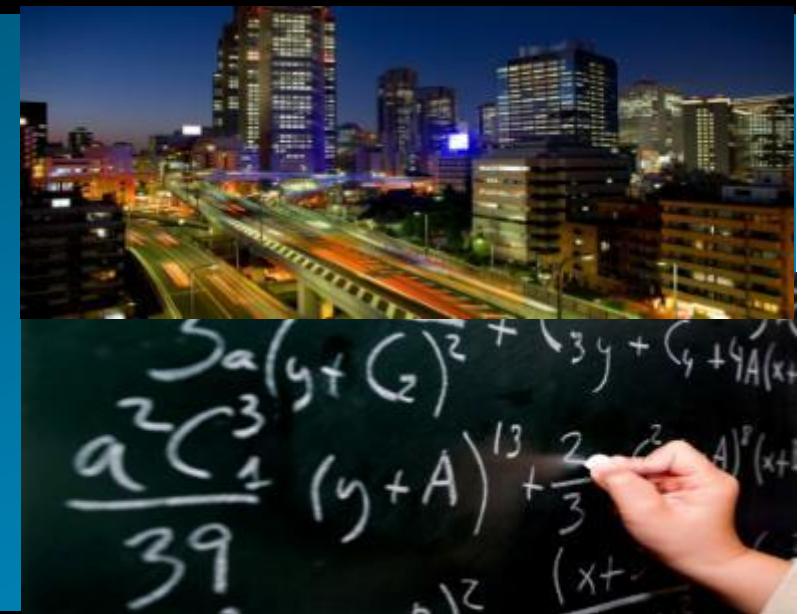




# Rebuilding the Transatlantic Bridge: US-Polish Cooperation Conference

December 3-4, 2009



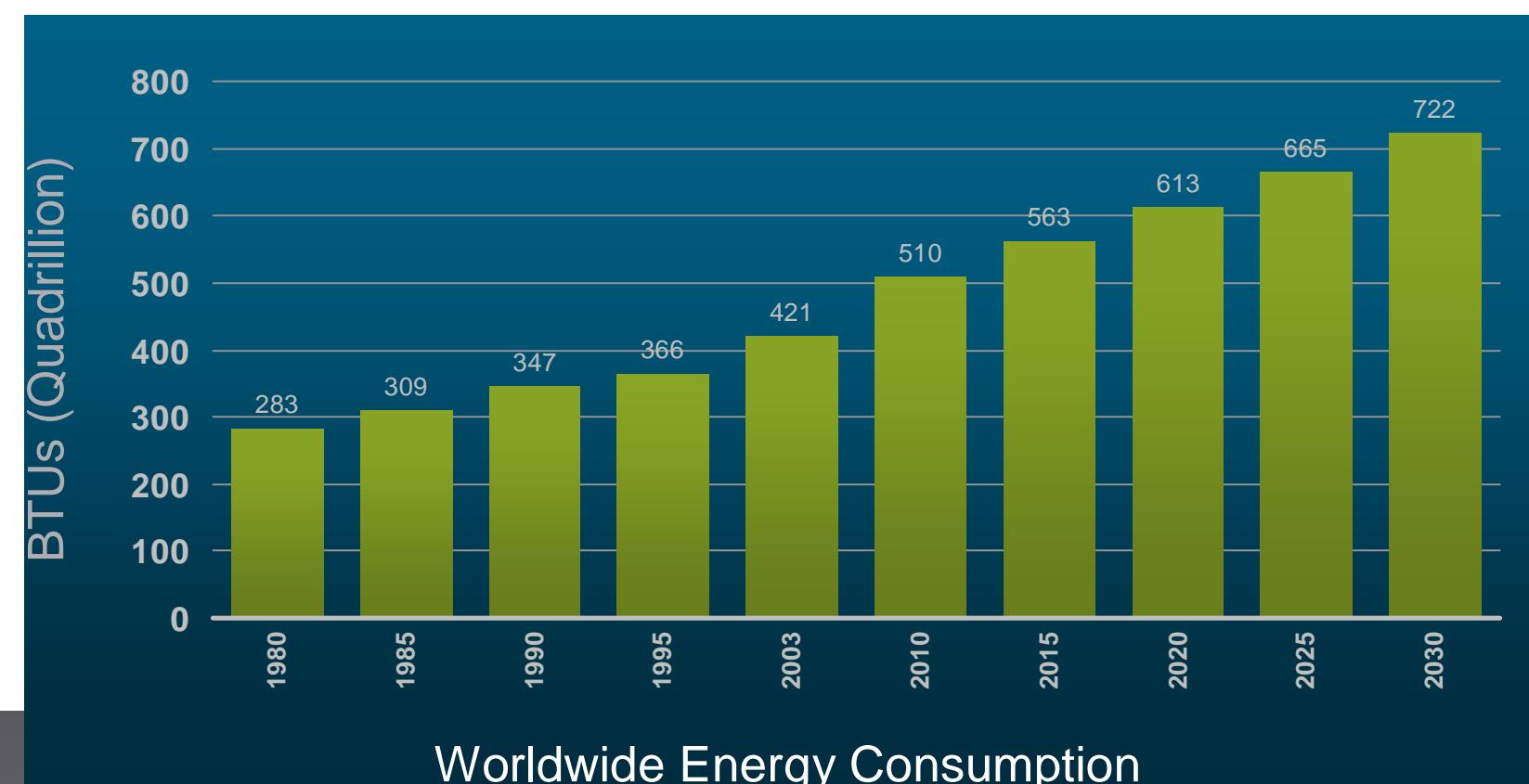
**Bartek Michalowski**

**Public Sector Manager**

**Cisco Systems**

# Increasing Demand

[1 BTU (British Thermal Unit) = about 1.06 kJ (kilo Joules)]



\* Source: History—Energy Information Administration (EIA) International Energy Annual 2003 (May-July 2005).  
