



The Energy
Regulatory Office

Smart metering project in Poland

Tomasz Kowalak, PhD
Director of the Tariff Department

51st RMC WG Meeting,
Warsaw, 13 of September 2011,

- Both side flow of information
- Real time (if necessary) of measuring and data collecting/exchange
- Three levels of needed meters' deployment:
 - inside the grid,
 - at the delivery points (on the border of an individual DSO's grid)
 - at all customers' and other system users' receiving points
- Very important, but only the step toward Smart Grid (smart grid ready concept)



1. Smart metering - Polish interest origin (before 3rd package)

- Capacity shortage risk
 - demand curve dynamics
 - power plants investments
 - RES connection dynamics
- Network investment dynamics
- EU climate policy vs. Polish energy mix
- and other reasons...

2. Regulatory initiatives

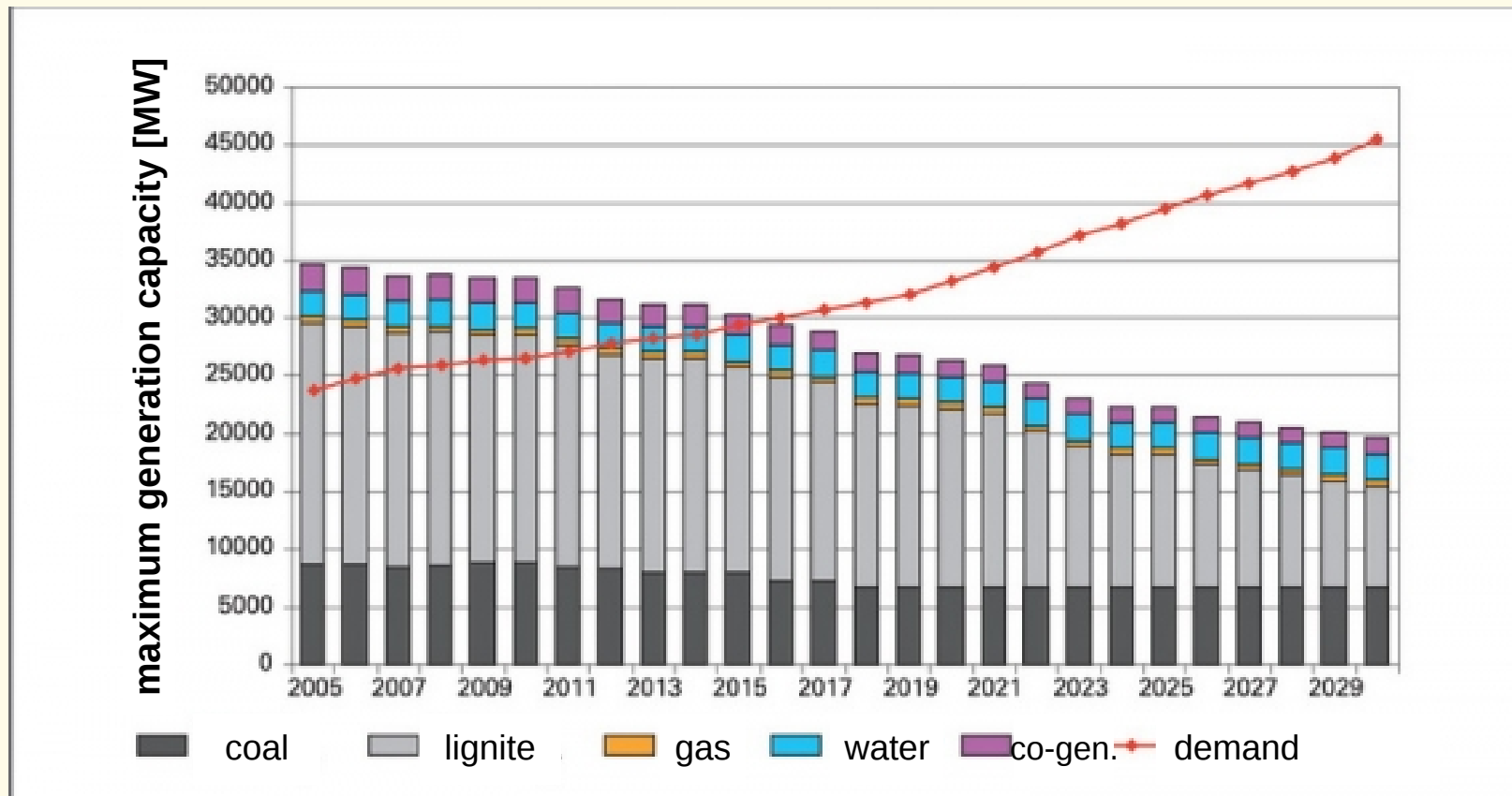
- Declaration

- Education

3. Other initiatives

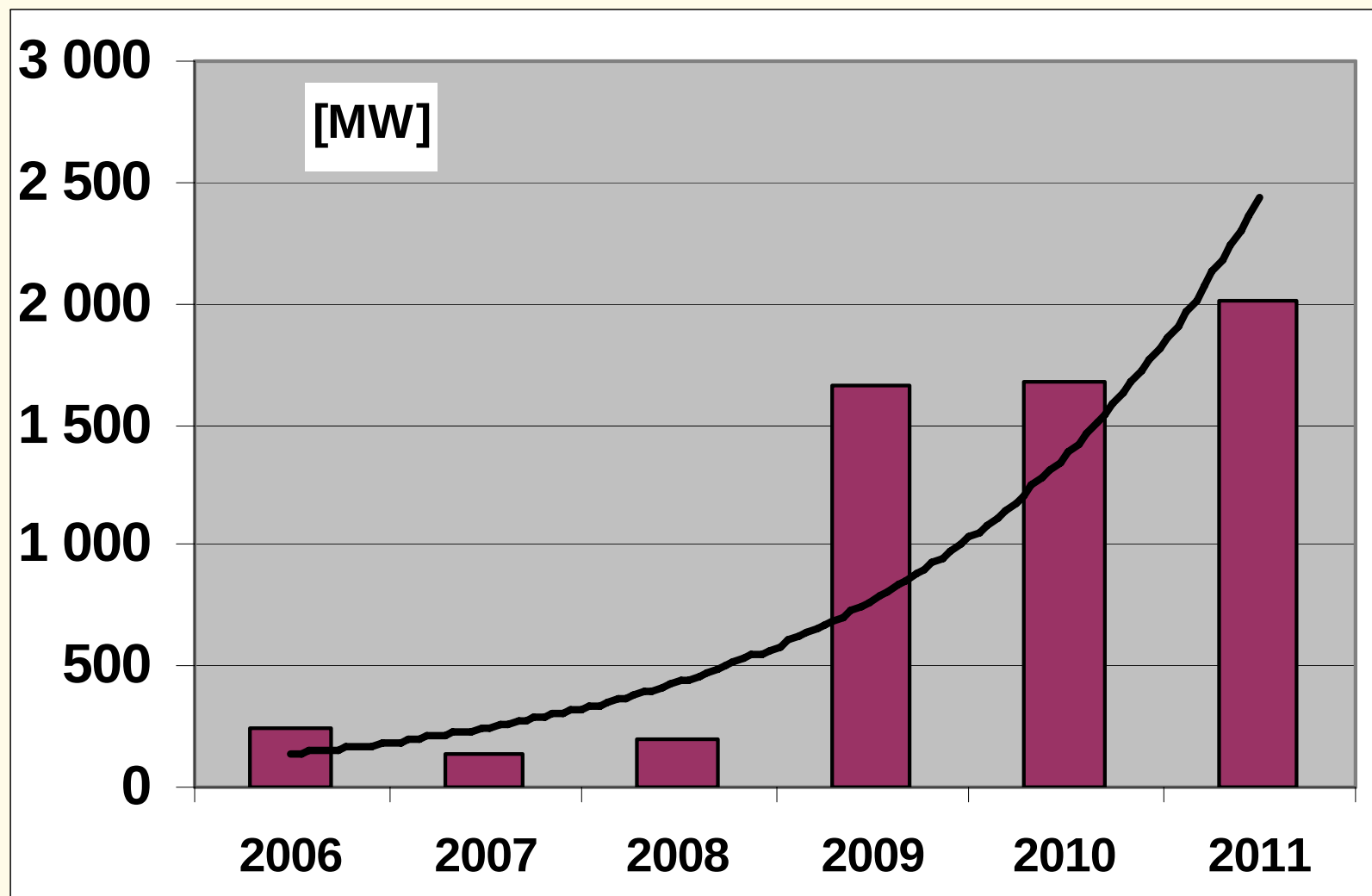
- Co-operation

Capacity shortage risk (generation/demand balance)

