

# Talk Overview

**Telecommunications based solutions can help to reduce the effects of climate change by reducing the demand for energy. An end-to-end view is developed, highlighting the various points across a communications network where positive action can help to alleviate energy use and drive up services that telecommunication consumers can adopt to improve efficiency. Actions that vendors are taking to develop greener products are highlighted, together with the reasons these actions are critical to realize a broadband economy.**



The Future Is Green

# Using Telecommunications to Reduce Environmental Impact

**Green Communications**

Innovative  
Green Network  
Solutions

**Green Huawei**

Green Supply  
Chain Mgmt.  
(e.g. RoHS,  
WEEE)

**Green World**

Protecting the  
earth by  
innovative ICT  
solutions

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# The Future Telecoms Environment:

## The Generally agreed vision is that:

- By 2030 our cities will be very clever.
- Our surroundings – buildings, bus stops, bill boards, cars, phones, maybe even our clothes - will have varying levels of inbuilt intelligence, sensing, tracking and communications capabilities.
- This level of connectivity and interaction will fundamentally change how we manage our lives and living spaces – at home, work and play - and all points in between.
- All of this will change our views of mobility.
- To deliver this vision of the future needs the foundations to be laid now



# Important Industry Trends

## WE CONTINUE TO GROW AND ADD STUFF

- Smart GRID
- Broadband Europe
- Deployment of LTE and Femto cellular technology
- Service convergence – Semantic web emerges
- Seamless connectivity
- Access to Internet/Services world goes mobile
- More phones and devices than people 10bln or more by 2015

## THEN WE START TO DEMATERIALISE

- Inclusive and directive 'smart' government
- Industry Partnerships
- Locally governed communities
- Services proliferate based on Telecare, eHealth, e-Government, Smart Metering, eEducation
- Social platforms drive consumer growth and behaviour

## BOTH NEED TO BE DONE TOGETHER



**1<sup>st</sup> Two important things we need to know ....**

# Today's Reality - Carbon intensive emitters



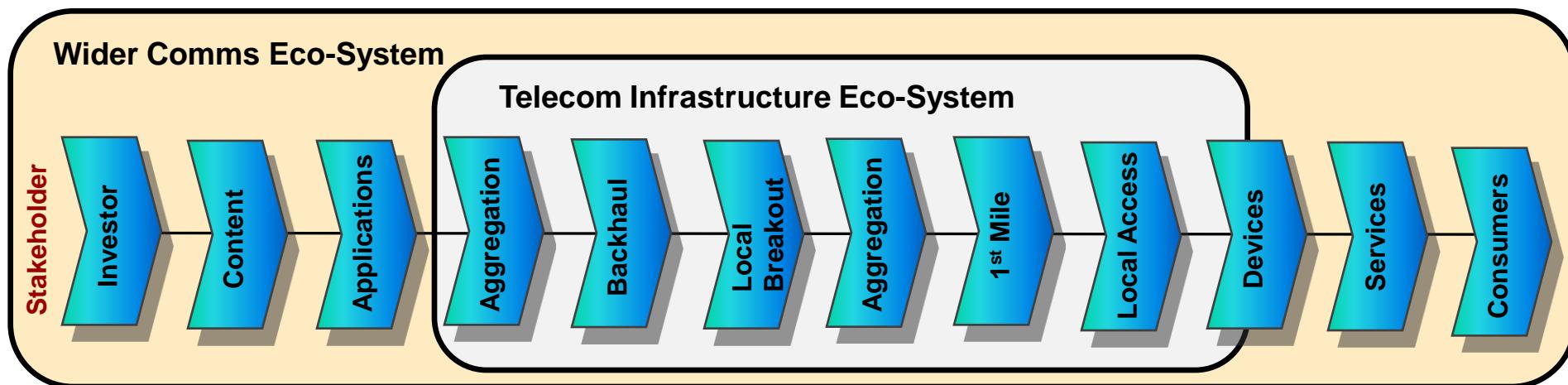
ELECTRICITY

AGRICULTURE  
DOMESTIC  
FORESTRY  
WASTE  
ETC.