Projections—EPRI Assessment of Achievable Potential from Energy Efficiency and Demand Response Programs in the U.S., Jan 2009

\*\* Source: World Development Indicators Database 2004, Cisco IBSG Analysis

# The ICT Contribution: New Applications for Energy Efficiency



Gas



Electricity



Water



Internet

Essential Utilities

4th

Reduce Cost and Complexity by  
Replacing Disparate Networks with One  
Simplified, Flexible, and Scalable IP Platform



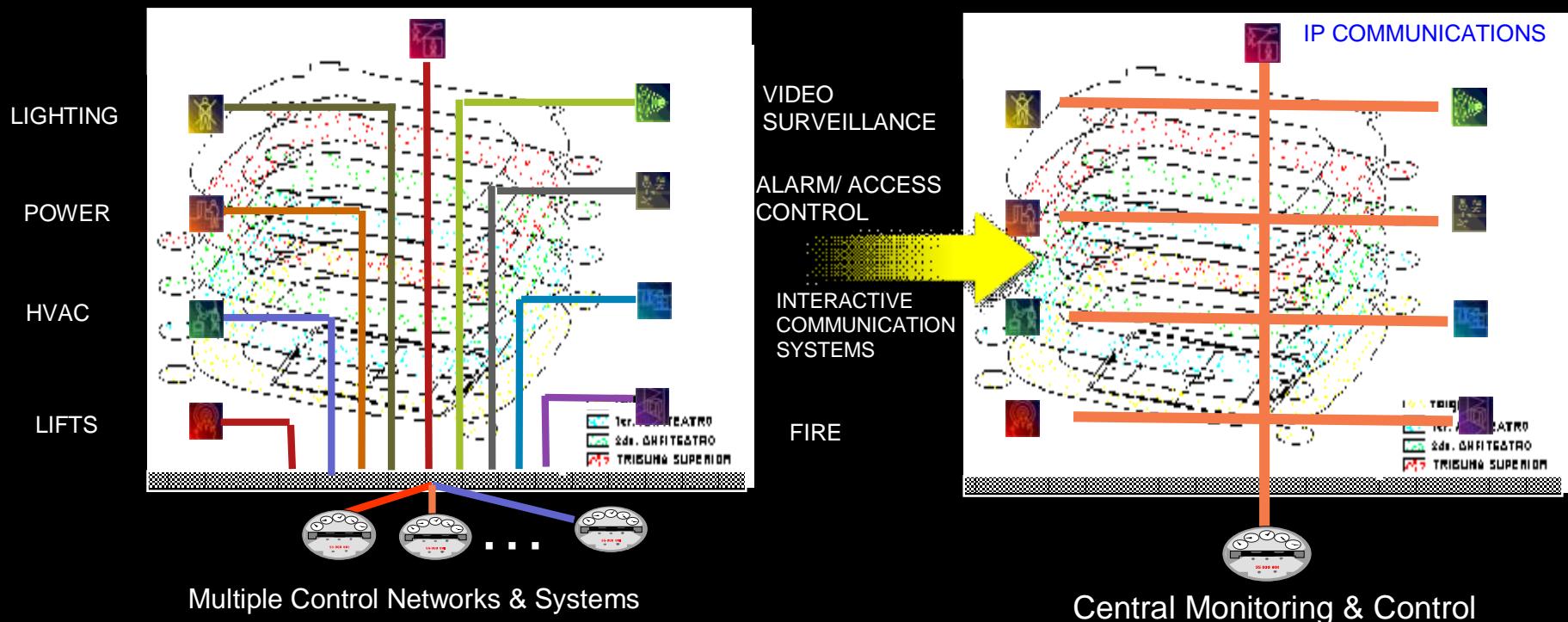
# The ICT Contribution: New Applications for Energy Efficiency

