

Green Telecom

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Telekommunikationsindustrien i Danmark
Telecommunications Industry Association in Denmark

TI

Main Points

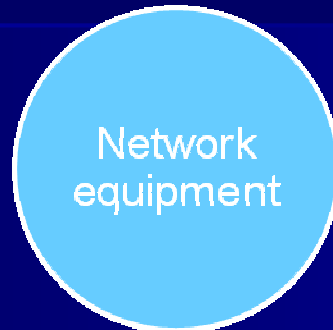
- 1) Telecom operators are dedicated to reduce energy consumption
- 2) Telecom is an essential part of the solution – to reduce energy consumption in other sectors
- 3) The digital infrastructure is in place
- 4) Politicians! Be ambitious! And take action!

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Green Challenges for Telecom Operators

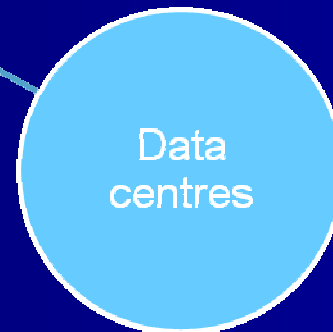
2 pct of total CO2



LTE, all IP, ethernet, fibre, hosted services IP PBX

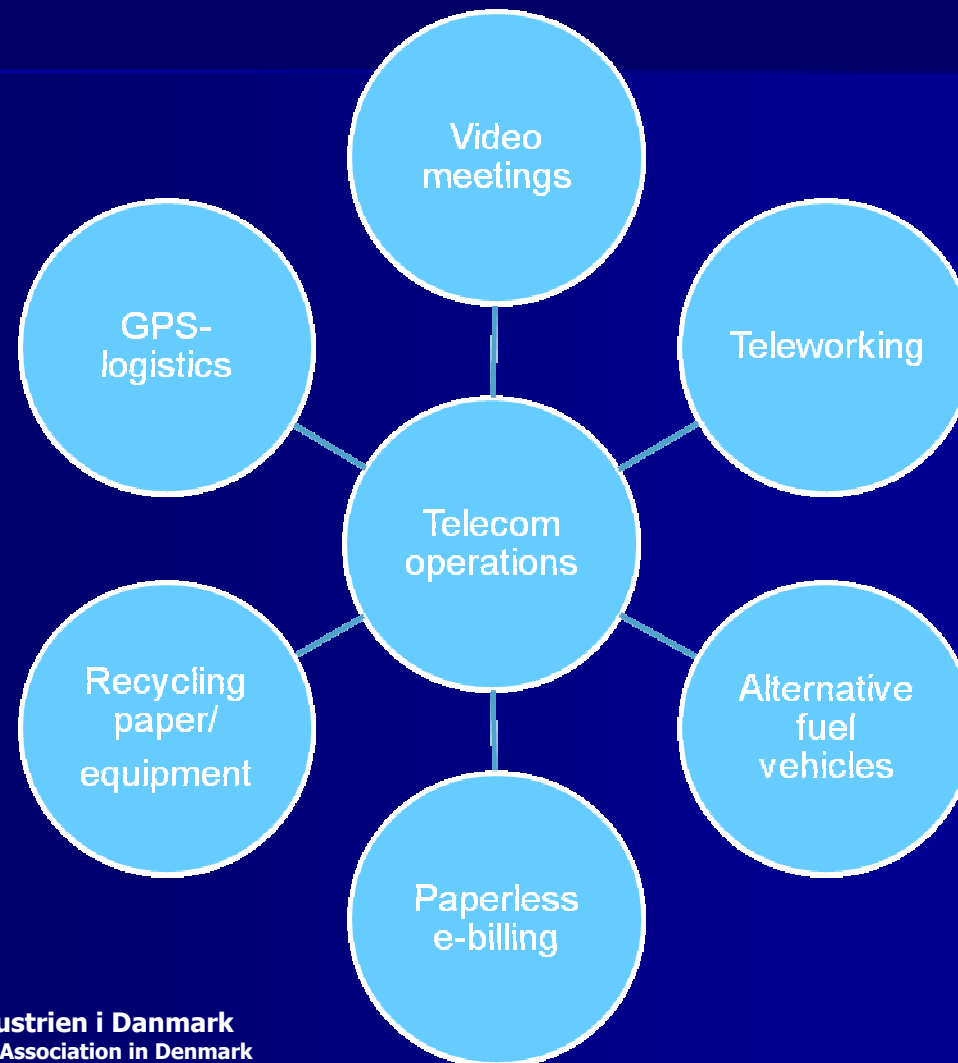
Phones/equipment
Agreements with vendors
Single standard - mobile battery charger

