

TSO “Augstsrieguma tīkls”



Varis Boks

AS "Augstsrieguma tīkls"
Bord member

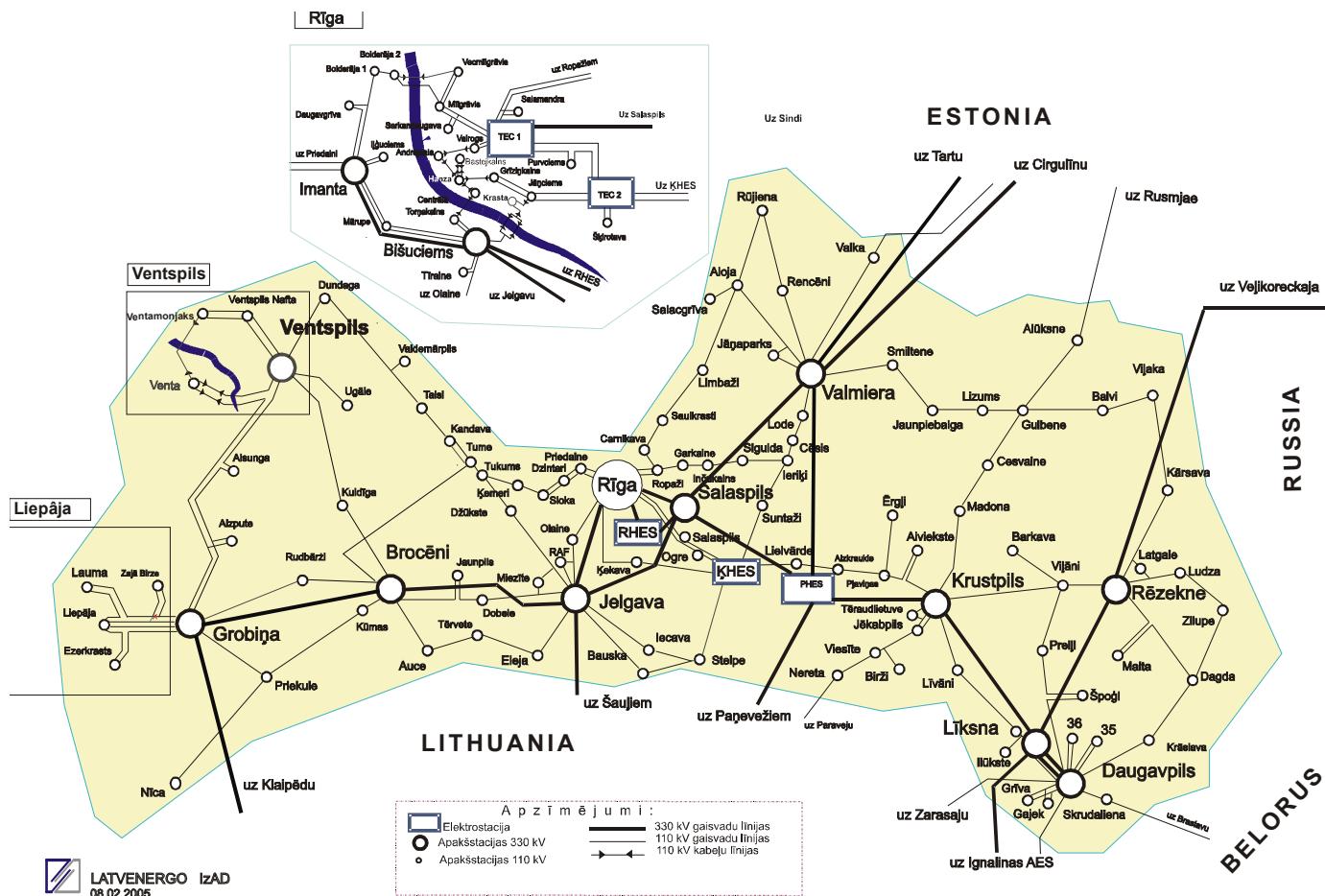


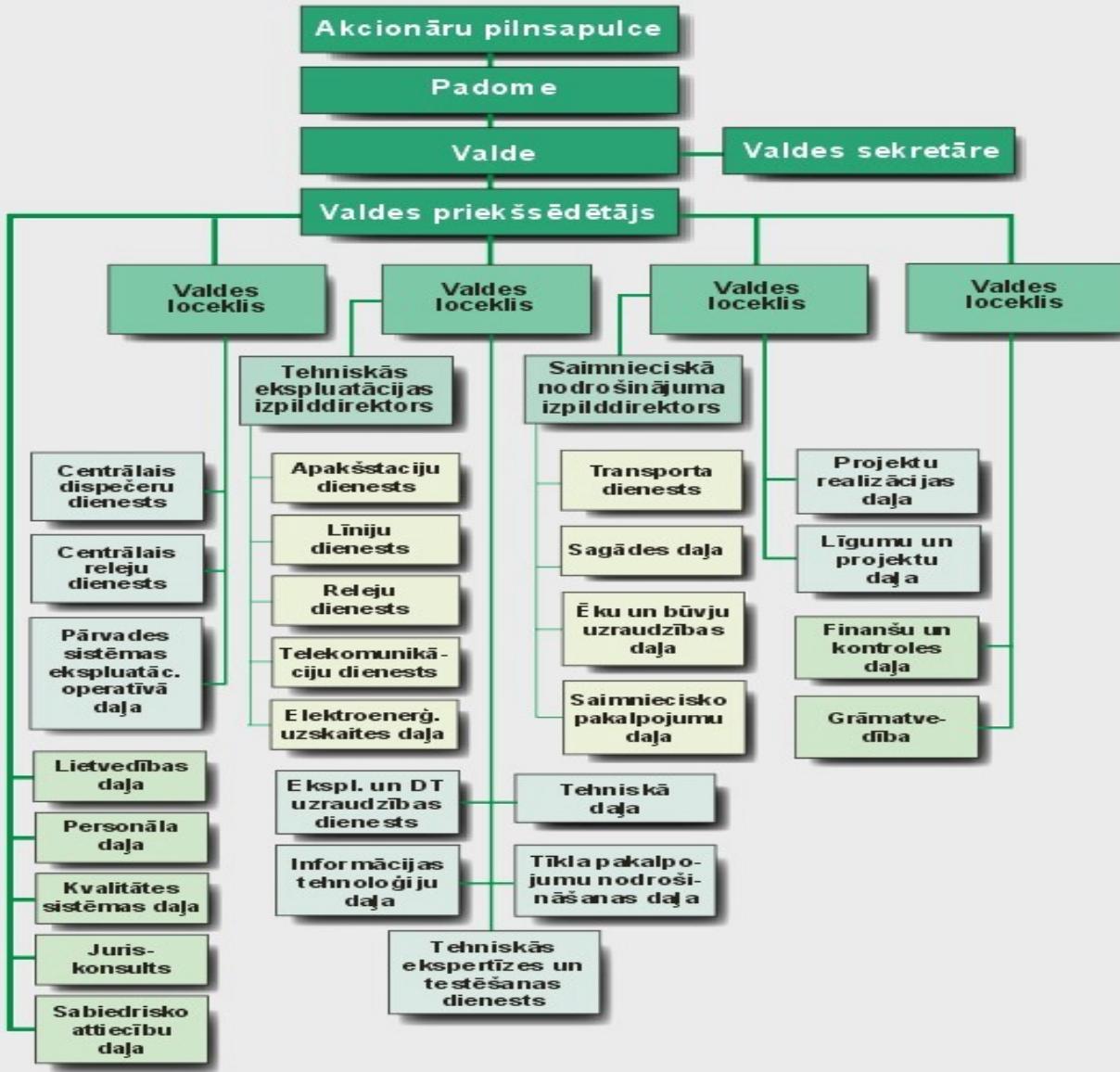
Mūsu enerģija jūsu labklājībai