## Legacy building

- Disparate Building Networks
- Proprietary and Redundant
- Sub-Optimal Information Usage

## Intelligent building

- Interoperable
- Efficient and Scalable
- Multi-use Systems Information
- Maximized ROI and Lower TCO



# The ICT Contribution: New Applications for Energy Efficiency

## Cisco Smart and Connected Community



## Cisco Smart Grid



# Smart+Connected Community



**City  
management**

**Economic  
development**

**Citizen quality  
of life**

# Smart + Connected Communities



# Connected Bus



# Personal Travel Assistant



# Personal Travel Assistant



# Personal Travel Assistant

Seoul Personal Travel Assistant

My Today May 19, 2010

- 1 Seoul PTA 업무협의 [11:00]
- 2 Meeting [17:00 무학동 7]
- 3 PTA 회의 [17:30 성동동 1-1]
- 4 Add Travel Schedule
- 5 Add Travel Schedule

Real-time Road Traffic Information

Green Route & Public Transit Info

Personal Travel Planner

Real-time Trip Router

My Mobility Carbon Footprint

# Personal Travel Assistant

My Today

Travel Planning

Virtual Assistant

Transcript

Selected Route

Origin : 순화동 5-1

Destination : 쌍림동 1-1

Distance : 5.89km

Time : 26.42분

Carbon Emissions : 0.33 g

Koute Guide

# Personal Travel Assistant

Seoul Personal Travel Assistant

My Today      Travel Planning

Green Route 1

\*전체경로정보  
- 출발지 : 반포교문사  
- 도착지 : 공덕계량  
- 이동거리 : 9.16 Km  
- 예상시간 : 56.46 분  
- 탄소배출량 : 595.25 g

[Carbon Detail](#)

\*세부경로정보  
1. WALK, 반포교문사~종로6가, 27분/ 2.26km  
2. BUS, 종로6가~마현동주민센터, 260분 25분/ 6.54km  
3. WALK, 마현동주민센터~공덕계량, 4분/ 0.36km

Green Route 2

Shortest-Time Route

[Start Route Guide](#)

Carbon Emissions

Transport Modes of Selected Travel Route

No	Transport Mode	Distance	Carbon Emissions	Carbon Reductions	Expected Mileage
1		2.26 km	0.00 g	330.46 g	0.03 P
2		6.54 km	595.25 g	361.18 g	0.04 P
3		0.36 km	0.00 g	52.93 g	0.01 P
	Total	9.16 km	595.25 g	744.57 g	0.07 P