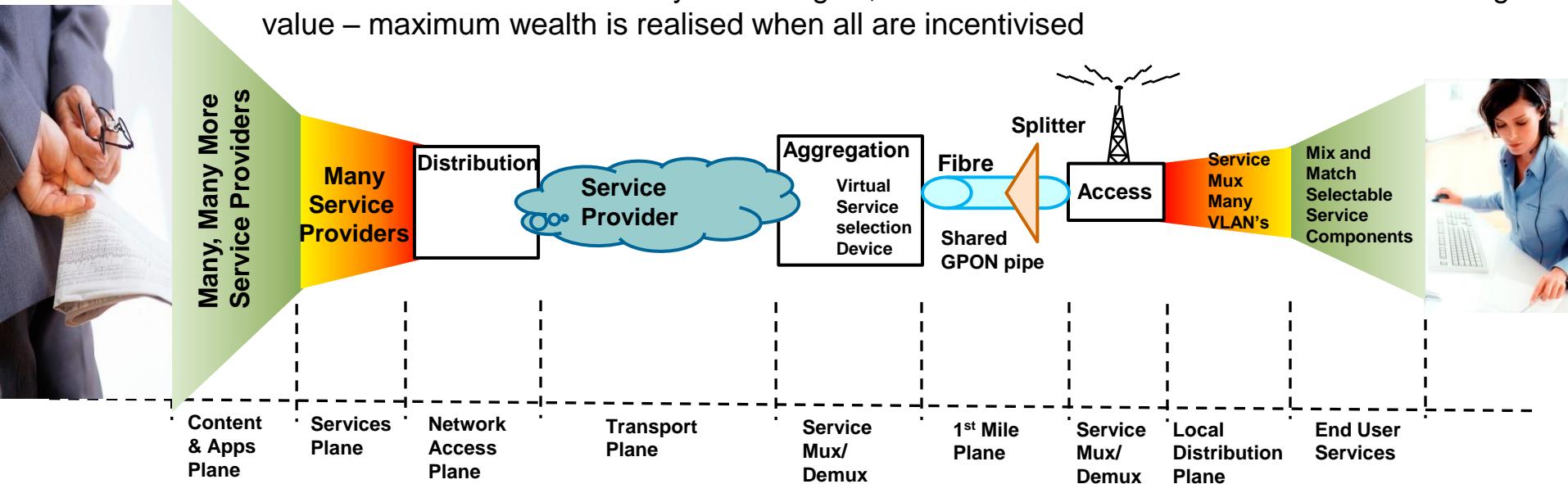


BUILDINGS

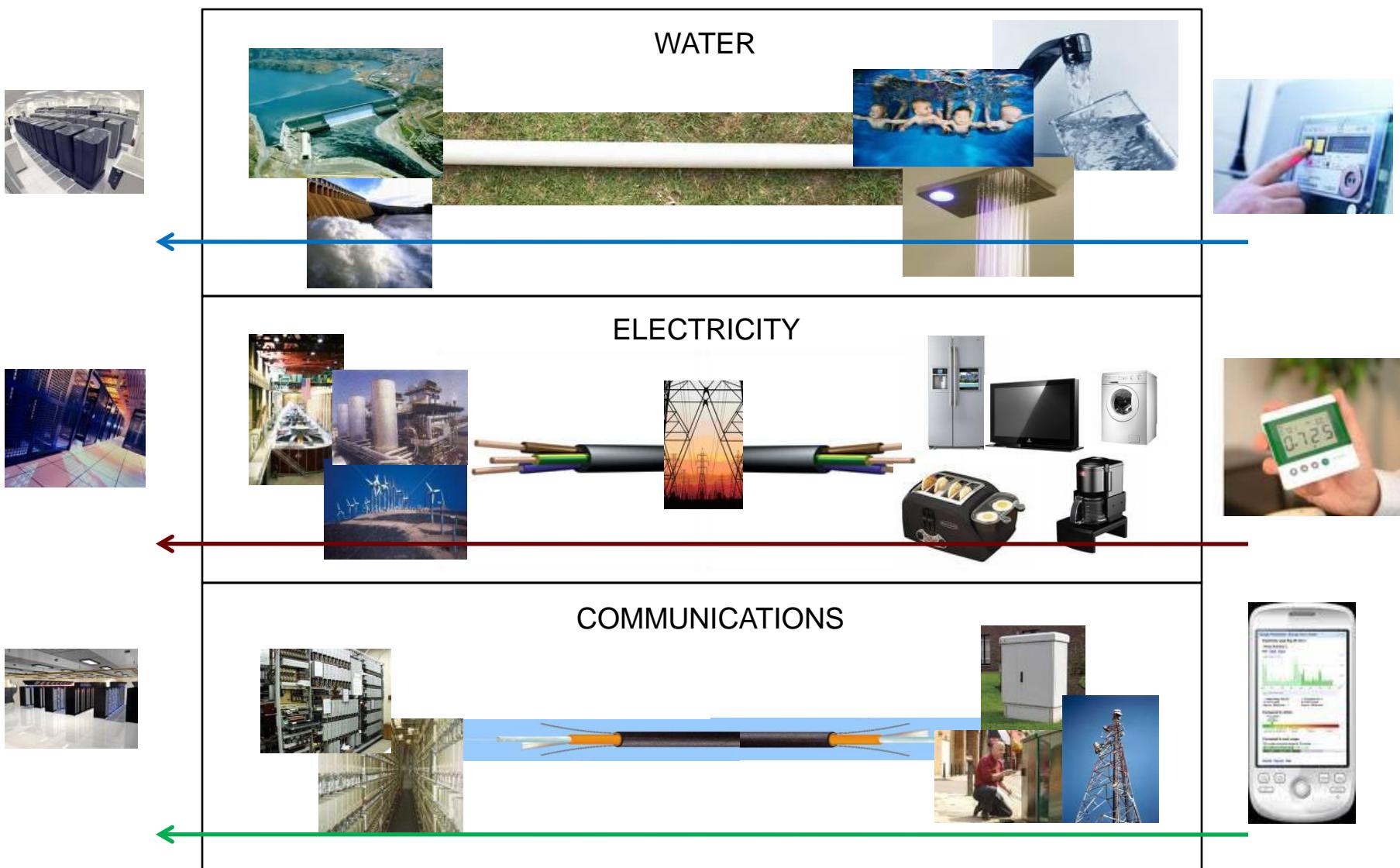
