

OPPORTUNITIES AND RISKS FOR UTILITY IN DR

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1st Int. European Demand response Center, Work shop, Graz, 2012



The mission

Company's mission is a complete supply of electricity to consumers and a performance of associated services.

The vision

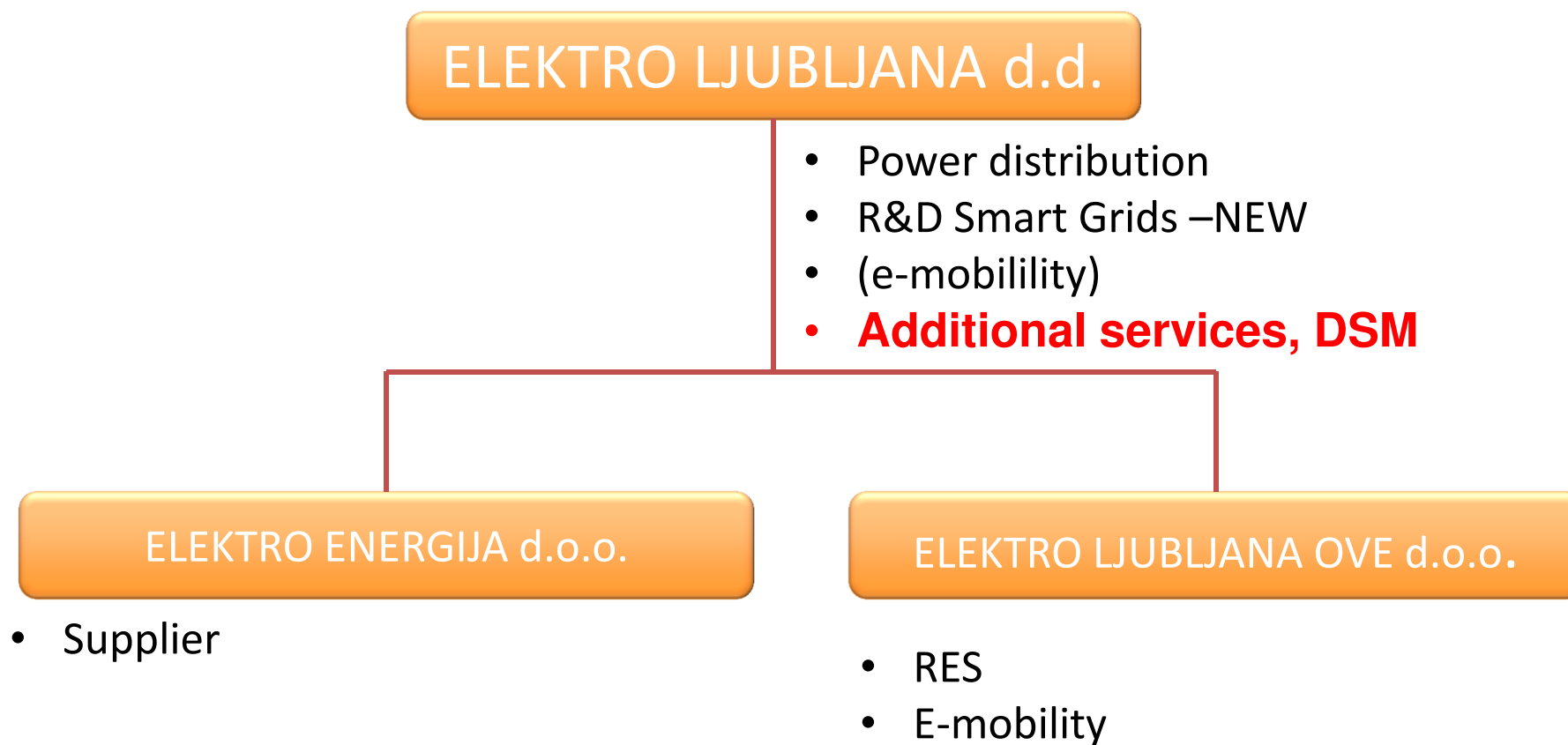
Company's vision is to become a leading supply Company in the area of energy in Slovenia. The Company achieves its vision through active investments and marketing policy, redesign of local energy concepts in the areas of electricity, gas and heat production and distribution, and through the introduction of new products with regard to sales of **energy products and services**.

