

Workshop NTP Smartgrid Croatia, Zagreb / 2 July 2013

Smart Grid in Croatia – vision and implementation

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Answers for infrastructure and cities.



Content

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Drivers for a Smart Grid



Load shifting





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Paradigm shift in power grids: The new age of electricity





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While the smart grid concept is well accepted, some questions will remain

Where to start?

- Which strategies?
- Where to invest?
- Which are the right steps?
- Which technologies?
- How to measure success?



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Infrastructure & Cities Sector - Smart Grid Division

SIEMENS



The Smart Grid by Siemens is part of the answer.

Constant energy in a world of constant change

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Utilities' business frameworks are changing



Smart Grid is an integral part of the solution set

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Smart Grid solutions

Changing energy system requires new solutions

Challenges in changing energy systems

Balancing Renewable and generation & distributed demand, new generation business models Limited generation Load management and grid capacity & peak avoidance Reliability through Aging and/or weak automatic outage infrastructure prevention and restoration Efficient generation, ----Cost and emissions transmission, of energy supply distribution & consumption Full transparency Revenue losses, on distribution level e.g. non-technical and automated loss losses prevention



The Smart Grid Suite by Siemens



Croatian Technology Platform for Cooperative Renewable Energy Systems and Smart Grids





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National Technology Platform

NTP Smartgrid Croatia

- Form an expert team on national level (utility, university, industry and government)
- Joint vision and strategy
- Platform for active cooperation
- Set roadmap and standards framework for smartgrid implementation
- Learn from previous experience (NTP Austria, NTP Slovenia)





Smart grids implementation plan

- Determine smartgrid functionalities and benefits
- Define priorities and set strategic goals
- Make investment and time plans
- Setup pilot projects
- Conferences & workshops
- Marketing and education





Pilot projects

- Proof of concept for Smart Grid
- Design, implement, use and evaluate different aspects of Smart Grid concepts (business cases, objectives, technology choices and regulatory aspects)
- Demonstrate sustainability and technical competence (interoperability)
- Define standards & show best practices
- Apply to future (nation-wide) projects



Conclusion

- Identify and evaluate smartgrid technologies
- Form long term vision, strategy & implementation plan
- Set regulatory conditions for smartgrid implementation
- Define business model (roles and responsibilities of participants) and the model of market
- Invest in construction and modernization of transmission and distribution grid
- Invest in R&D projects





Thank you for your attention!

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