# The Broadband Value Chain



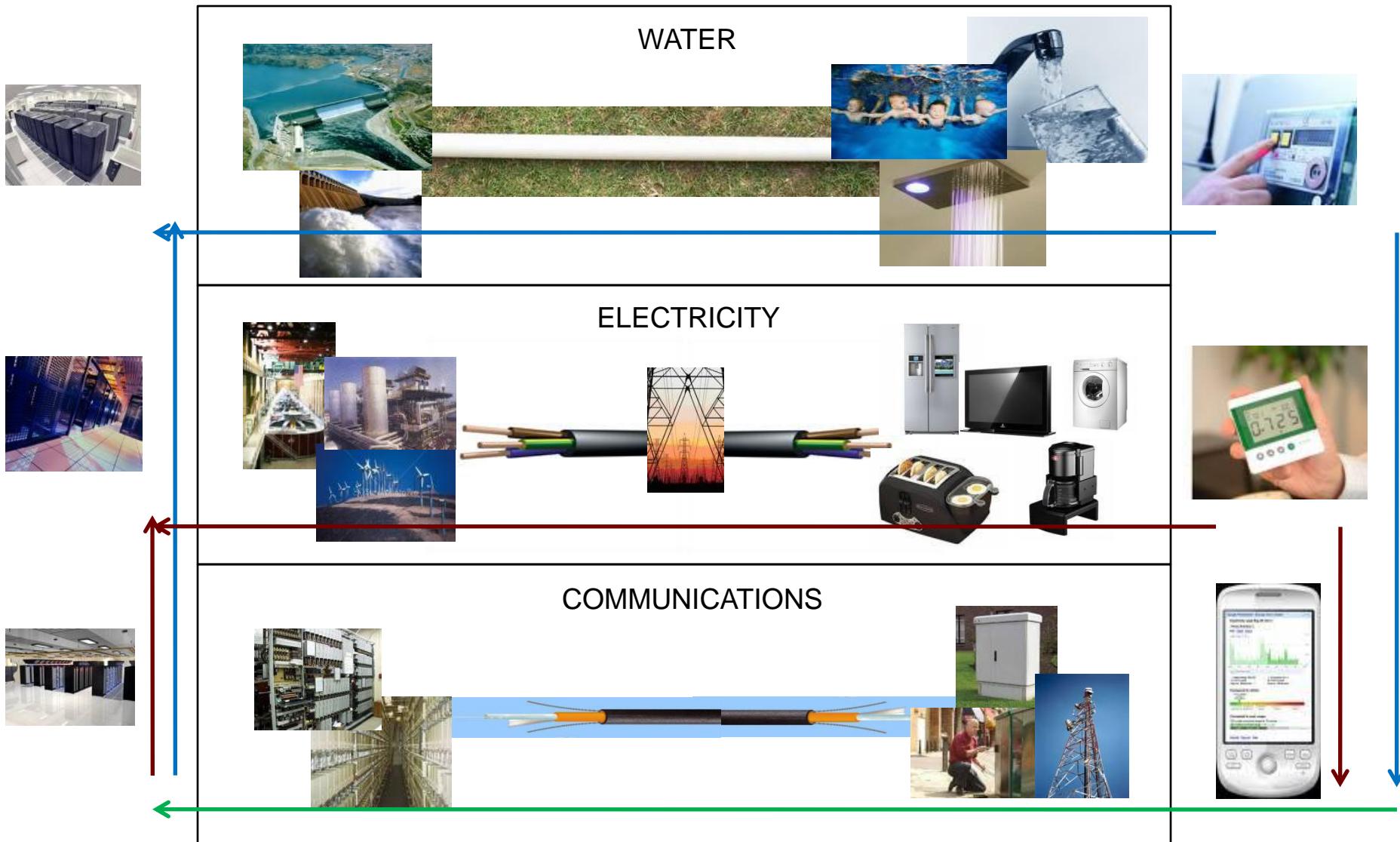
The BB Value Chain involves many technologies, services and stakeholders who derive differing value – maximum wealth is realised when all are incentivised



