

FTTH Council Europe

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FTTH Council Europe

FTTH Council Europe

The Organisation

- Founded in 2004, non-profit organisation
- More than 100 members
- Members: manufacturers, construction & engineering companies, NPO, academia

The Vision

- The vision of the FTTH Council Europe is a sustainable future enabled by Fibre to the Home

The Mission

- The mission of the FTTH Council Europe is to accelerate the FTTH adoption by all broadband stakeholders through education and promotion in order to enhance the quality of life, contribute to a better environment and increased competitiveness.

FTTH Worldwide

FTTH Worldwide December 2008



...and FTTH continues to **grow**

Global Ranking

- Joint project of the three FTTH Councils worldwide
- Based on market research of the Councils, using the FTTH Council FTTH Definitions Document
- Ranking: Percentage of households in a country/economy that have a FTTH connection (subscribers)
- All countries with more than 1% FTTH penetrations are included

FTTx Definitions

Included

- **FTTH**Home – Complete Fibre Path to Home
 - in-building cables: house copper or fibre or wireless
- **FTTB**Building – Fibre to Apartment/Office Building
 - in-building cables: building copper or fibre regarded as a transitional stage to FTTH
- Both defined in global FTTH Councils, FTTH Definitions Document
 - http://www.ftthcouncil.eu/documents/studies/FTTH-Definitions_Update_2008.pdf