Reducing energy consumption
Reducing costs



Get rid of old servers
Virtualisation / Cloud

Telecom Operations



Operators

- Operators all over the world work hard on reducing energy consumption (costs)
- Also operators in Denmark have concrete action plans to reduce energy consumption (CSR)
 - Network equipment
 - Own operation
- Signed the ETNO Sustainability Charter
- Participate in the Carbon Disclosure Project

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ICT – Part of the Solution

- In 2008, The Climate Group found that ICT could enable emissions reductions of 7.8 Gt CO₂ in 2020 - 15% of business as usual emissions
 - Based on an analysis by McKinsey & Company
 - SMART 2020: Enabling the low carbon economy in the information age
- **Motor systems**
- **Logistics**
- **Buildings**
- **Grids**
- **Teleworking**
- **Telemeetings**
- **eGovernment**
- **Dematerialisation**
 - all digital

Teleworking

Fact: If 10 pct. (19.3 mill) of EU-25 work force did flexi work... potential reduction of app. 22 million tons of CO2

- Work from home
- Efficient use of time / fewer cars



Telemeetings

Fact: If 20 pct. of all business travels within EU-25 was replaced by video conferences...potential reduction of app. 22 million tons of CO2

- Substitute meetings with phone conference or telepresence solutions
- Efficient use of time / less traveling



Public Sector - Translations via Telecom

Higher productivity
Less transport

- Successful pilot projects in hospitals
- Expansion to other institutions/sectors
- National translation center (?)



Public Sector - Tele Medicine

Higher productivity
Better service
Less transport



- Successful pilot project – patients with reduced lung function – video/test

Public Sector - Interrogations

Higher productivity
Less transport
[Better service]



Successful pilot project

Telepresence

Decision – full implementation



Dematerialisation

Fact: 1 CD/DVD = 1 Kg CO₂
There are 7 billion DVDs and
10 billion CDs sold every
year = 17 million ton CO₂

- Digital infrastructure - e-government and digital distribution of music, films, reports etc
- Save production and distribution of CDs and DVDs
- Reduce the use of paper