Development



- 1897, start of electrification of capital city Ljubljana
- 1963, supplying Central Slovenia
- 1990, Public Company Elektro Ljubljana
- 1998, Public Limited Company
- 2002, Green Energy TM
- 2005, Developing new products for the markets
- 2008, Demand Response Center - R&D
- 2011 in numbers:
 - Customers 327.300
 - Supply 4 TWh
 - Net sales revenues 282 milion EUR
 - Market share 33%

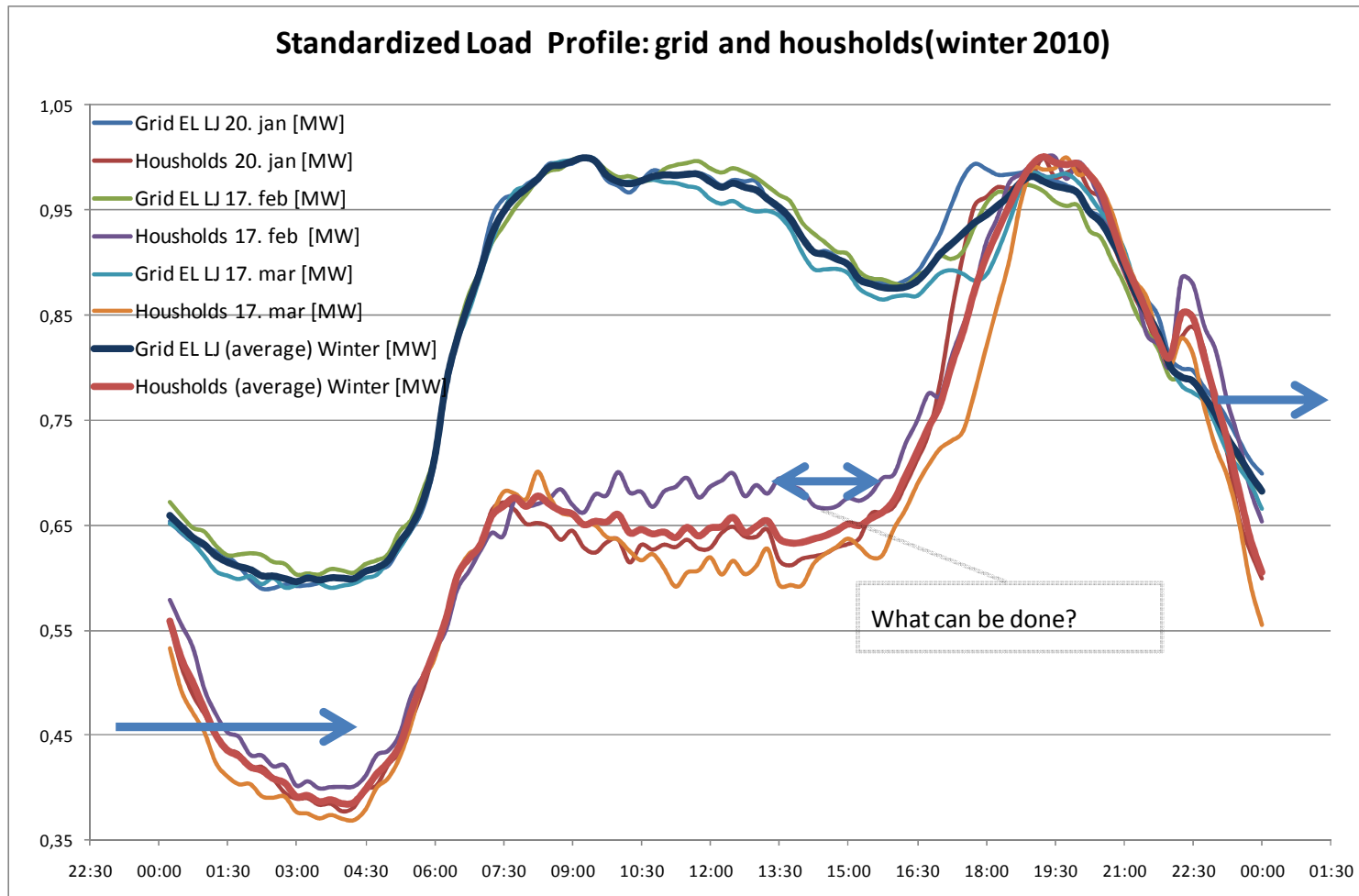
PREDSTAVITEV PODJETJA



Situation 2012



LP 2010, 2011 increased demand



Households Application



- Controlling (on/off) small household loads; quantity!
 - On time vizualisation of demand: Web based registration and monitoring
 - Voluntary participation
 - Financial bonus for participation
 - 80l water heater
 - 47 EUR/annualy
- Result: remote energy efficiency



NOVO!



Prihranite z nami!

Industrial/Commercial DR Field Application



- Participating with available loads and/or W_{el} production units:
 - Pulp & Paper (gas steam turbine)
 - Foundry (smelting furnaces)
 - Animal Waste Processing (Electricity/heat cogeneration plants)
 - Ironworks
 - Glass
 - Commercial buildings
- More than 63 MW (available capacity) VPP
- Commissioned in autumn 2011 – now 25 participants!!!