# The Need for Utility Services



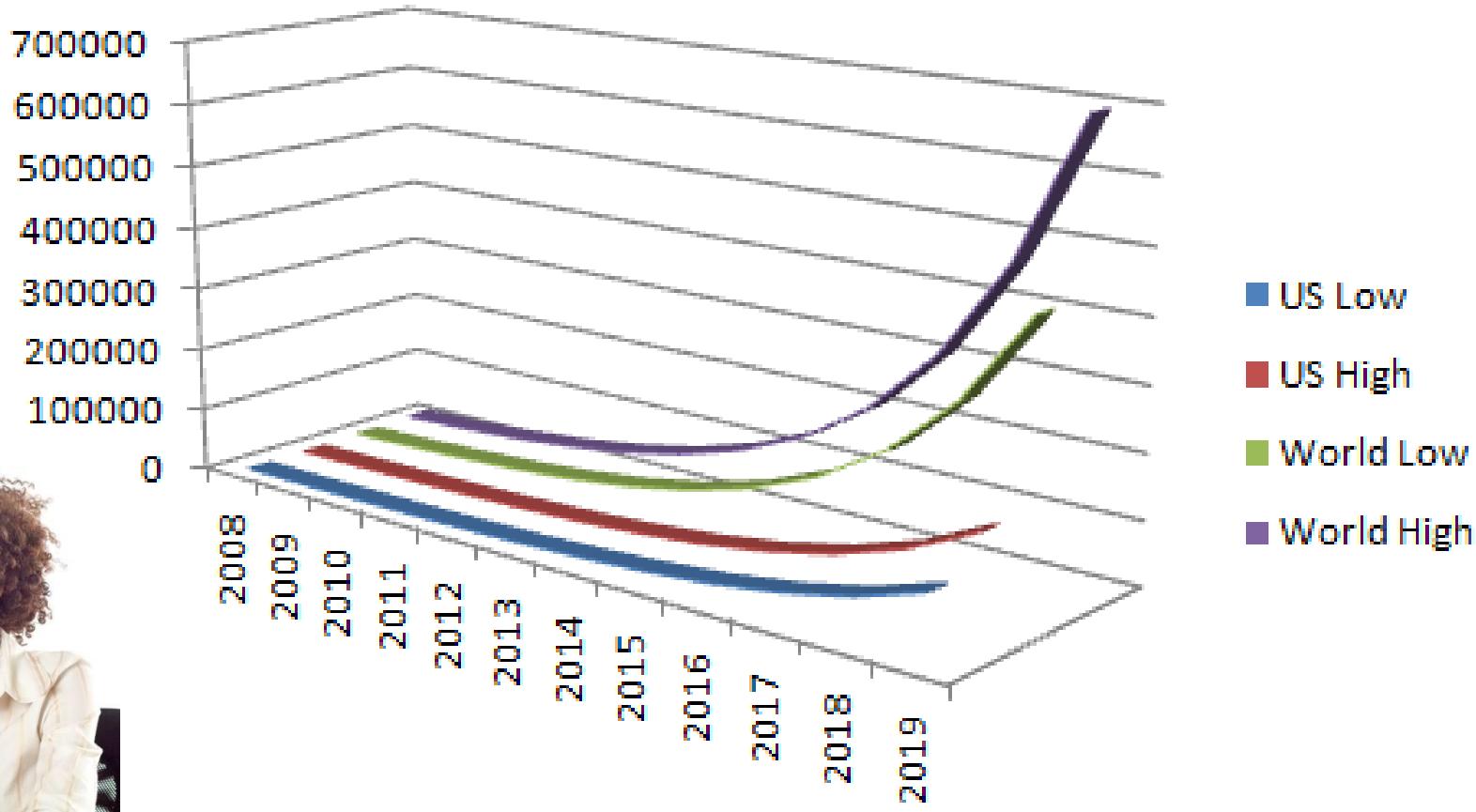
# The Need for Utility Services



# Anticipated Internet Traffic Trends

(PetaByte =  $10^{15}$  bytes)

Based on a conservative worldwide  
Internet traffic growth estimate of  
around 50% per year



<http://www.dtc.umn.edu/mints/home.php>

# Partnering & saving across the Telecom eco-system

- **Competition & Open Access Models**

- Monopoly Company



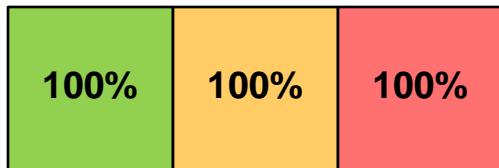
Active Line Access Model  
CO<sub>2</sub> emissions x 1  
Limited Competition