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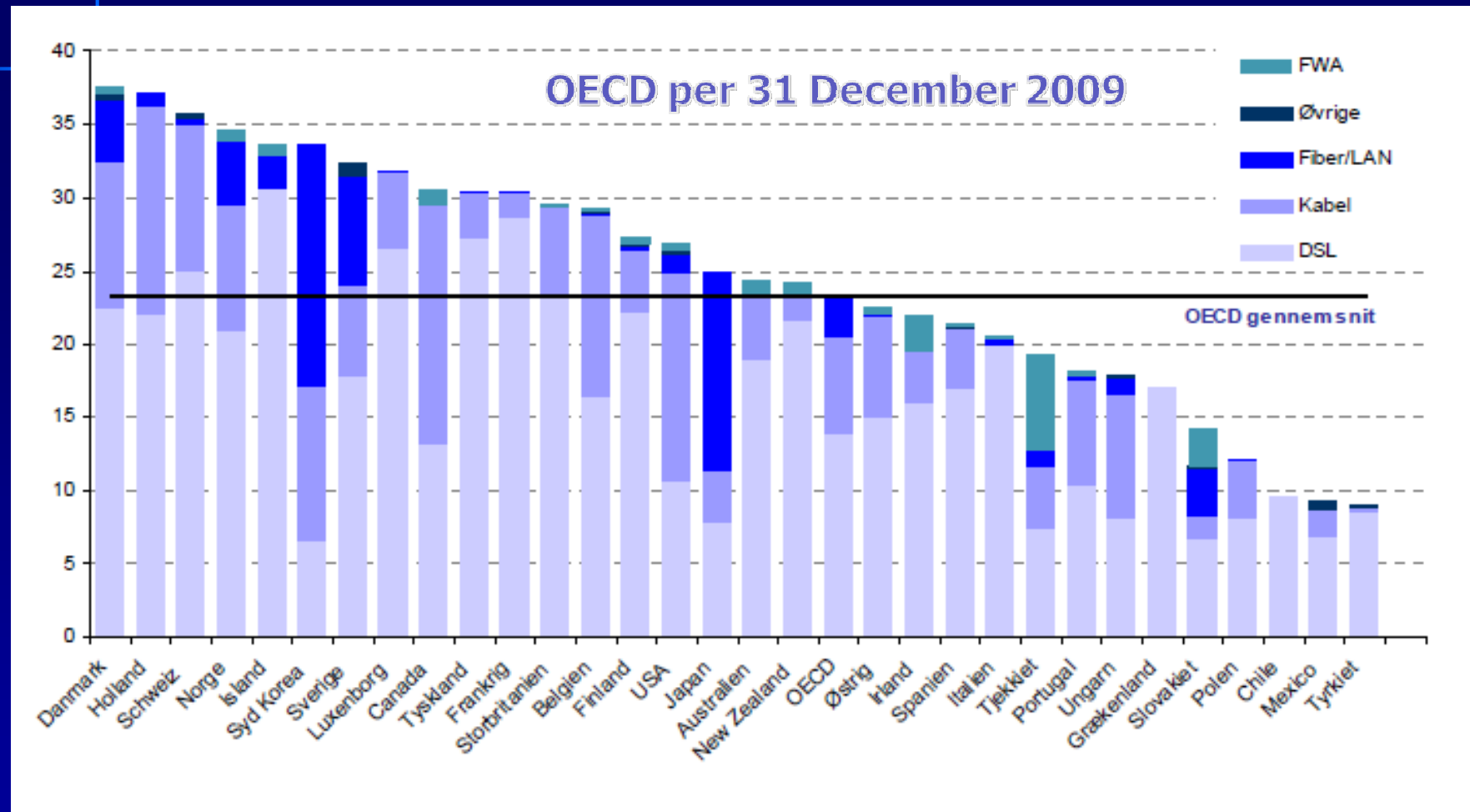
High Availability of Broadband

	Availability 1 July 2010
2 Mbit/s DS	99 pct. of HH/BU
10 Mbit/s DS	92 pct.
100 Mbit/s DS	25 pct.
2 Mbit/s US	90 pct.
10 Mbit/s US	45 pct.
100 Mbit/s US	24 pct.

High Take Up

	Take Up 1 July 2010	
Fixed Broadband	2,1 million 38,2 per 100 IHB 74 pct. of HH/BU	
Dedicated Mobile Broadband (dongles)	1 million 19 per 100 IHB	
Mobile Subscriptions	7,6 million 136,3 per 100 IHB	

DK Leading on Broadband



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Action Points

- Government - stimulate demand
 - Make ICT a high political priority – across the whole government
 - Formulate ambitious visions and goals
 - Put focus on national implementation of the successful pilot projects
 - Put focus on the large public tasks
 - education, health sector, social sector

Action Points

Fact: telepresence meeting = 10-30 kg CO₂. CPH-Bruxelles roundtrip = 215 kg CO₂ per passenger.

- Government - formulate concrete goals
 - use of teleworking
 - Use of telemeetings (invest in equipment)
 - Increase productivity and decrease pollution
- DK has the EU Chairmanship in 2012 – opportunity to formulate goals for Denmark – and EU

Action Points

- Local Municipalities – be ambitious with use of telecom and broadband in the public services and in the administration
- Stimulate investments in infrastructure
 - Mobile masts and antennas
 - Civil work – digging activities

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Telecom = Pollution....



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Or Green Growth and Innovation?