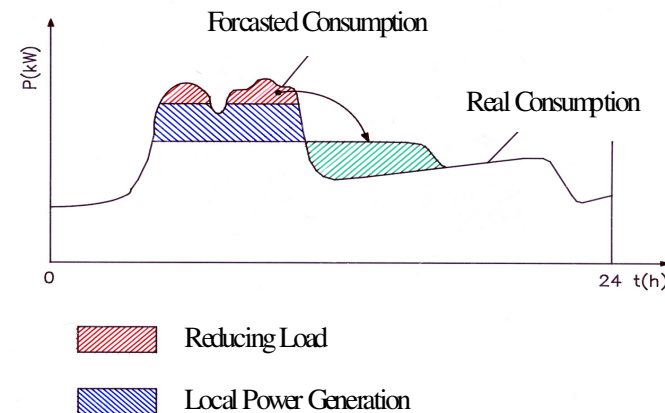
Industrial/ DR Field Application



Product Overview

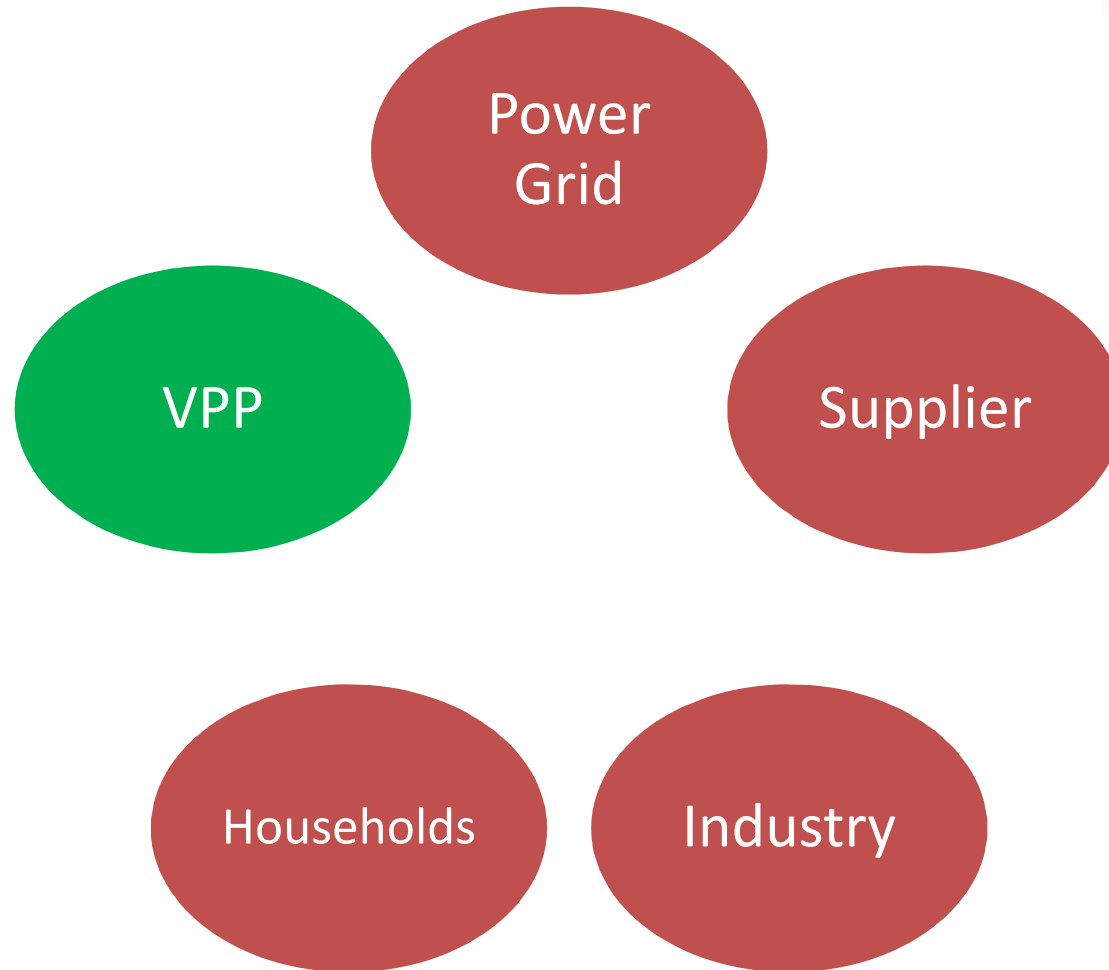
1. Optimal management of local energy sources
2. Optimal time scheduling of high energy consuming processes
3. Power consumption and electric loads control

Result



Electricity consumption reduction from 8% to 30% (13% on average) within 15 min. intervals

New Circle- participants



Concept of the VPP



- 1st player: power sector with new specific challenges, the carrier of new services:
 - Increasing share of RES; distribution of RES
 - **Underinvested aging infrastructure** with long lead times for new projects