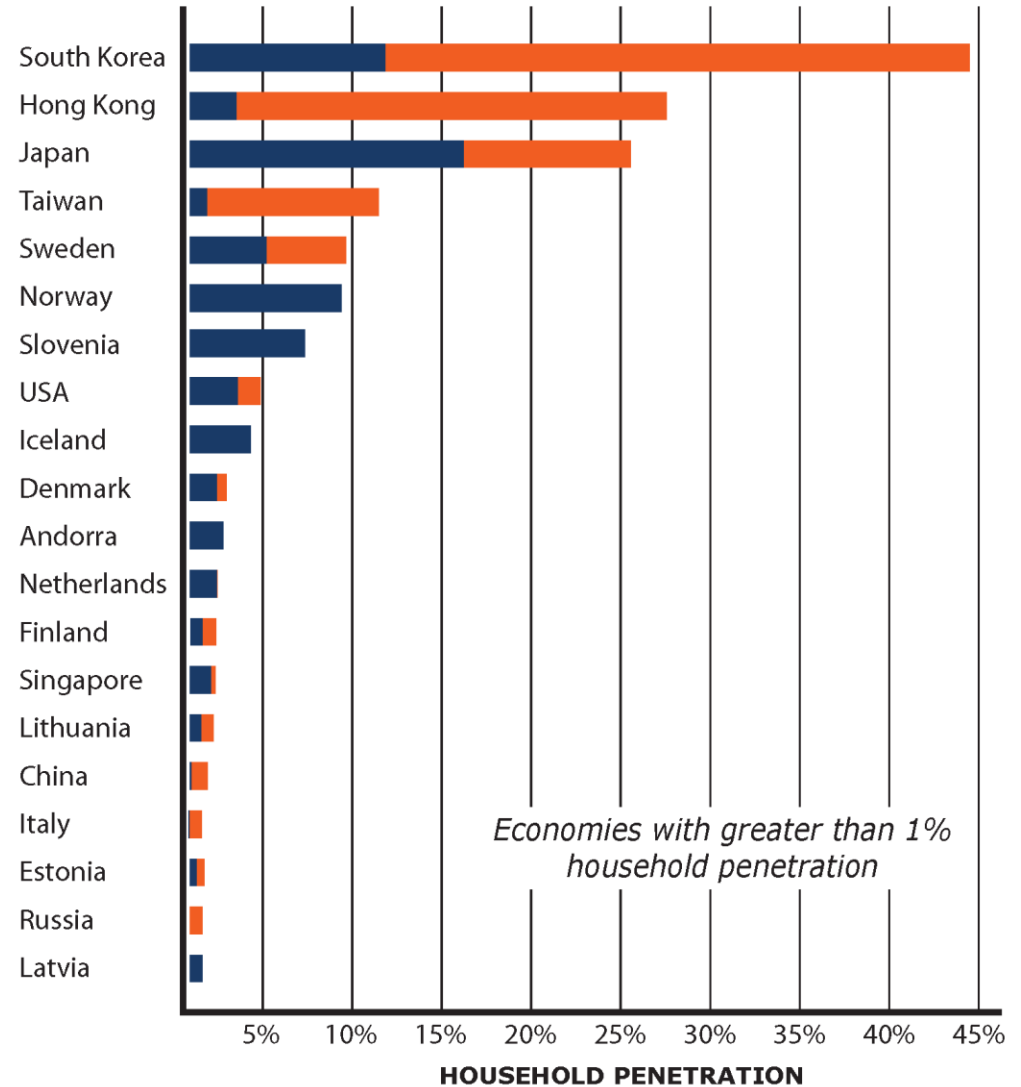
Not Included

- **FTTC**urb / **FTTN**ode – Fibre to Street Cabinet
 - distribution and drop cables using telco copper (DSL) or new copper
 - categorised as DSL technologies.

Global FTTH/FTTB Ranking

- 13 European economies in the Global Ranking
- But big economies like Germany, France, UK etc. are missing
- If European Union would be seen as one economy (like USA) then only 0.6% penetration and no mentioning in Global Ranking

Economies with the Highest Penetration of Fiber-to-the-Home / Building+LAN



Year-End 2008 Ranking

Source: Fiber-to-the-Home Council
Feb 09

(blue) Fiber-to-the-Home Subscribers
(orange) Fiber-to-the-Building + LAN subscribers

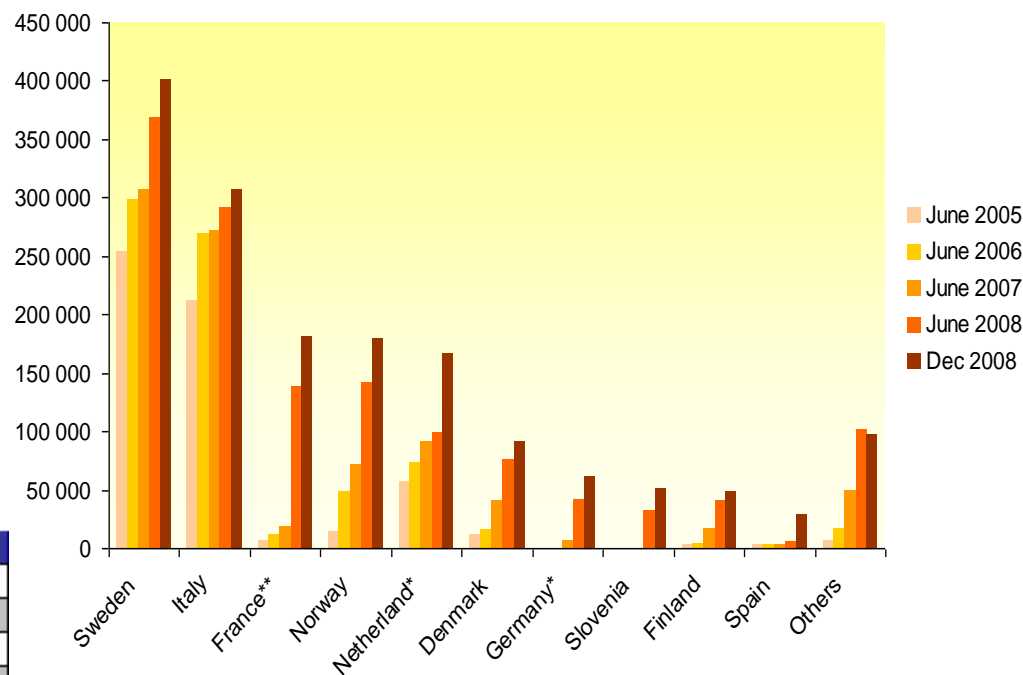
FTTH in Europe

FTTH in Europe

Status December 2008

- 1.7 Mio. subscribers, 11.3 Mio. homes passed
- 3/4 of subscribers in just 5 countries
- Less than 10% of homes passed are deployed by incumbents