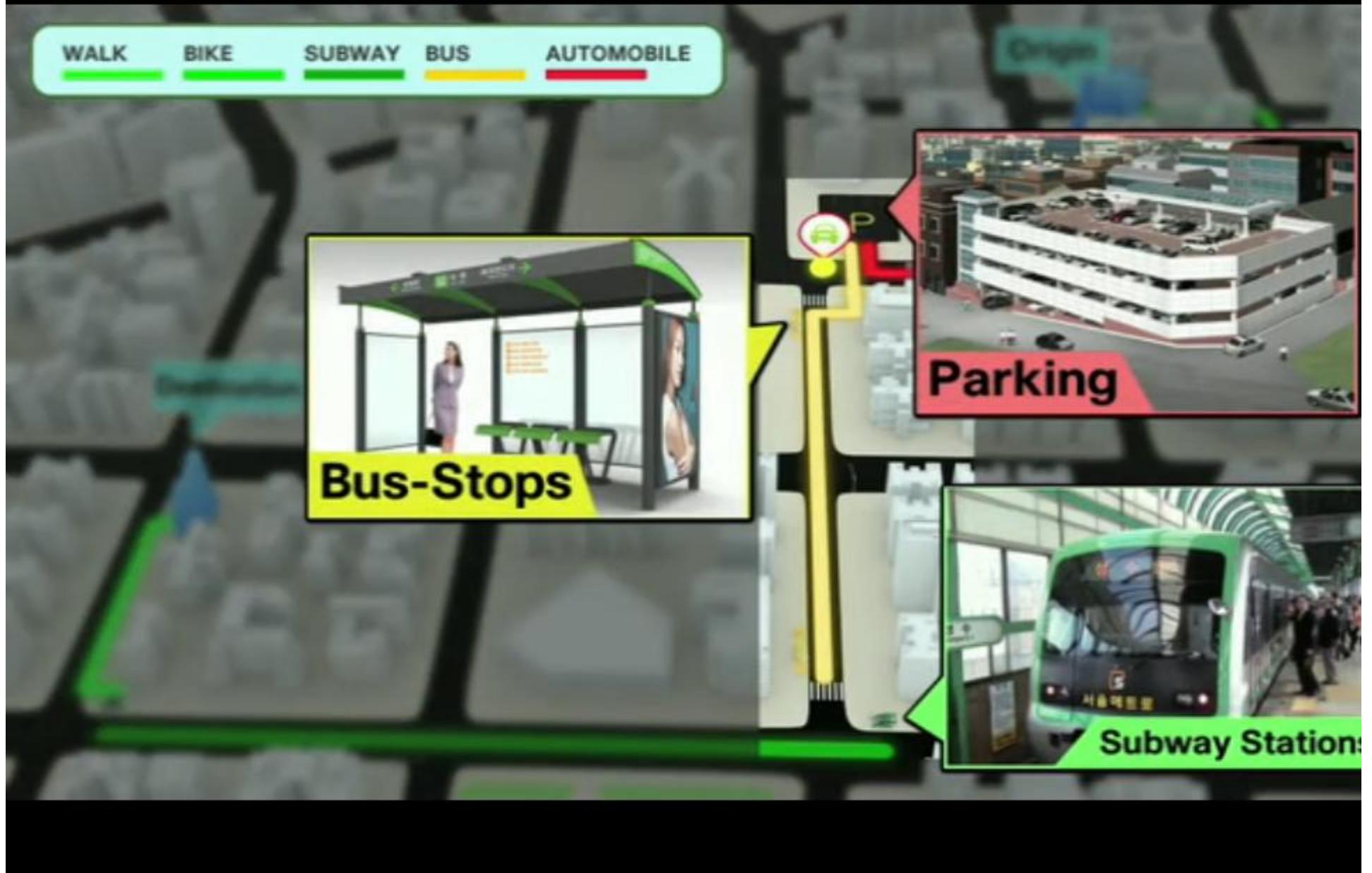
[Close Carbon Detail](#)

# Personal Travel Assistant



Not Saved	Carbon Emission	Travel Distance	Travel Time
Route1 : <b>GreenRoute1</b> ★		Blue bar	Red bar
Route2 : <b>GreenRoute2</b>	Green bar	Blue bar	Red bar
Route3 : <b>Shortest-Time Route</b>	Green bar	Blue bar	Red bar