 - Public resistance against new projects (transmission lines, nuclear, coal, etc.)
 - **Increasing consumption**
 - **Environmental issues**
- 2nd player: the supplier (conn. to customers) specific challenges are:
 - Add friendly energy products
 - Increasing revenues
 - Decreasing risks

« HIDE



Hello, cyberGrid! | Sign out

09:49 | 16.02.2012



Dashboard

Default

Accounts

Resources

Activations

Monitoring

Reports

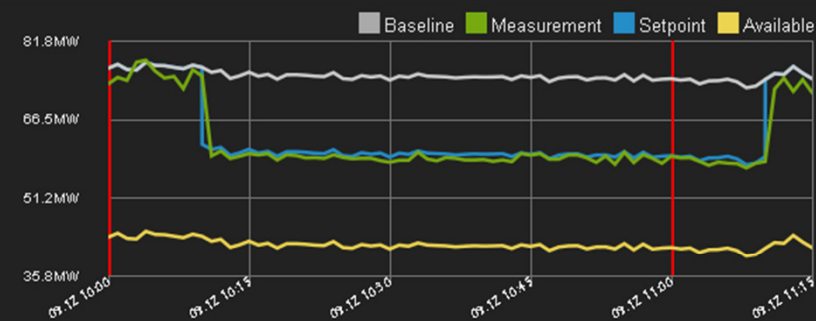
Settings



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CHART 2011-12-09 09:5... € W 09/12/2011 09/12/2011 1H 1D 5D 1M 1Y