Evolution of FTTH/B subscribers in Europe (1)



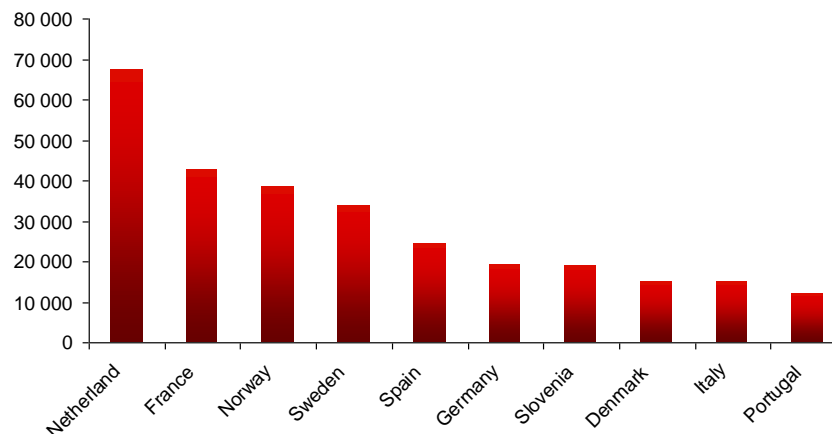
Source: FTTH-Council Europe/IDATE 2008

December 2008		
Incumbents	22	9,8%
Municipalities / Power Utilities	131	58,5%
Alternative operators / ISPs	61	27,2%
Housing companies & Other	10	4,5%

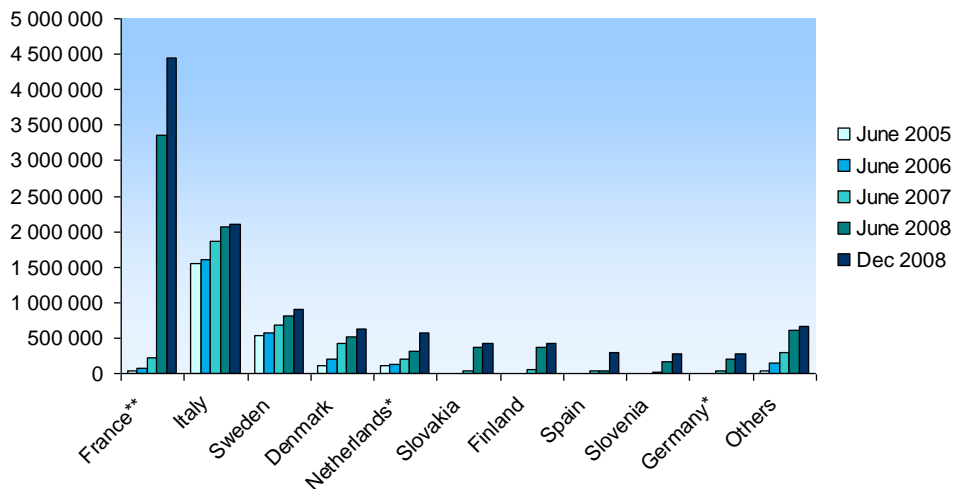
FTTH in Europe

- 52.8% of subscribers are connected to FTTH
- 47.2% of subscribers are connected to FTTB

New FTTH/B subscribers between June 08 and December 08



Evolution FTTH/B Homes Passed in Europe (1)



Heavy Reading on FTTH maturity:

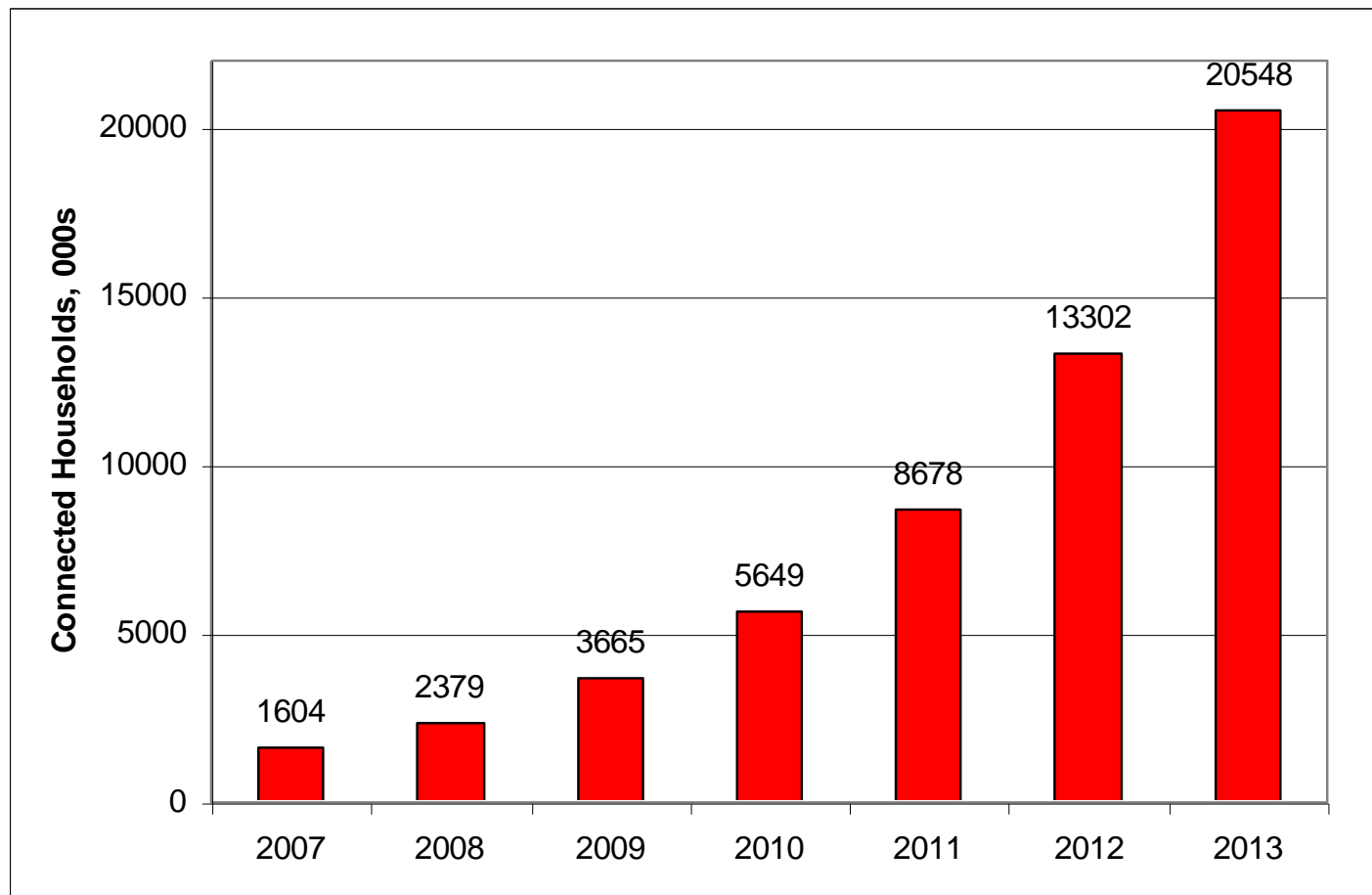
- USA are 4 years ahead of Europe
- Japan is 8-10 years ahead Europe

FTTH in Eastern Europe

- In Russia, FTTH/B is becoming the main means of Internet access:
 - Deployments have been made by private operators VimpelCom and Comstar-UTS
 - The main architecture is FTTB
 - There are, December 2008, more than 6.3 million FTTH/B homes passed, with a take-up rate of nearly 10%
- Major deployments also in Slovenia and Slovakia and Baltic countries

FTTH Market Forecast

European FTTH Forecast



Building a Sustainable Future

What does FTTH Stand For?