Baltic and UPS interconnected grid



Transmission Network

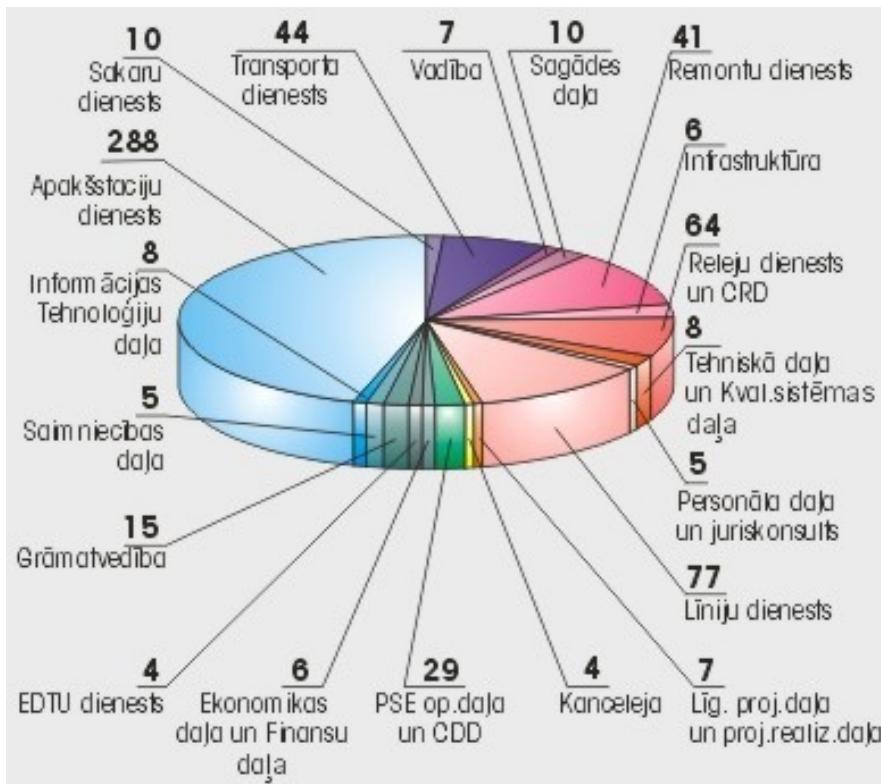




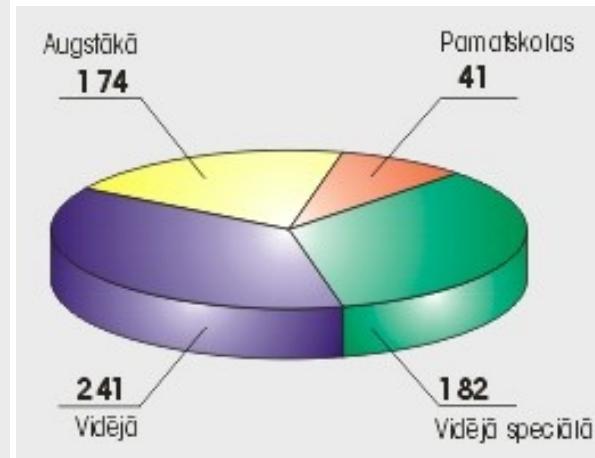
“Augstsrieguma
tīkls”