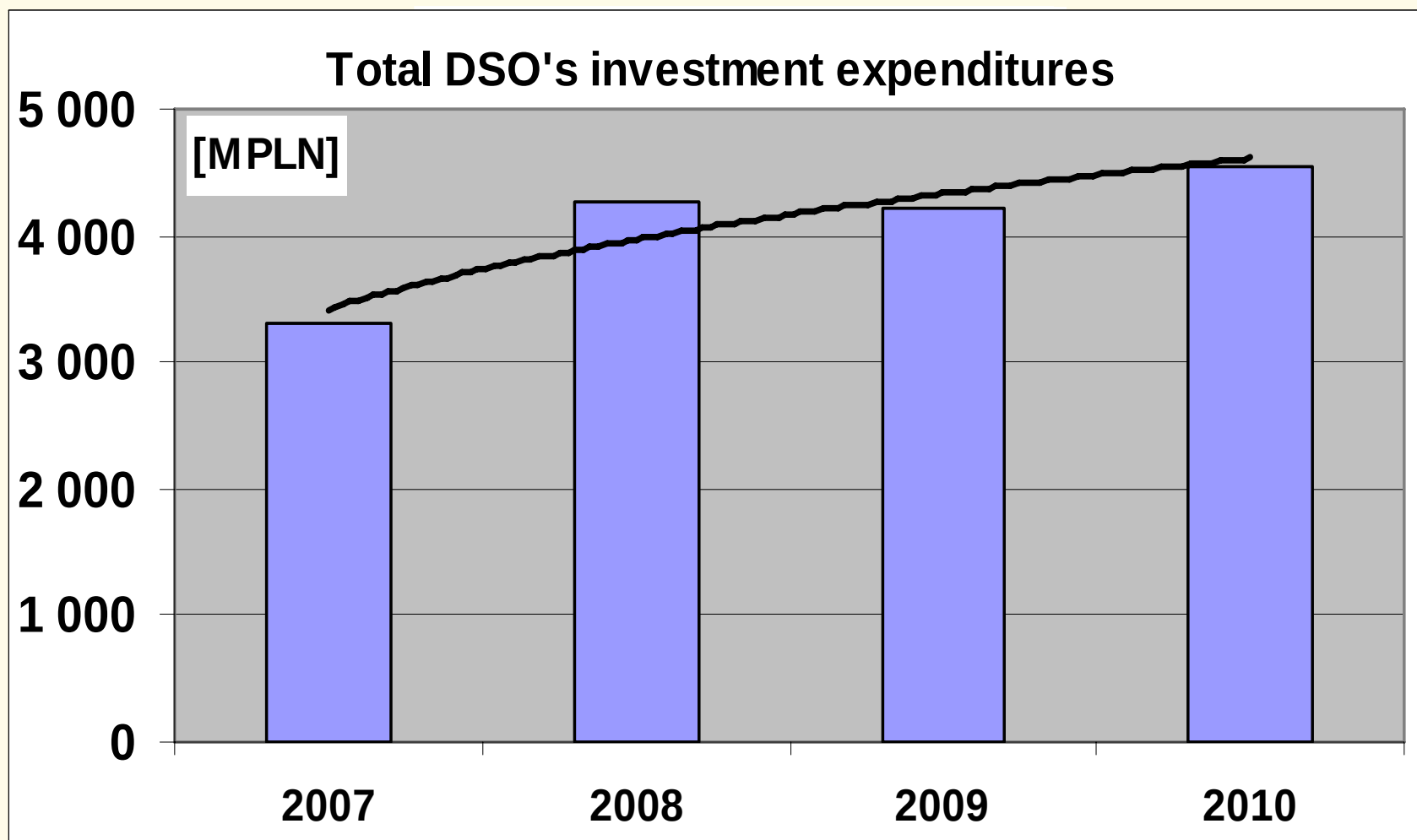


Central power plant investment: over 11 GW of total value, but app. 50% of planned investment