FTTH means

- High guaranteed bandwidth per user
- Symmetrical bandwidth
- High Quality of Services
- End game technology for broadband

Advantages of FTTH:

- No strict distance restrictions
- No shared bandwidth
- No network-bottlenecks
- No latency-problems
- No cross talk
- Real bandwidth instead of „up to“

Is FTTH a Sustainable Technology?

- Does FTTH have a positive impact on our:
 - Society and Quality of Life
 - Economy
 - Environment



FTTH & Society



Society

FTTH Impacts our Lives

Society



Web 2.0

eEntertainment

eLearning



Teleworking



eHealth

eHome



eBusiness

eGovernment



Societal

Environmental

Socio-Econ. Benefits of FTTH

- FTTH can provide:
 - Significant reduction in telecom costs
 - Improvements in educational facilities and services
 - Improved healthcare
 - Improved person care and reduced care costs
 - Positive impact on GDP (Gross Domestic Product) in rural areas

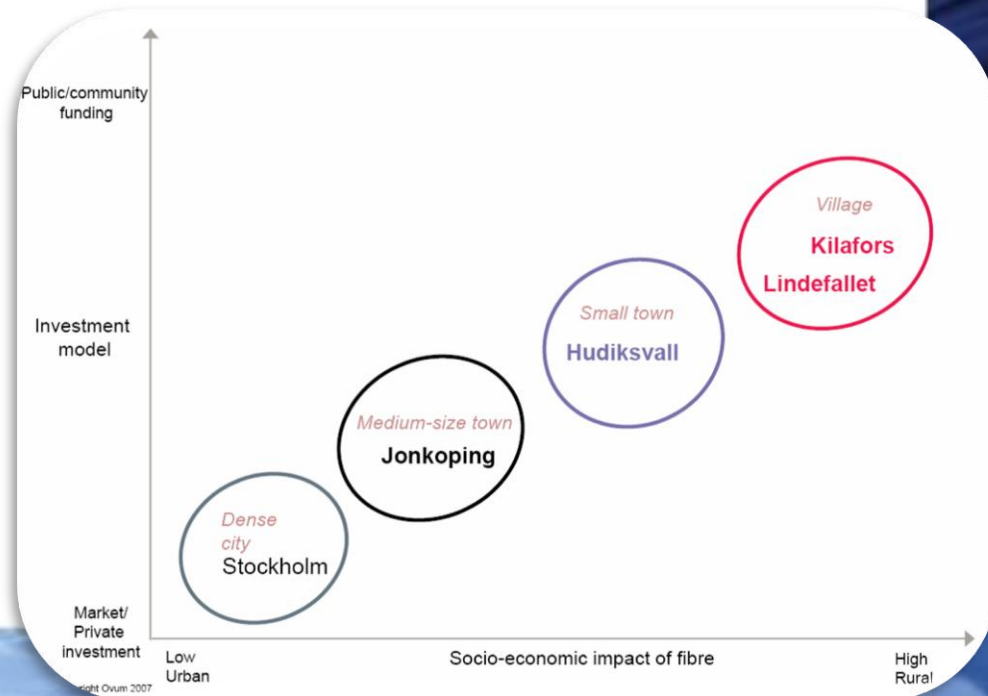


Improved Quality of Life

Socio-Economic Impact

Study by Ovum for FTTH Council Europe:

- FTTH enables users to benefit from real broadband application services
- FTTH-users are ready to use new services for teleworking, eLearning etc.
- FTTH-users are more satisfied
- Highest impact in rural areas