structure

TSO number of employees and education



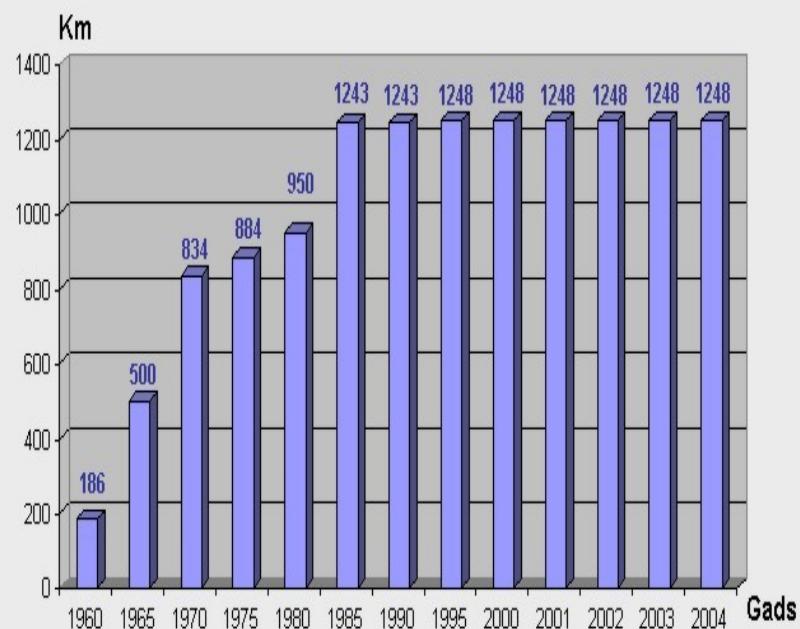
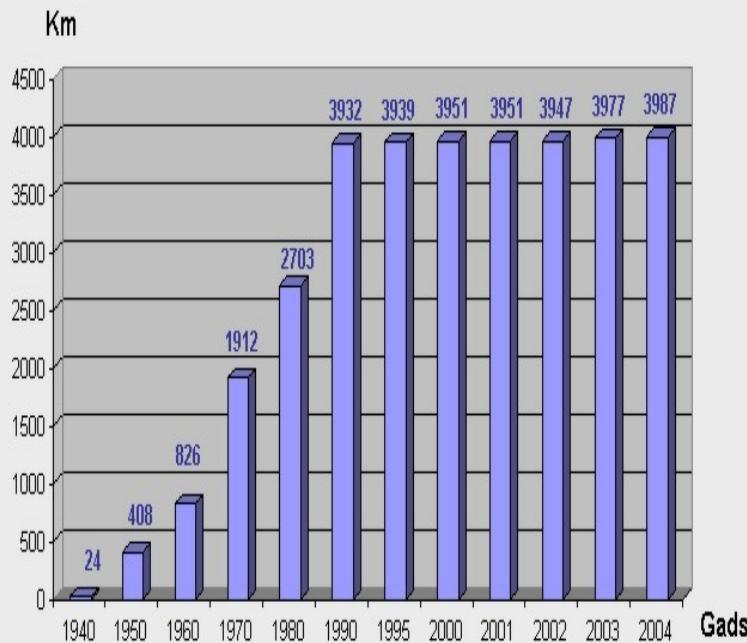
Personal education



Transmission grid

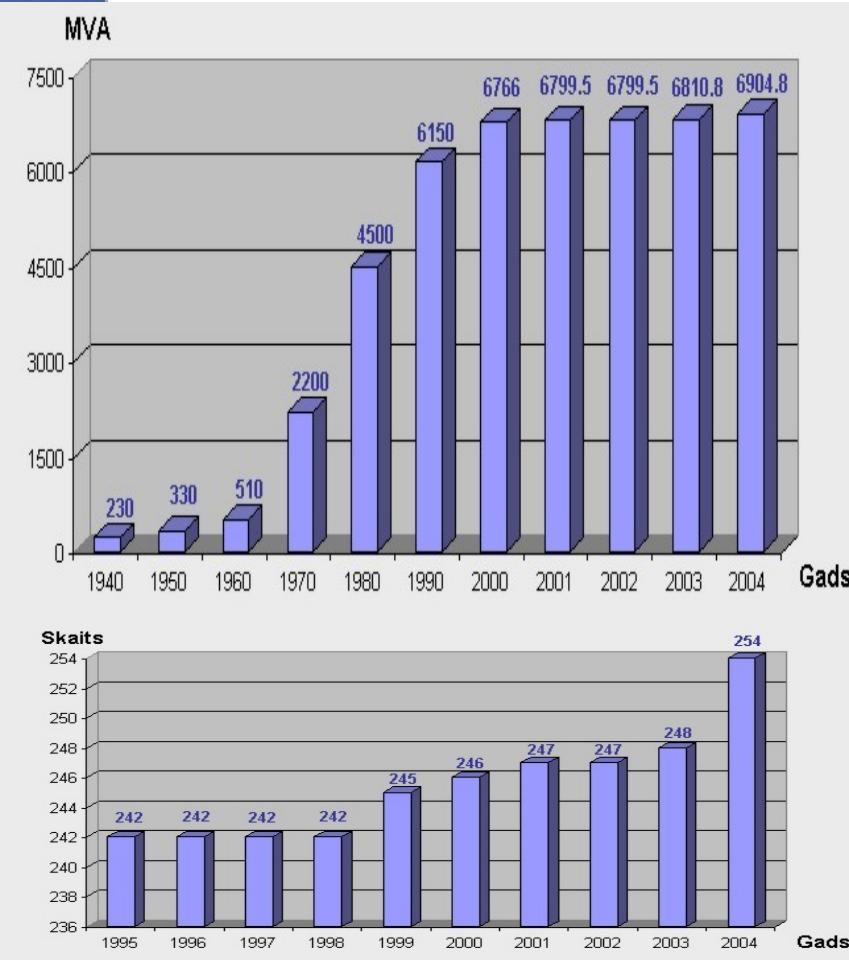
The length of transmission Networks (km)

