as a tool in climate protection needs complex way of thinking
- The real potentials relate to other sectors
- Difficult to understand - marketing
- Slow act in policy



Thank you for your attention!

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