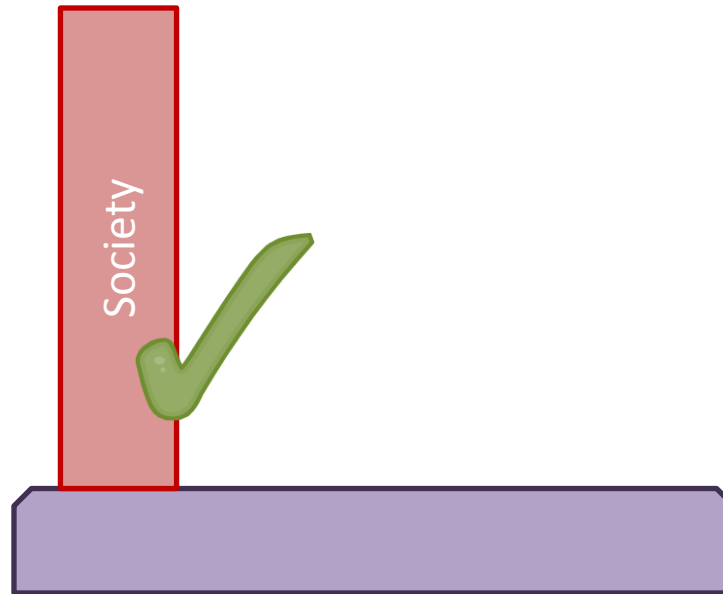
FTTH and Society

The “Net Generation” will expect to have high bandwidth available:

- Conclusion of Don Tapscott about his research:
“Young people all over the world are the active users of the new media and also active collaborators and contributors to all this. They are coming of age in the digital age and this leads to an unprecedented demand on network’s bandwidth, need for speed and insatiable thirst for content. That situation changes their mindset and their demand in an unprecedented manner. As they will become parents themselves, that demand will only grow further and networks better prepare for that.”
- Our real-life experiment in Copenhagen with three young university students proved Don Tapscott right.

FTTH & Society

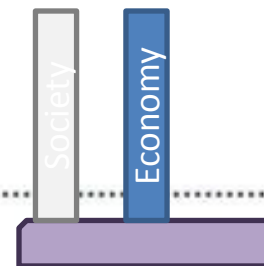
- FTTH has positive impact on society



FTTH & Economy

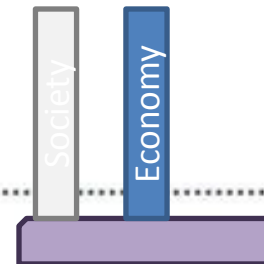


Economic Impact



- FTTH creates business opportunities:
 - Deployment of FTTH
 - Operation of FTTH networks: increased ARPU and lower churn-rate
 - Development and operation of new and innovative services
 - Increased revenues for entertainment industry based on online services and content
 - Efficient telecommunication and information exchange – new ways of working
- FTTH is a critical driver for the knowledge economy

Macro-Economic Impact



US-Report “Connected Nation” key findings:

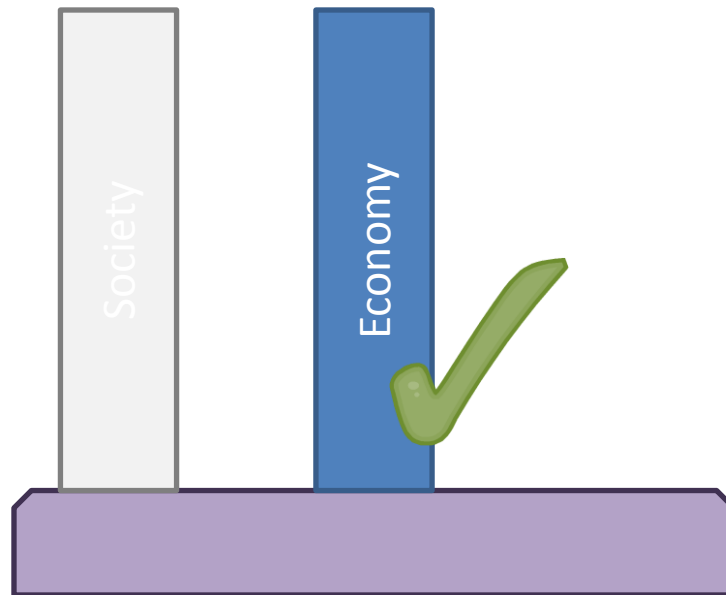
- Adopting a national policy to stimulate the deployment of broadband in underserved areas of the U.S. could have dramatic and far-reaching economic impacts. For instance, just a seven percentage point increase in broadband adoption could result in:
 - \$92 billion through 2.4 million jobs created or saved annually
 - \$662 million saved per year in reduced healthcare costs
 - \$6.4 billion per year in mileage saving from unnecessary driving
 - \$18 million in carbon credits associated with 3.2 billion fewer lbs of CO² emissions per year in the United States
 - \$35.2 billion in value from 3.8 billion more hours saved per year from accessing broadband at home
 - \$134 billion per year in total direct economic impact of accelerating broadband across the United States