110 kV networks 330 kV networks

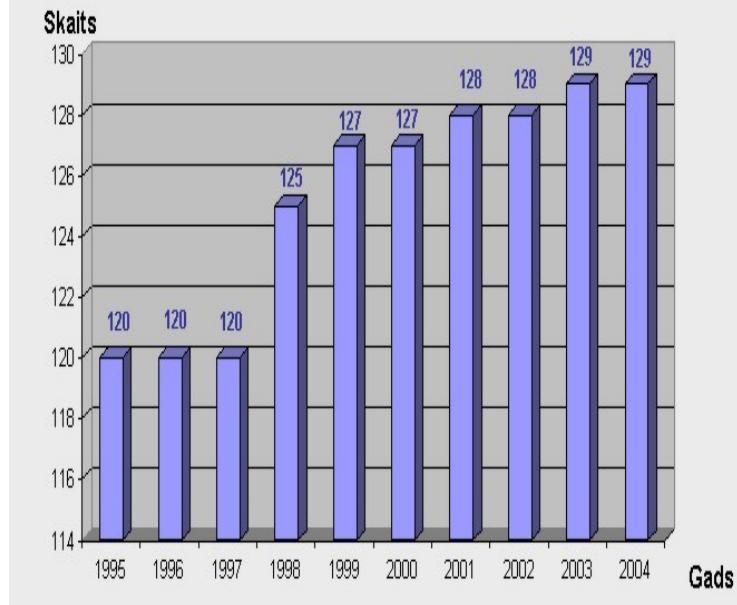


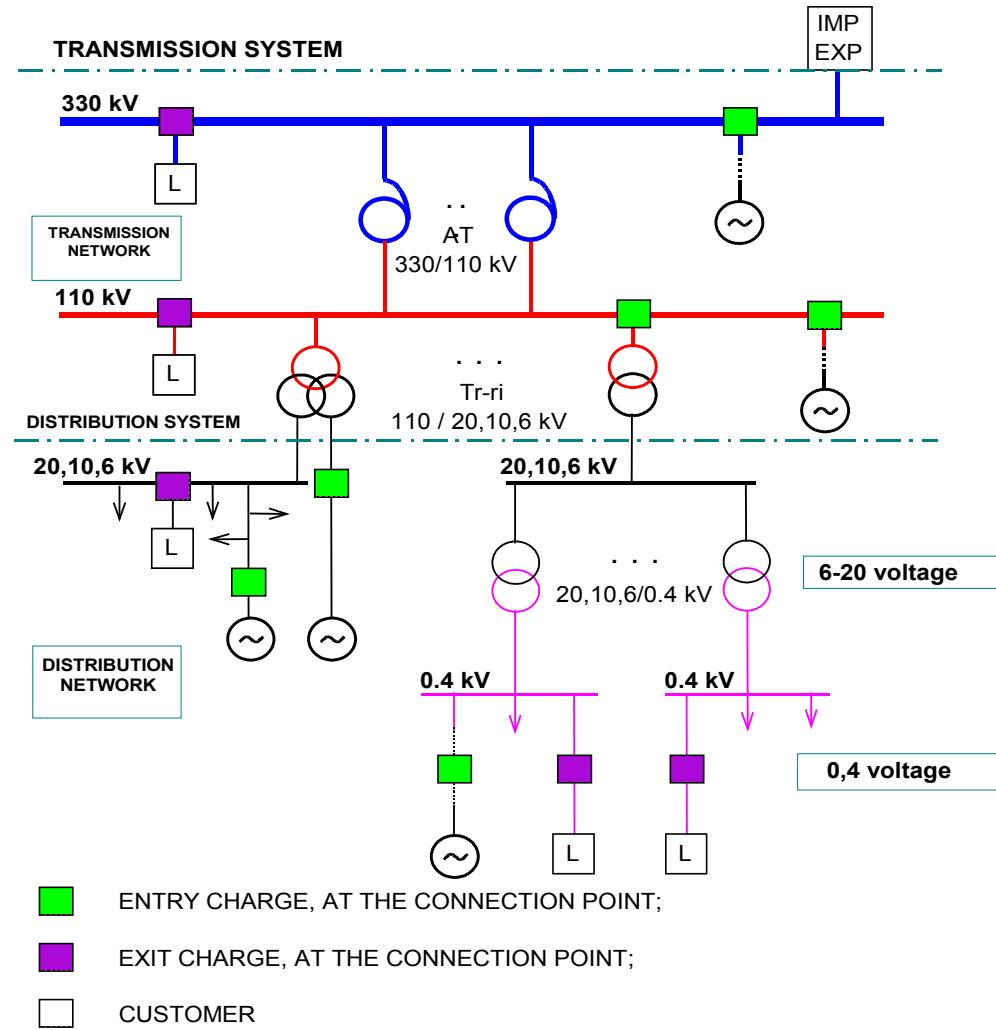
TSO HVN substations

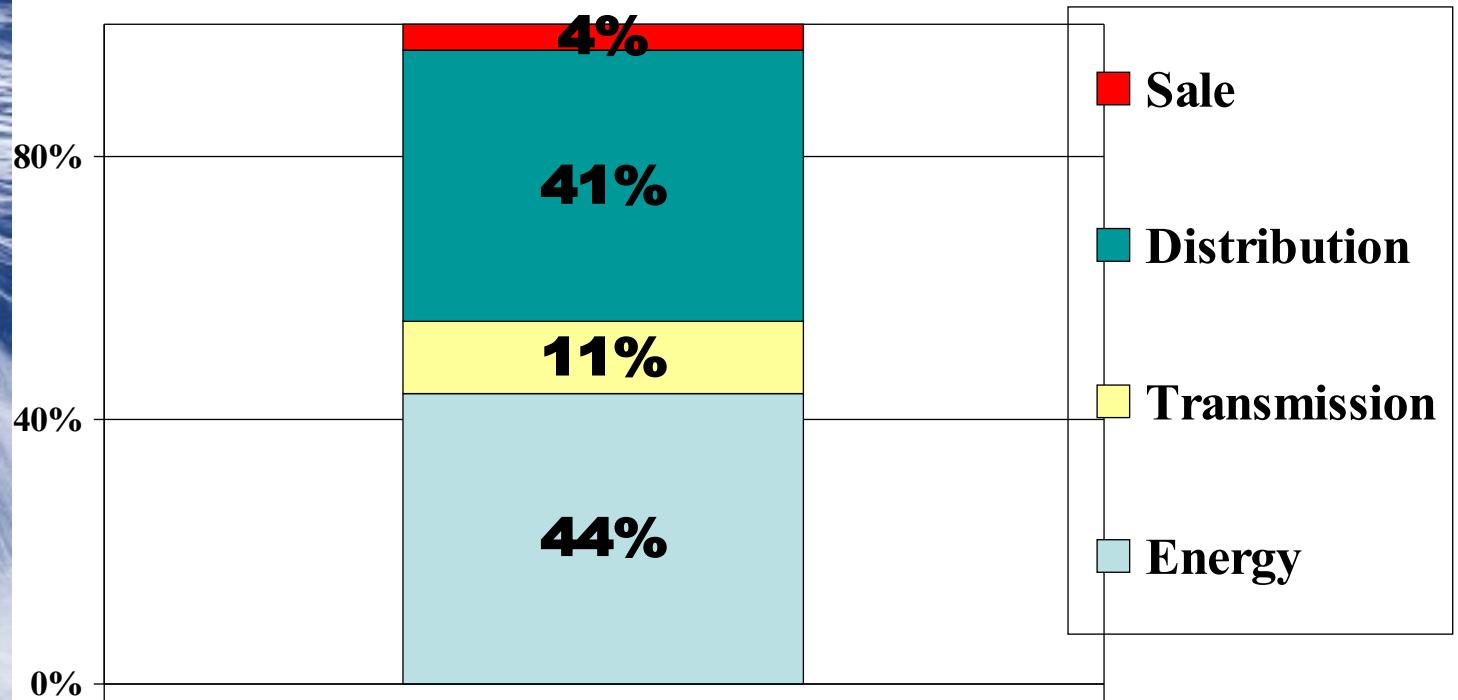
Substations installed transformers capacity