may face problems in the realisation phase.

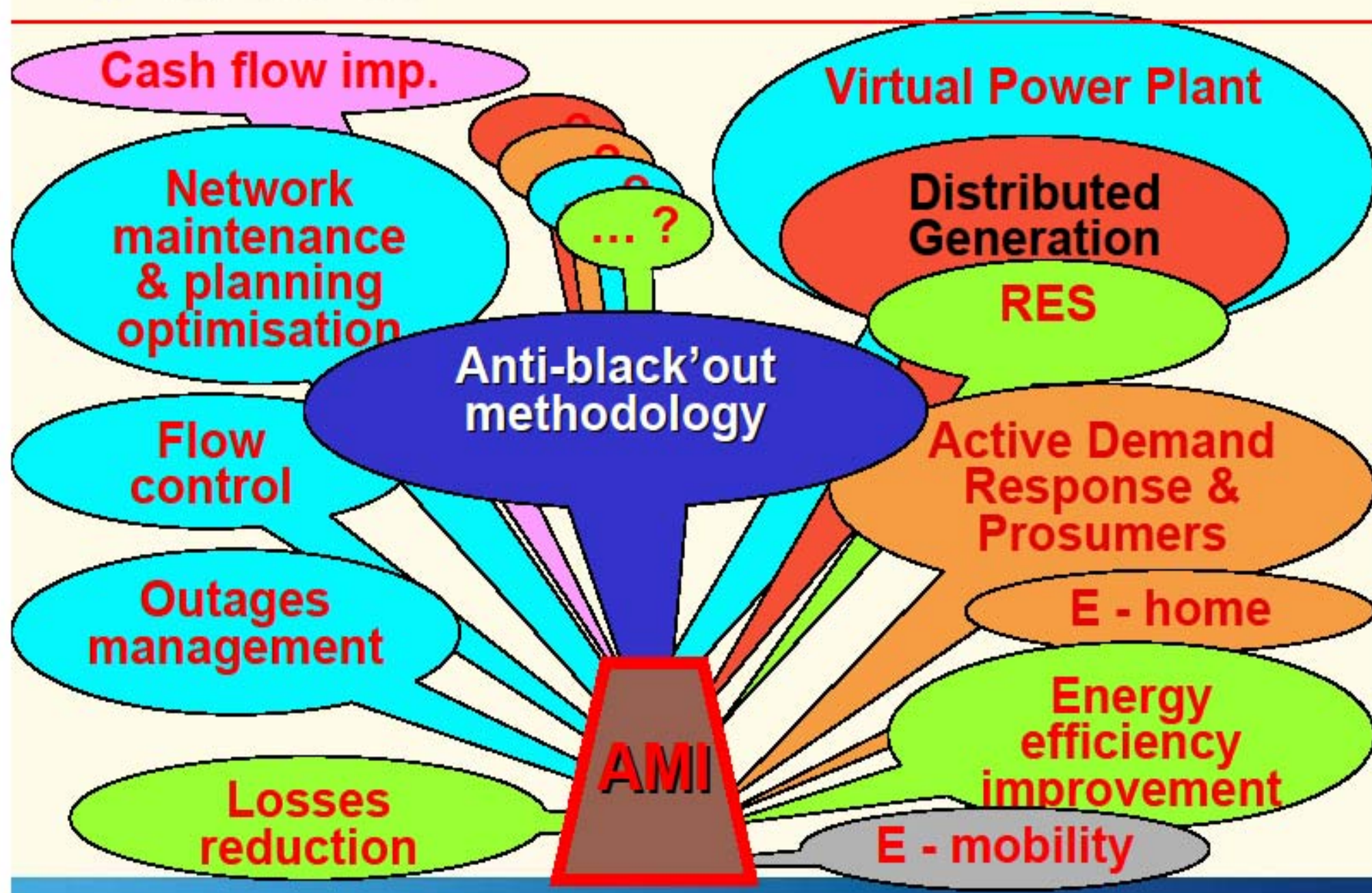
Dynamics of RES & CHP connections to DSOs