Australian Report “True Broadband” key findings:

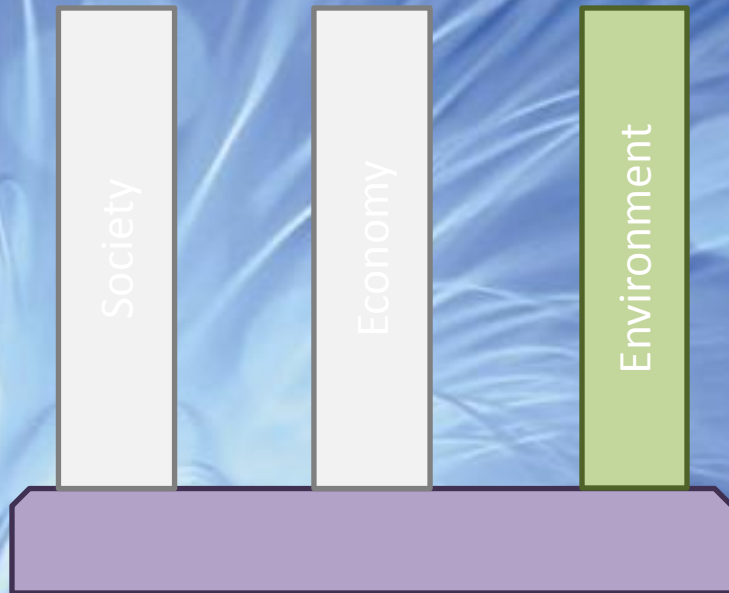
- The availability of true broadband just in the region of Brisbane and Moreton (Queensland) results in
 - More than \$4 billion increase of Output within 15 years
 - More than 2/3 of output-increase comes from industries other than telecommunication
 - 1,500 new jobs per year

FTTH & Economy

- FTTH has positive impact on economy



FTTH & Environment



Environmental Impact



- Usage of FTTH-services has positive impact on environment
 - Less commuting and therefore less traffic
 - Less business travels
 - Less long distance transport of patients
- Key Results of a study of PriceWaterhouseCoopers/Ecobilan:
 - The environmental impact of the deployment of a typical FTTH network will be positive within less than 15 years in average
 - Intelligent deployment (e.g. using sewers and existing ducts) can even improve the positive impact of FTTH
 - Using FTTH and FTTH services save CO² equivalent of driving with a car 4,600 km per year – for every household!