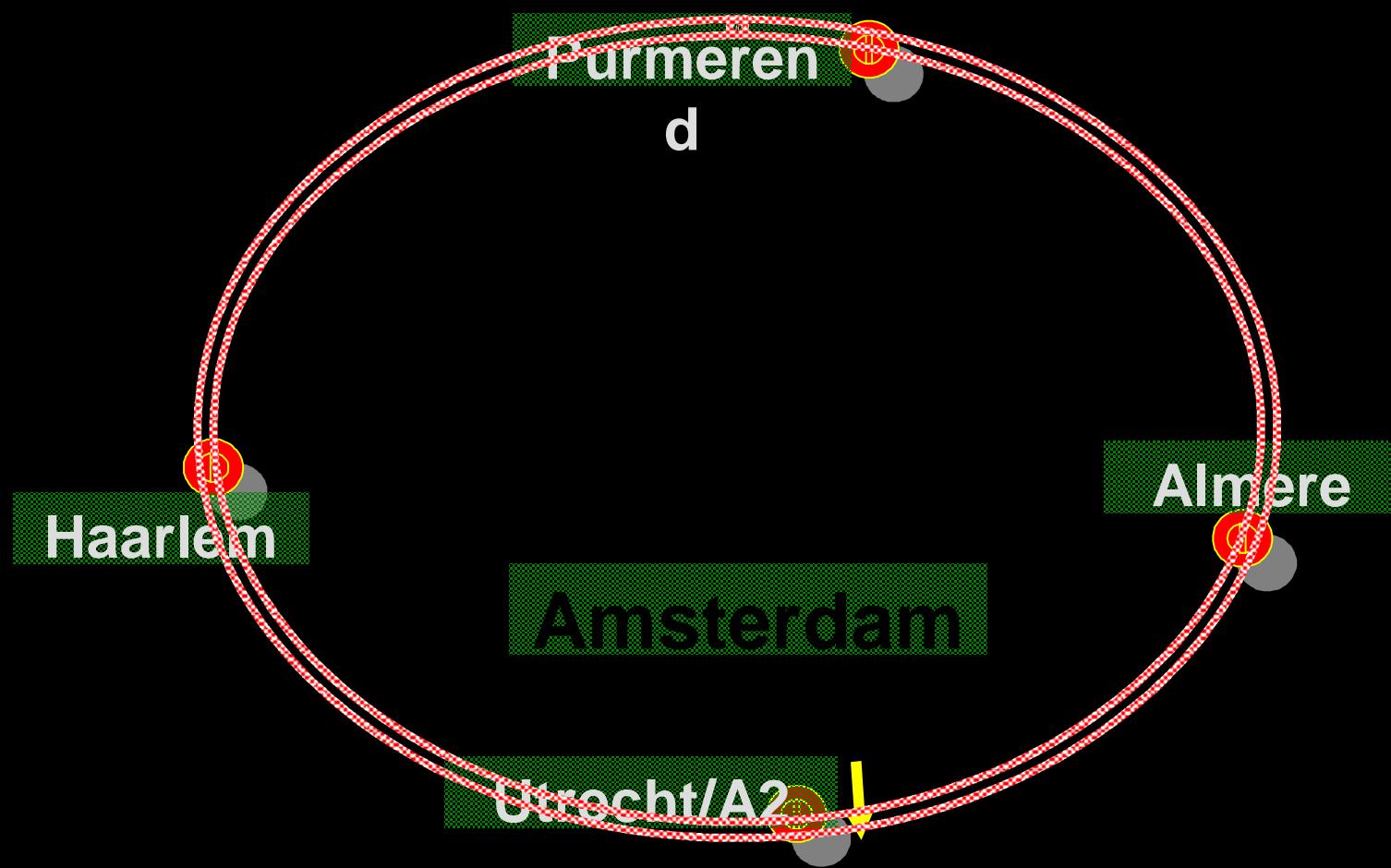
# Personal Travel Assistant



# Why moving people and information, if you can move information alone?



# Smart Work Centres



# Smart Work Center: an Integrated Service Concept



§ Flexible work stations/ conference rooms