Substations number

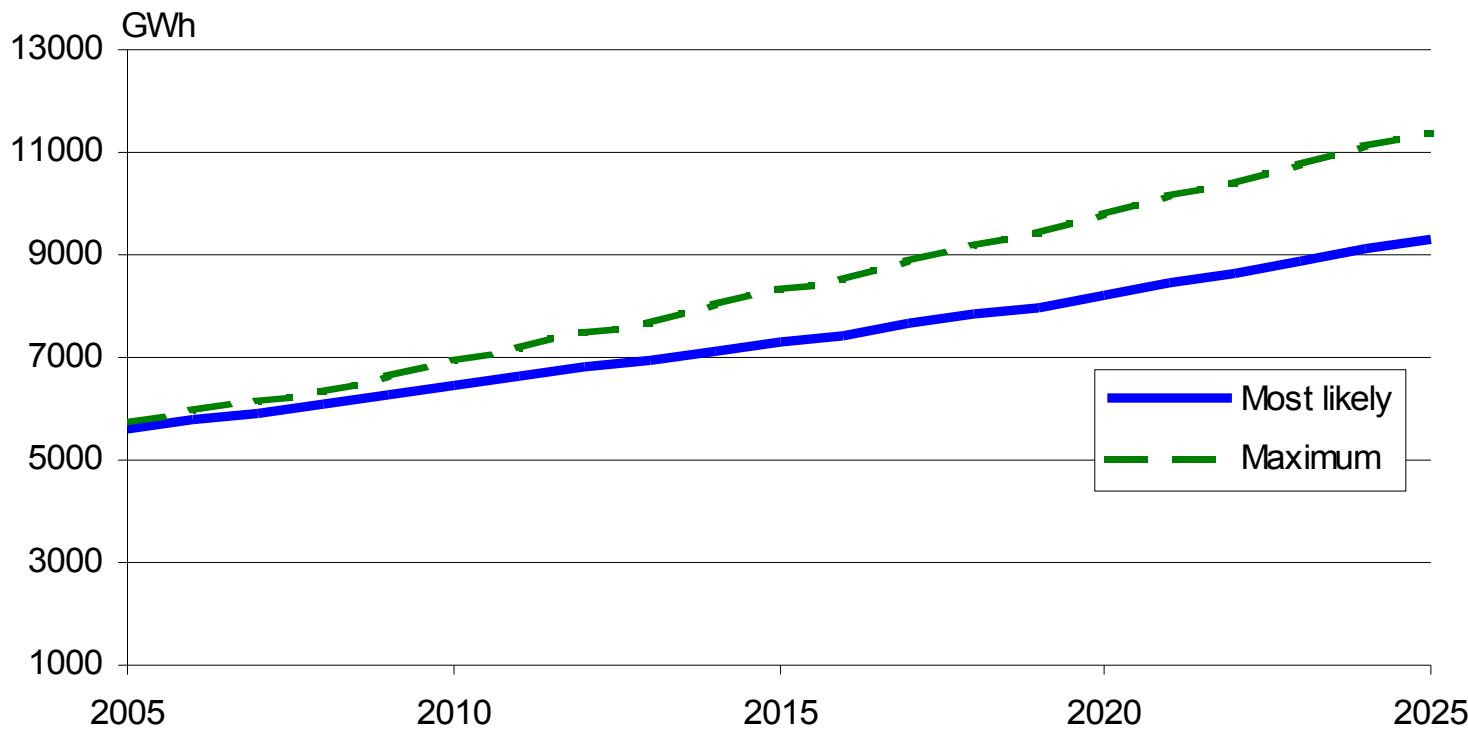




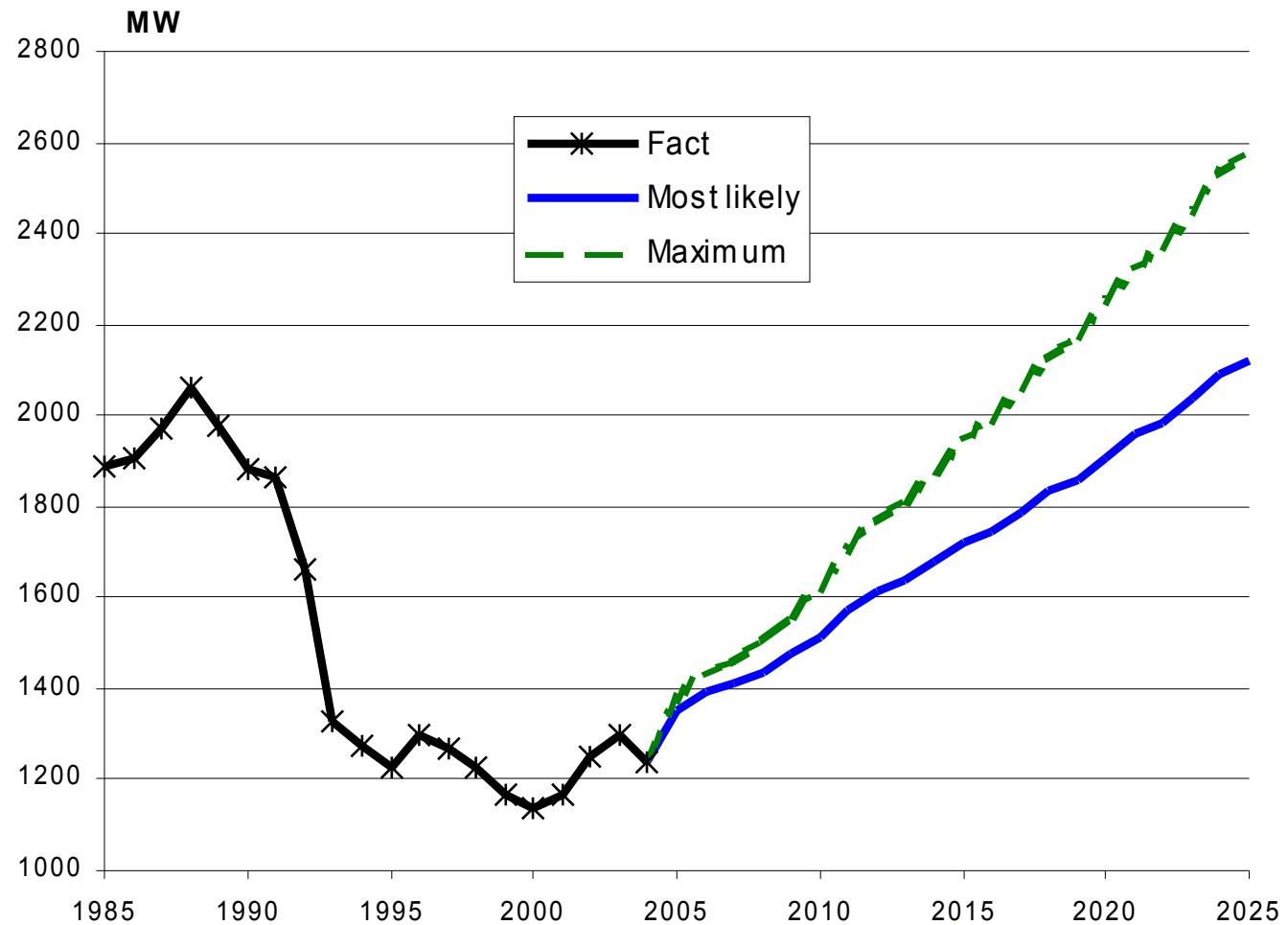


Tariff structure

Electricity Demand Forecast