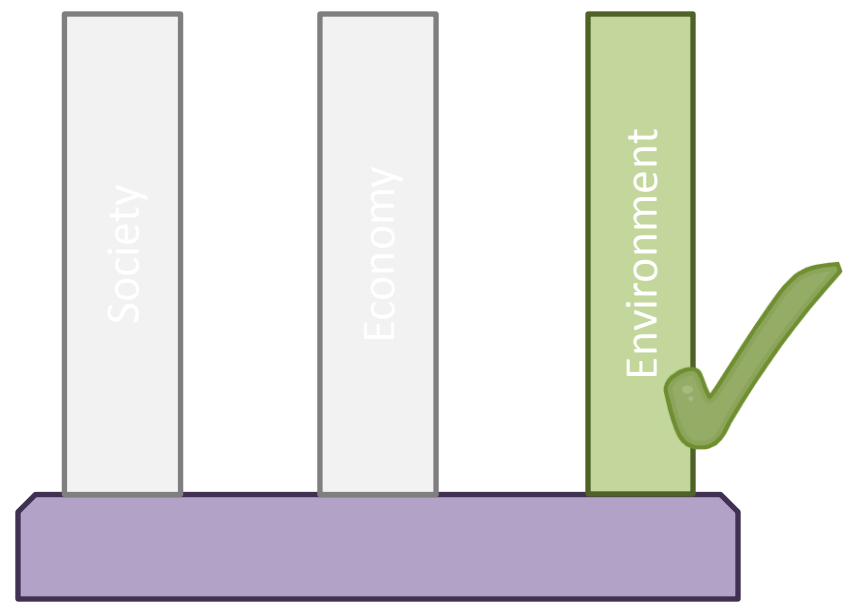
Environmental Impact



- Next Step: FTTH Council Europe together with PwC created a “Configurator” which allows to calculate the specific impact of every FTTH-network
- Network operators/planners/deployers can therefore:
 - Calculate the environmental footprint of their network
 - Optimise the deployment for perfect environmental benefits
 - Compare the network with other projects
 - Prove the positive environmental impact of their network to the stakeholders

FTTH & Environment

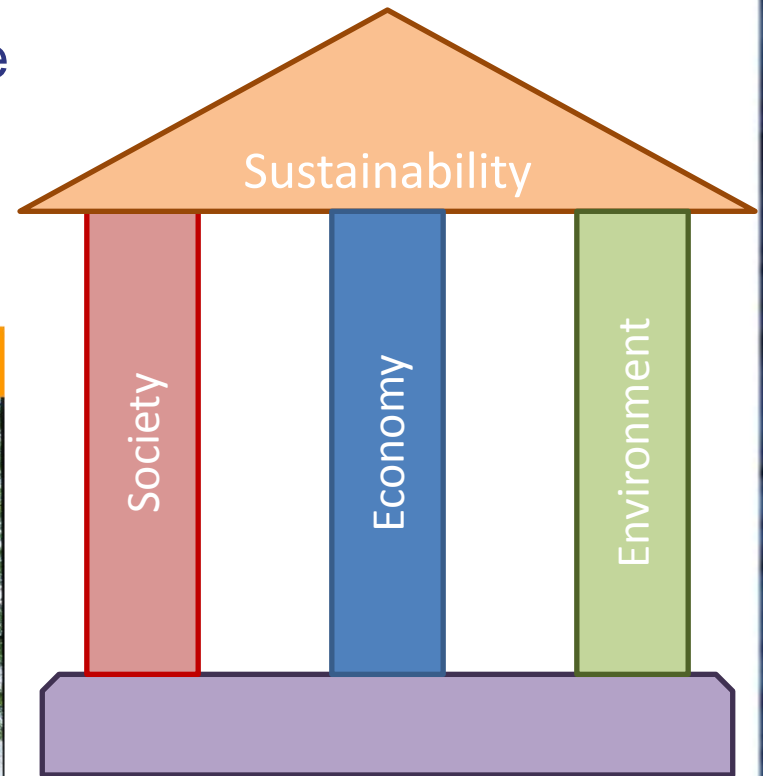
- FTTH has positive impact on environment



Conclusion

FTTH & Sustainability

- FTTH has a positive impact on our:
 - Society and Quality of Life
 - Economy
 - Environment



FTTH = a chance for sustainable development

More

- Teleworking
- Videoconference
- Medicine, care
- Governance
- Training, education
- P2P, exchanges
- Video surveillance

Less

- Life constraints & stress
- Inefficiencies of services
- Intense operations
- Infrastructures/transport
- Environmental changes
- Collective costs

- Business creation
- Family life balance
- Local development
- Safety & nurturing

Conclusion

Building a FTTH network



Building a Sustainable Network



Building a Sustainable Future

Let's start today!

FTTH COUNCIL EUROPE

Thank you for your attention!