Network investment dynamics



Smart Grid Perspectives



3rd of June 2009 Declaration

The results of first CBA, held in 2008, as well as smart metering concept, were presented to

- the Polish National Energy Conservation Agency
- Consumer Federation
- Polish Consumers' Association
- Electricity and Gas Customers' Forum

As a result the **Declaration concerning the introduction of smart grid into the Polish power system** was signed.

Many other bodies (administrative, academic and business) send their access will

Regulatory Position Paper – May 2011

concerning the requirements of Smart Metering Smart Grid Ready into the Polish power system,

part 1, related to DSO investment – published on June 02, 2011,
after public discussion,

The next parts, related to:

- metering data market structure and Metering Data Independent Operator,
- HAN and prosumers,
- regulatory incentives and
- legal rules

– TBD up to the end of the year

Education including:

- the ERO website,
- press releases and press conferences,
- content-related conferences,
- ERO personnel activity on many other conferences and workshops.

Co-operation with :

- Transmission System Operator,
- Distribution System Operators,
- Branch Chambers of Commerce,
- Universities of Technology,
- 19.11.2010 - ERO President has signed
the *Declaration of Appointing
the National Technological Platform on Energy*"

Parliament**Government:**

- Legal initiatives of MoE:
- Supporting organisations:
Advisory Team for Smart Grid Implementation

TSO – Smart Grid Area:

- Smart Transmission Network
- Dynamic Line Rating Monitoring System
- Demand Side Response Programs
- Distributed Energy Resources Management
- Smart City/Smart Region Cooperation
- Smart Metering Data Management

Other involved parties:

ENERGA – Operator (DSO), **KIGEIT** (Polish Chamber of Commerce for Electronics and Telecommunications), **PIIT** (Polish Chamber of Technology of Information Technology and Telecommunication), **Consortium Smart Power Grids Polska, Cluster 3x20 ...**

Key challenges for meters deployment

1. Imbalance of the cost and benefits – the need of the regulatory tools activation
2. Limitation of new meter's functionality – the lost of potential benefits
3. Proper structure of data market – status of independent data operator
4. Current lack of common communication standard – danger for interoperability

Future ERO activities

Preparation of next parts of Regulatory Position, first of all related to:

- Incentive tools,**
- HAN,**
- Data Market (Independent Data Operator position),**

Crucial problems to be solved

1. Targets and priorities definition - solved
2. Defining of proper tools to achieve targets – solved, under description
3. Functionality of overall system and its certain elements – partially solved
4. Defining of common communication protocols: no solution already
„competition” between: - SGOP,
- IDIS,
- EBIX,
- DLMS,
(all of this under Mandate M441 umbrella !)
5. Education of entity employees and customers – TBD, **the biggest challenge**

There is less and less time !



Thank you for your attention



The Energy
Regulatory Office

tomasz.kowalak@ure.gov.pl

phone: +48 (22) 661 62 10
fax: +48 (22) 661 62 19