§ Lounge work places  
§ Telepresence facilities



§ Restaurant/ Business Club/ Catering  
§ Child day care



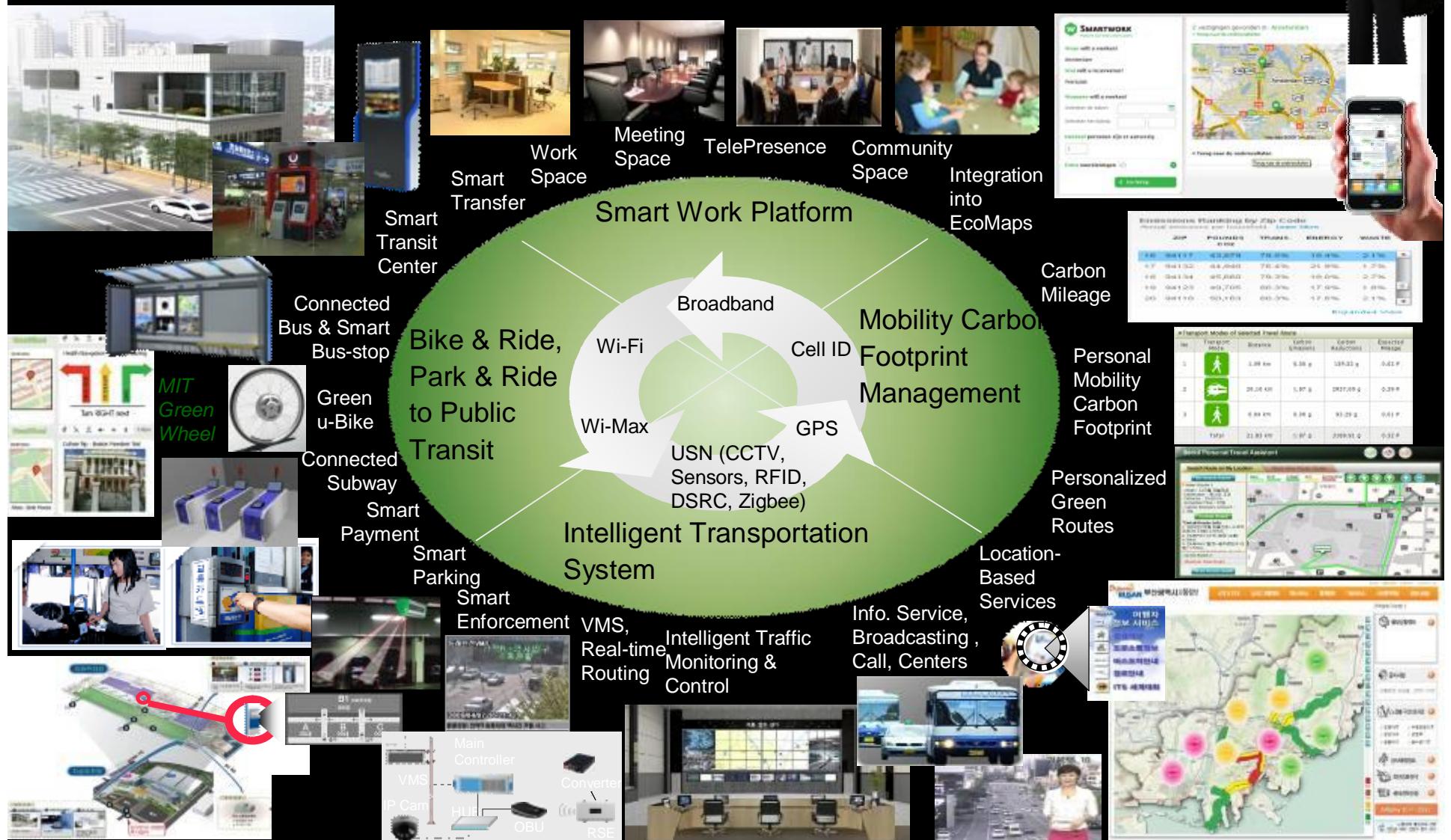
§ Bank  
§ IT Support  
§ Notary and legal advice