- Shared solution



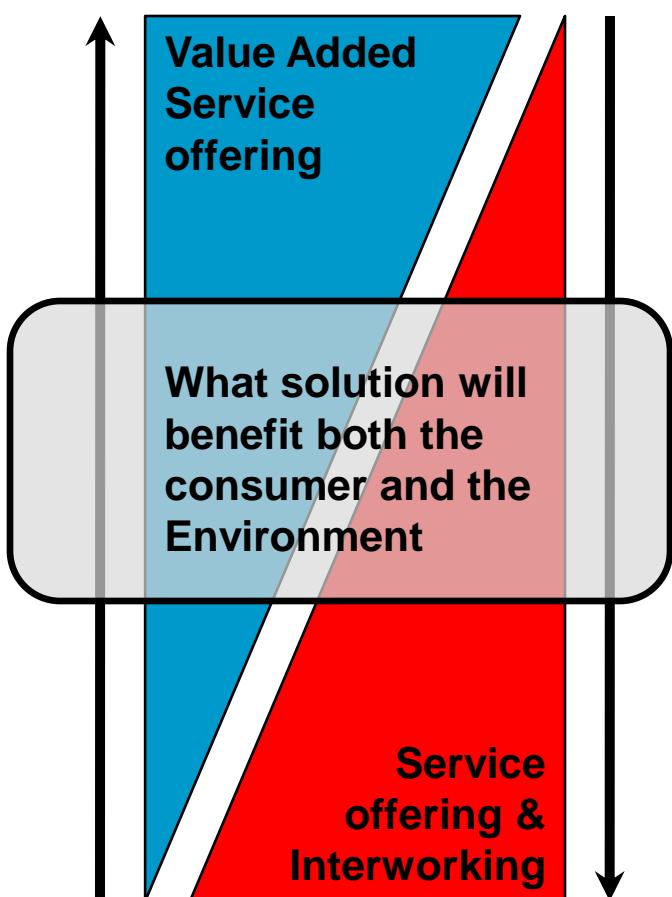
Multi Fiber/Duct Model  
CO<sub>2</sub> emissions x 1.5  
Equipment Competition

- Duopoly or more – Full Competition



Multi Net/Infrastructure Model  
CO<sub>2</sub> emissions x 2 and higher  
Full Competition

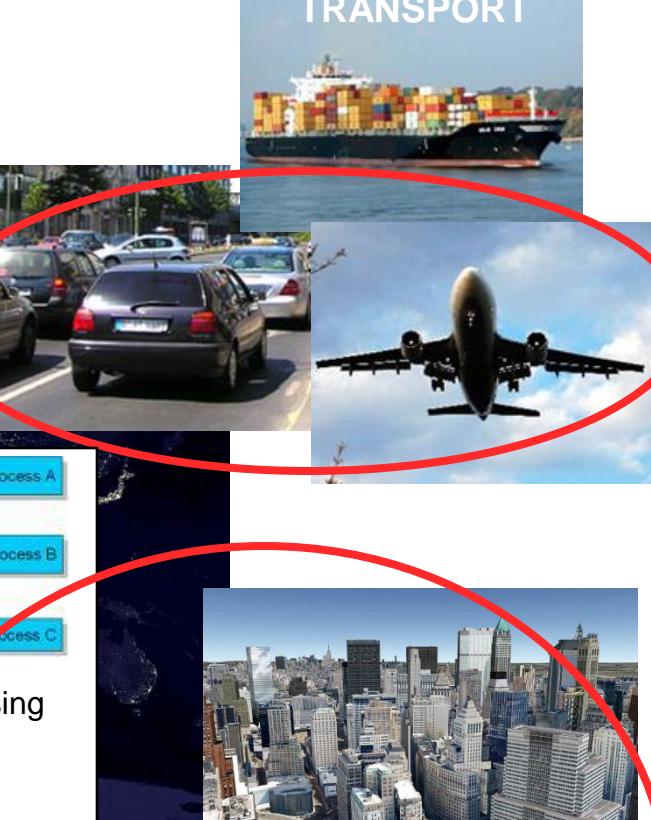
**Policy should encourage these areas**



# Potential Solutions



**AGRICULTURE  
GOVERNMENT  
DOMESTIC  
FORESTRY  
WASTE  
ETC.**



**BUILDINGS**

# Conclusions

- **Organisations will rely more on Digital Communications**
- **The growth in data sharing will grow exponentially**
- **The telecoms sector has the ability to add value and drive down energy consumption from many sectors**
- **Partnering and Virtualization is key to savings**
- **ICT can enable a GREENER Digital Economy**
- **.... But a coordinated plan is needed to realise the maximum benefits across several industries**

**Thank you**  
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