ACTIVATIONS NOW 15 30 1H

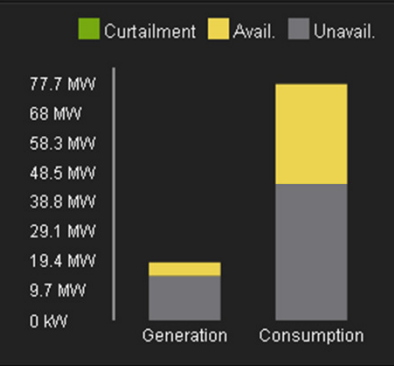
Timeframe	Capacity
14.02.2012 13:42 - 13:57	max: 10MW
14.02.2012 13:40 - 13:40	max: 10MW
14.02.2012 13:35 - 13:38	max: 10MW
14.02.2012 13:00 - 13:15	max: 10MW

WEATHER Ljubljana

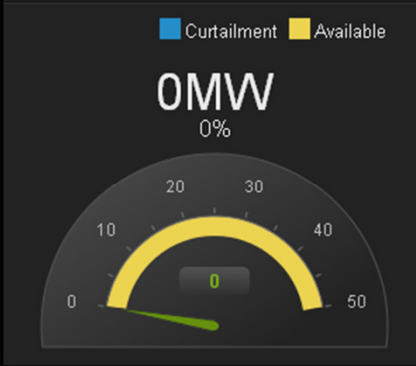
4°C
Blowing Snow

Wind: NW at 22.53 km/h
Humidity: 31%
Today's High: 5°C
Today's Low: -7°C

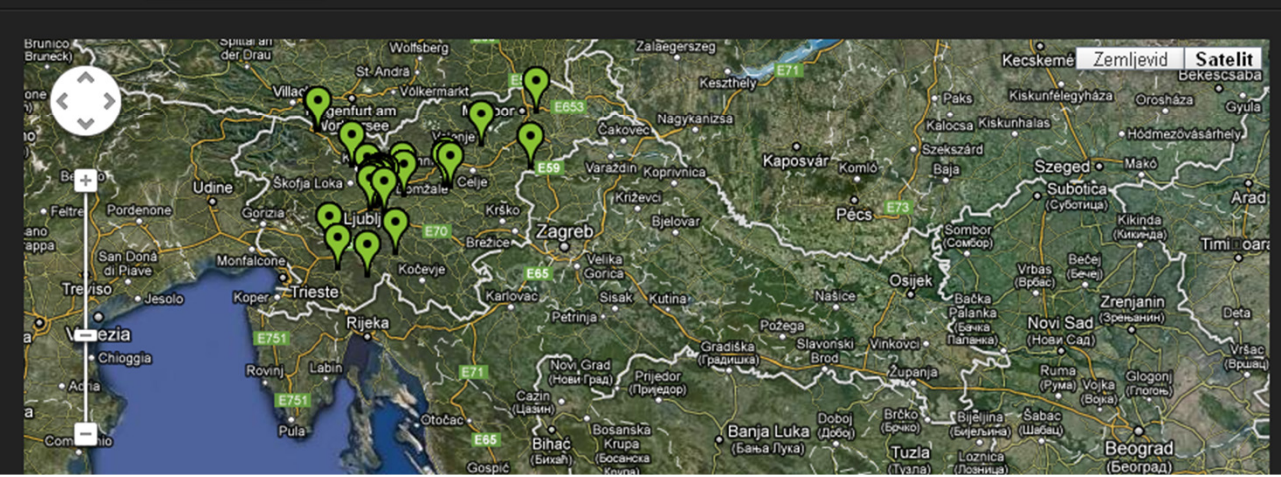
TOWER 2011-11-23 10:4... D



CAPACITY 2011-11-23 10:4...



MAP VPP



A silhouette of a person climbing a rope against a bright orange background. The person is positioned on the left side of the frame, reaching up with their right hand to grip the rope. Their left arm is extended outwards. The rope is attached to a vertical post on the left and extends upwards and then curves to the right, ending in a coiled section. The background is a solid, vibrant orange color.

Thank you for your attention!

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