§ Employment agency  
§ Easy physical access, close proximity to highway

# Public Transportation & Smart Work Centers

## Smart + Connected Urban Mobility Platform

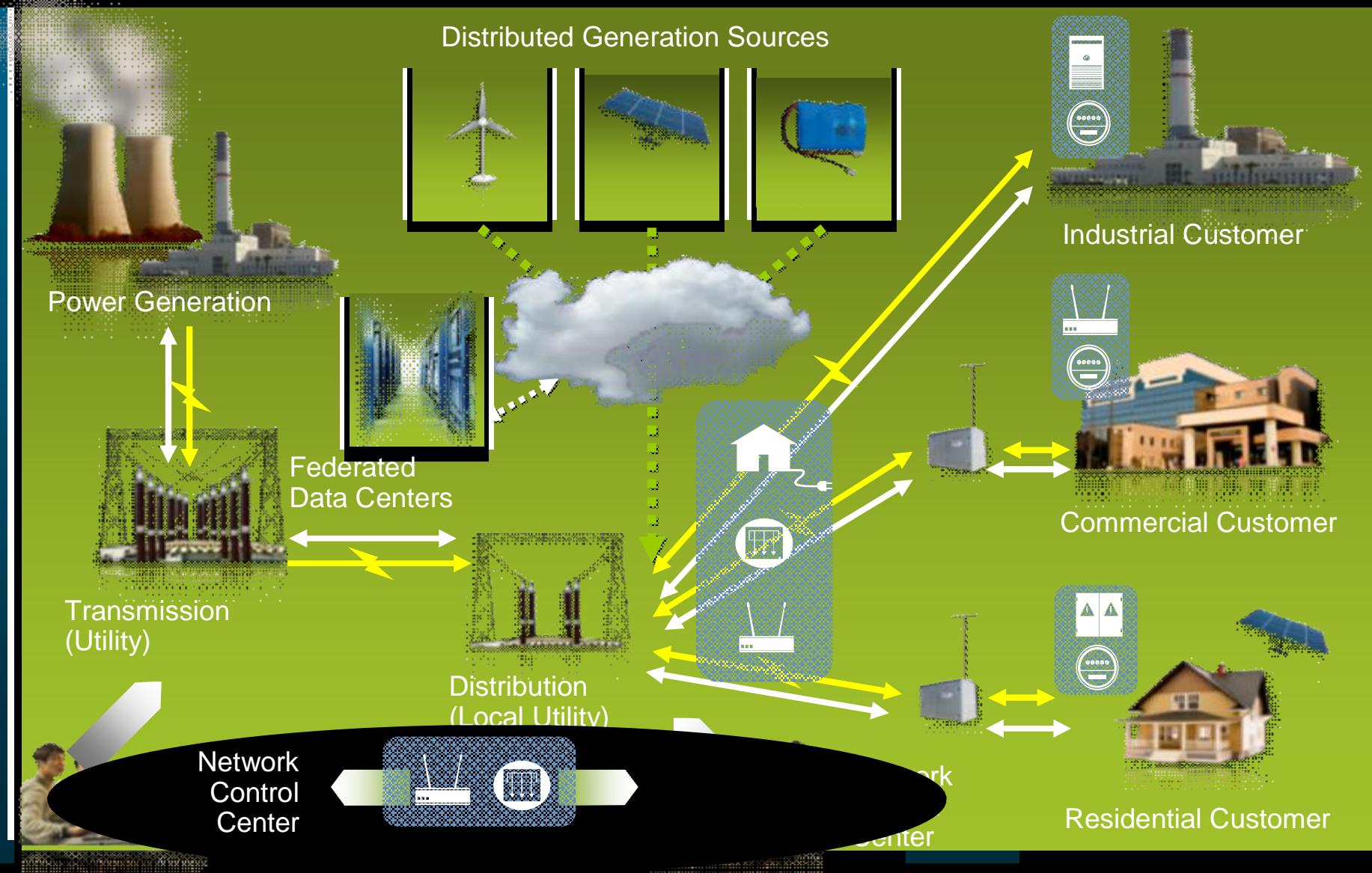


# Cisco Smart Grid

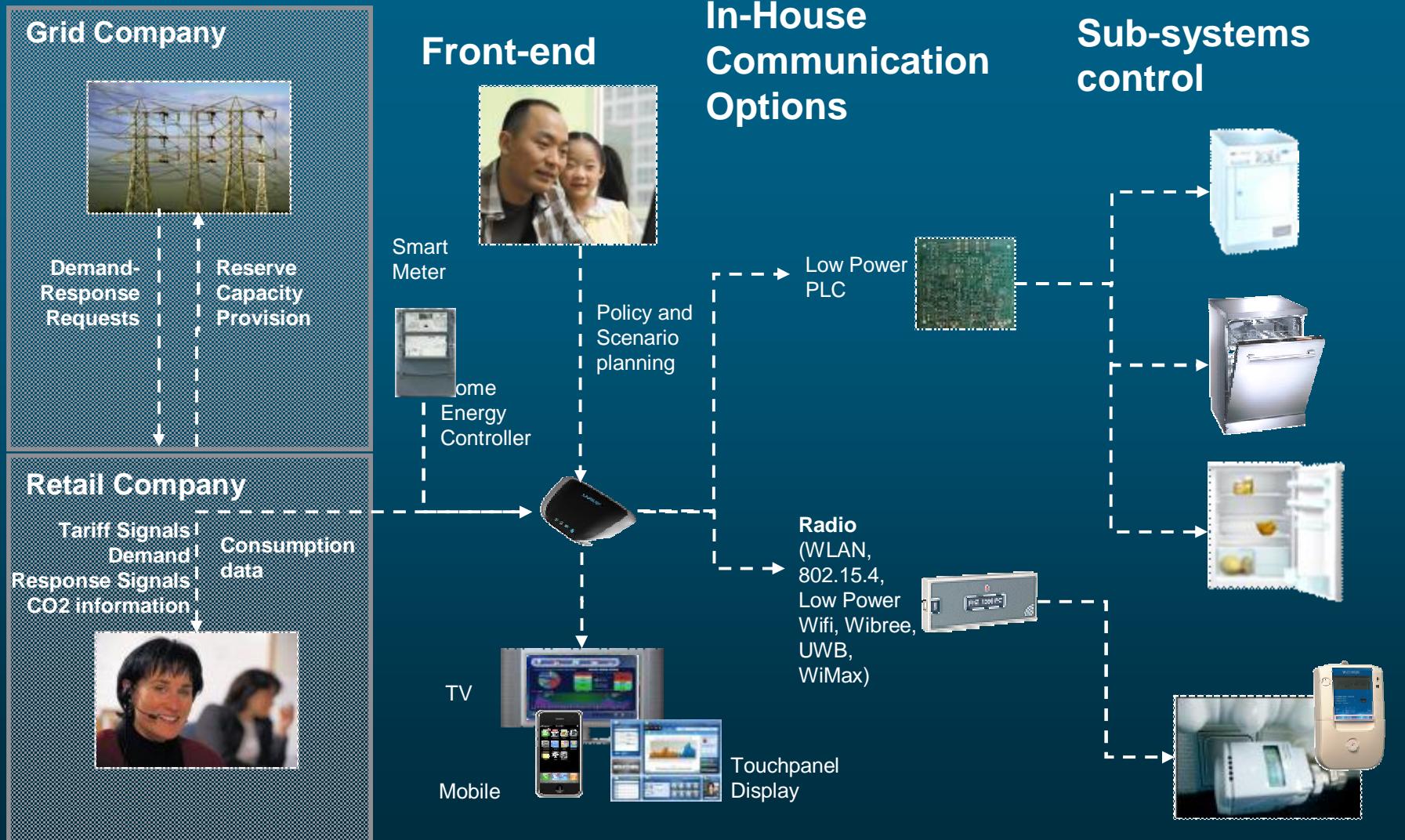


# Smart Grid Overview

→ Energy ← Information



# Creating intelligent homes...



# Home Energy Management Solution—Functionality Overview



Energy Monitoring



Energy Efficiency Portal



Electricity and HVAC Control



Digital Energy Passport



Demand-Side Management



Demand Response

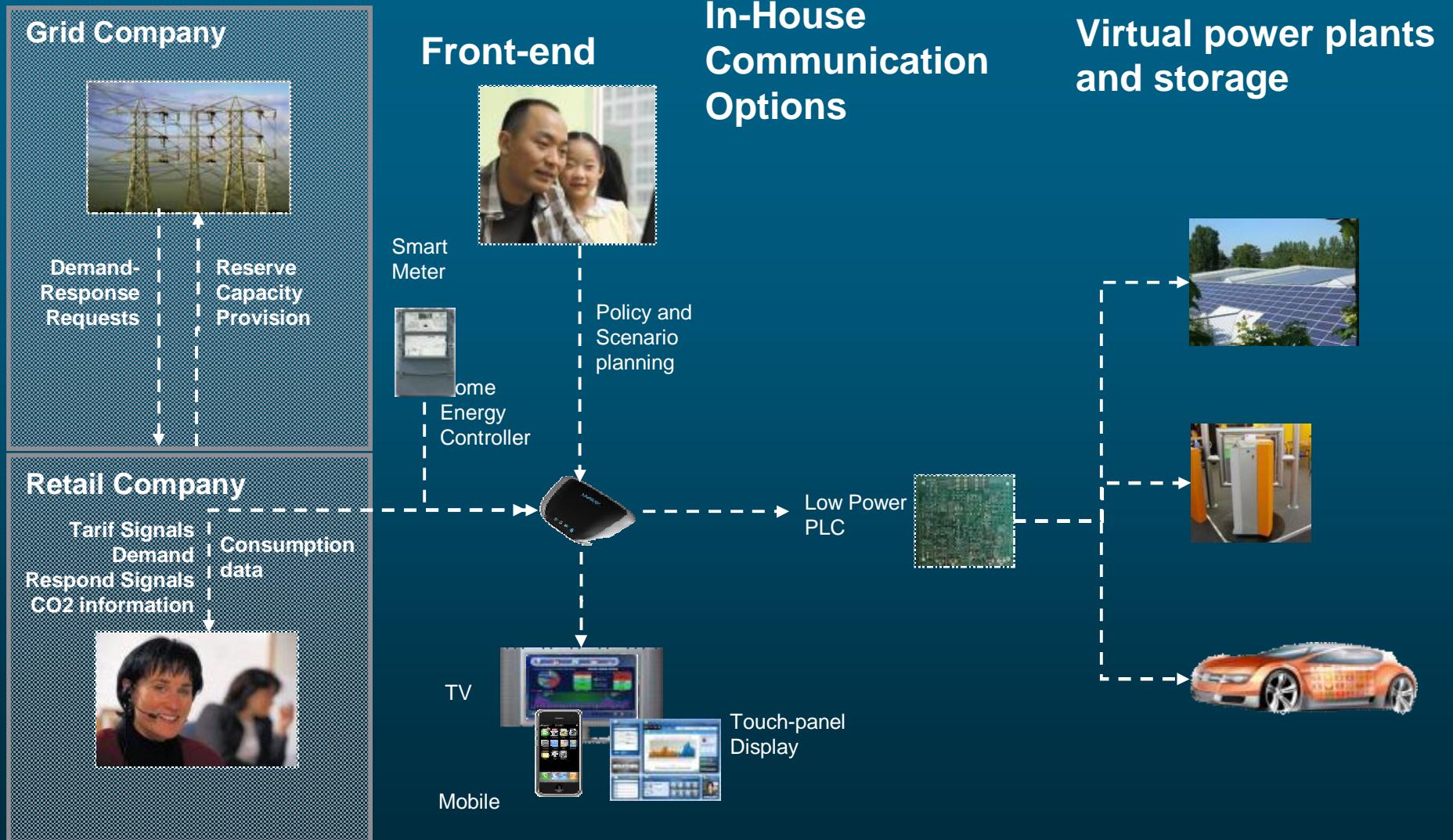


Management of Distributed Generation



Management of Electric Vehicles

# ...with integrated distributed generation and storage



# Next step

## Healthcare



„One button” contact

High Definition video  
and High Quality  
audio  
=  
real doctor visit  
experience

On-line medical  
data



# UNITED NATIONS CLIMATE CHANGE CONFERENCE DEC 7-DEC 18 2009

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DICTIONARY  
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HELP

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DANSK  
ENGLISH  
ESPAÑOL  
FRANÇAIS  
РУССКИЙ  
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## Virtual Conferencing at COP15