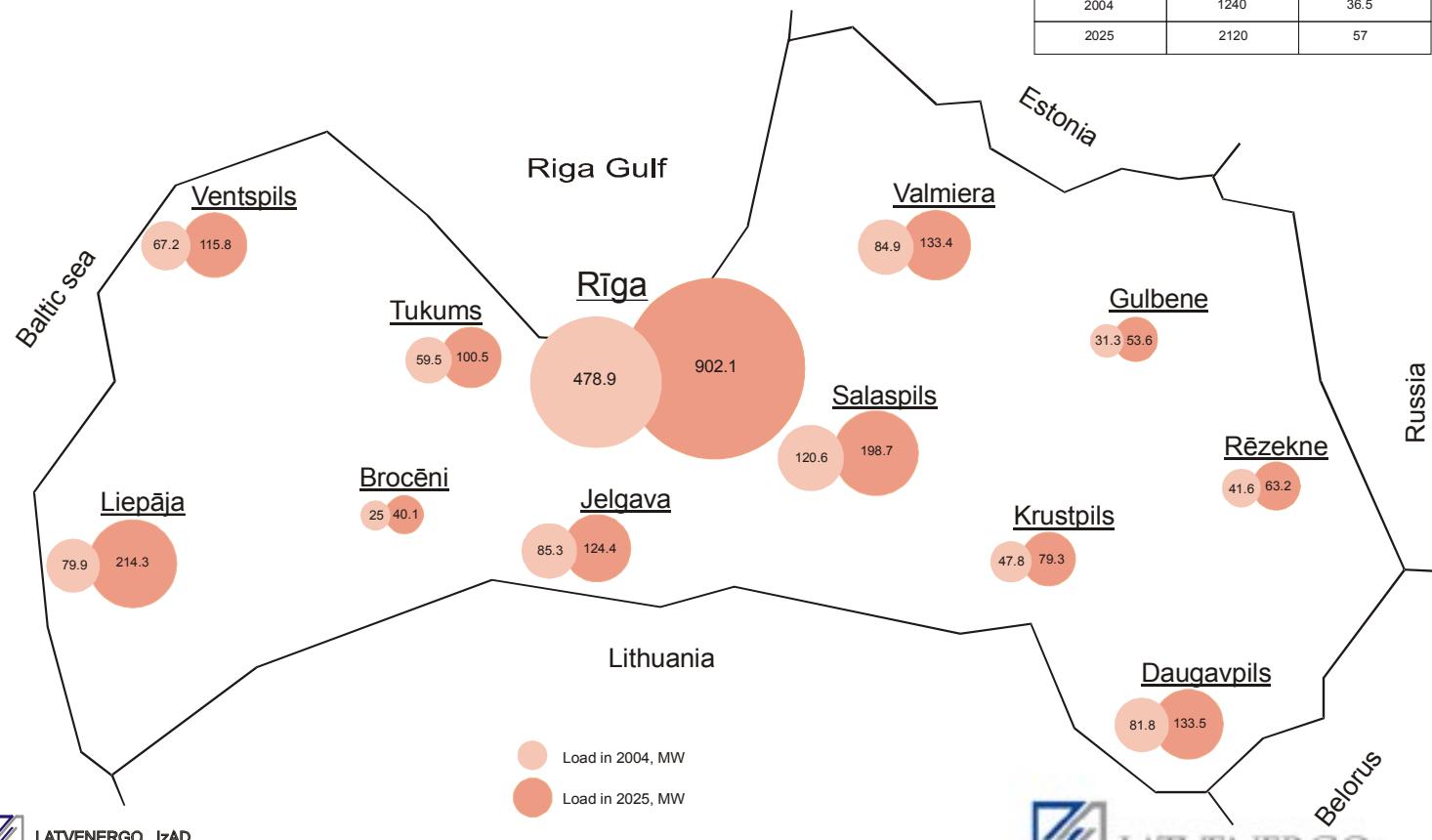


Peak Load Forecast

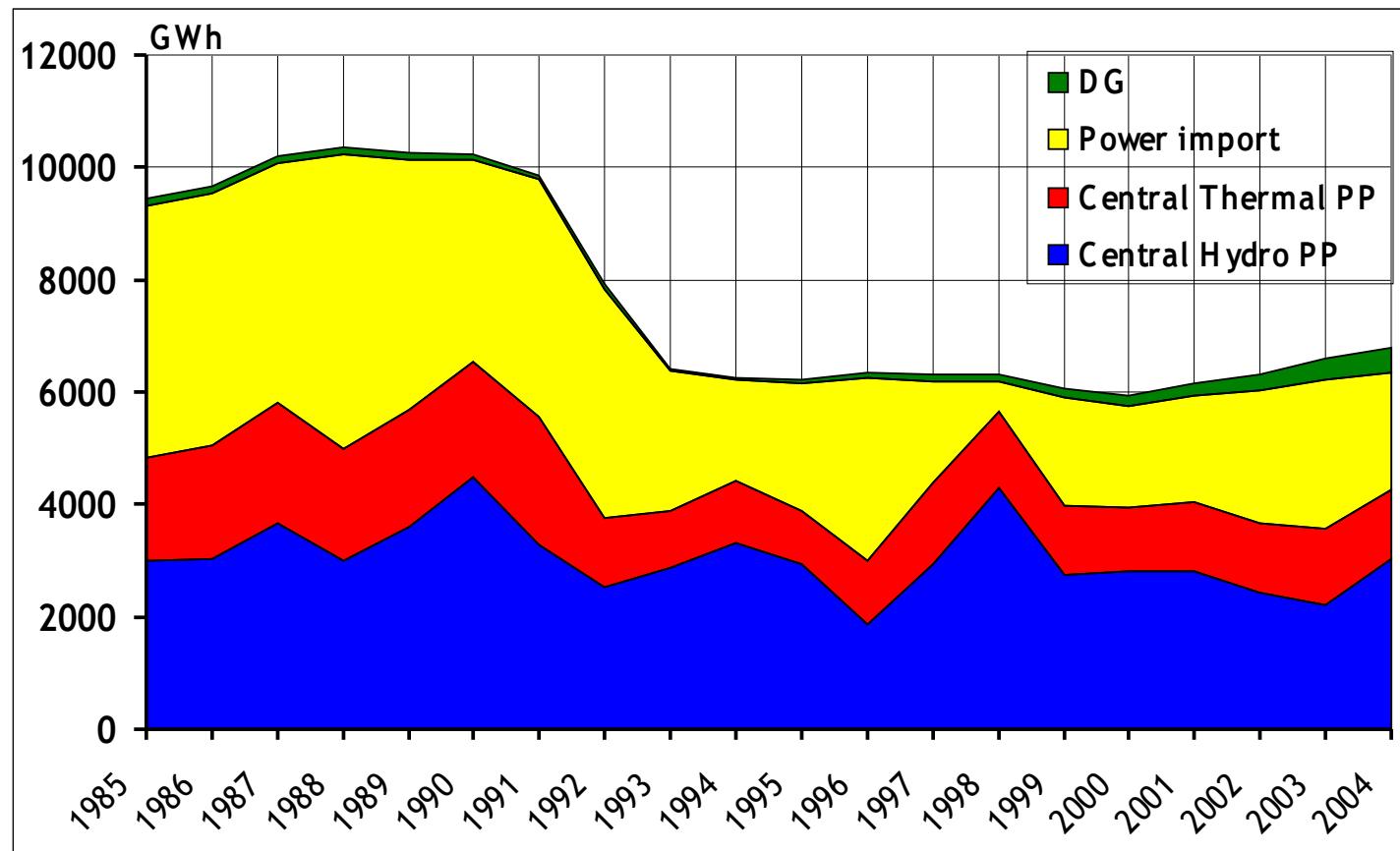


Winter Peak Load Distribution

Year	Pmax, MW	Incl. network losses, MW
2004	1240	36.5
2025	2120	57



Structure of Electricity Supply in Latvia



Average shares of different sources:

- Daugava HPP - 46% (25%-65%)
- Riga CHP - 20%
- Subsidized IPPs - 4%
- Import - 30% (10%-50%)

Large Power Plants in Latvia

Name	Start of operation	Number of units	Power Capacity, MW
Plavinas HPP	1965-1966	10	868.5
Kegums HPP-1	1939. (1947-1953)	4	72.1
Kegums HPP-2	1979	3	192
Riga HPP	1974-1975	6	402
Riga CHP-1	2005	3	144
Riga CHP-2	1975-1979	4	390
Total		31	2068.6

Distributed Generation in Latvia (2003)

Type	Number of plants	Power Capacity, MW
Hydro	149	26,2
Wind	16	26,9
Biogas	1	2
Landfill gas	1	5,3
Cogeneration	29	67,6
Total	196	128,0

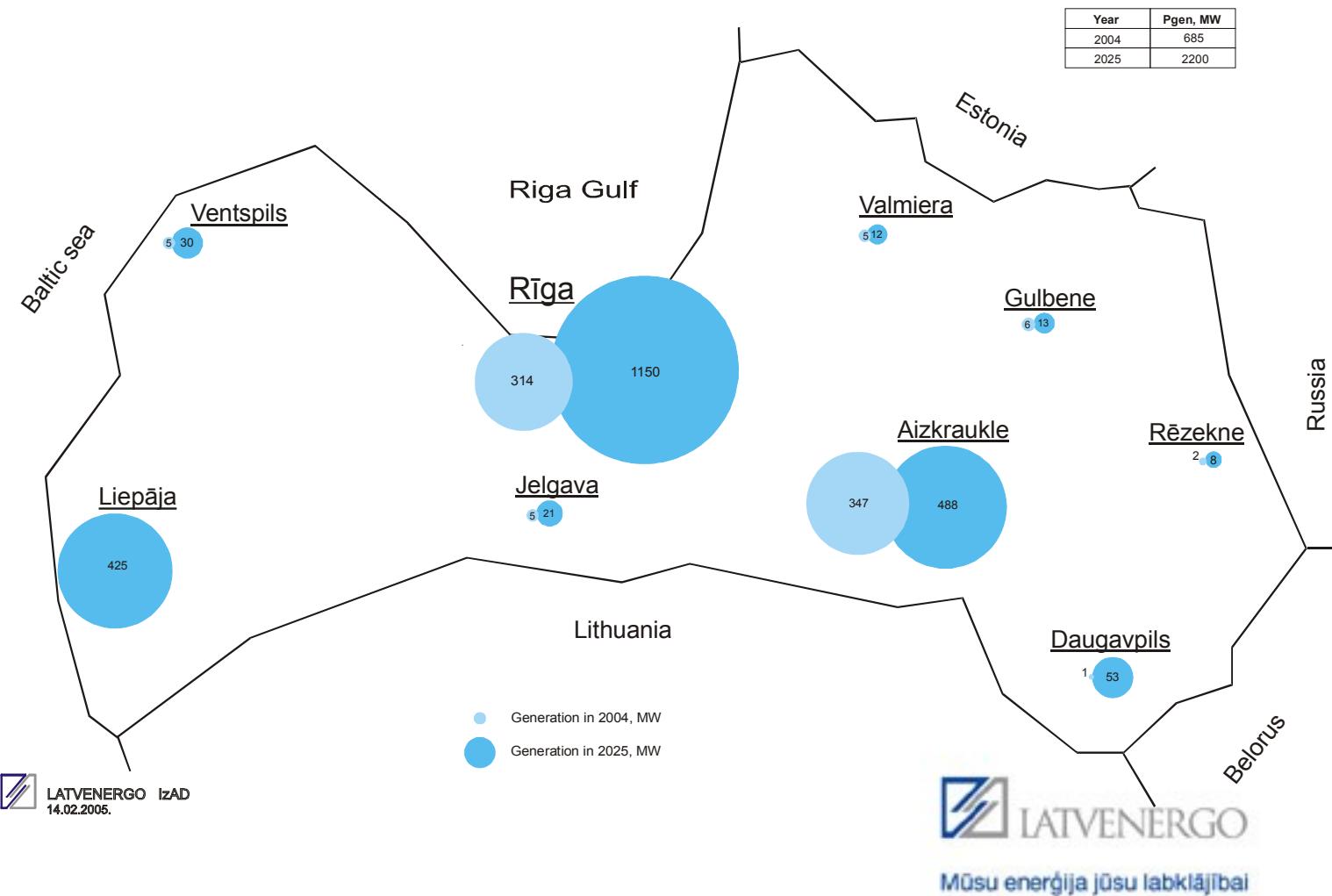
CHPs Under Construction

- 1. Reconstruction of Riga CHP-2**
(1 x 420 MW, CCGT CHP, natural gas);
- 2. Imanta CHP (in Riga)**
(48 MW, CCGT CHP, natural gas);

Other Power Plants under Consideration

- 1. Coal-fired power plant in Ventspils (and / or) Liepaja**
(400 MW, CHP, coal / biomass / peat);
- 2. New hydro power plant in Jekabpils and Daugavpils**
(hydro turbogenerators, JHPP = 30 MW, DHPP=100 MW)
- 3. Distributed generation, including RES and CHP**

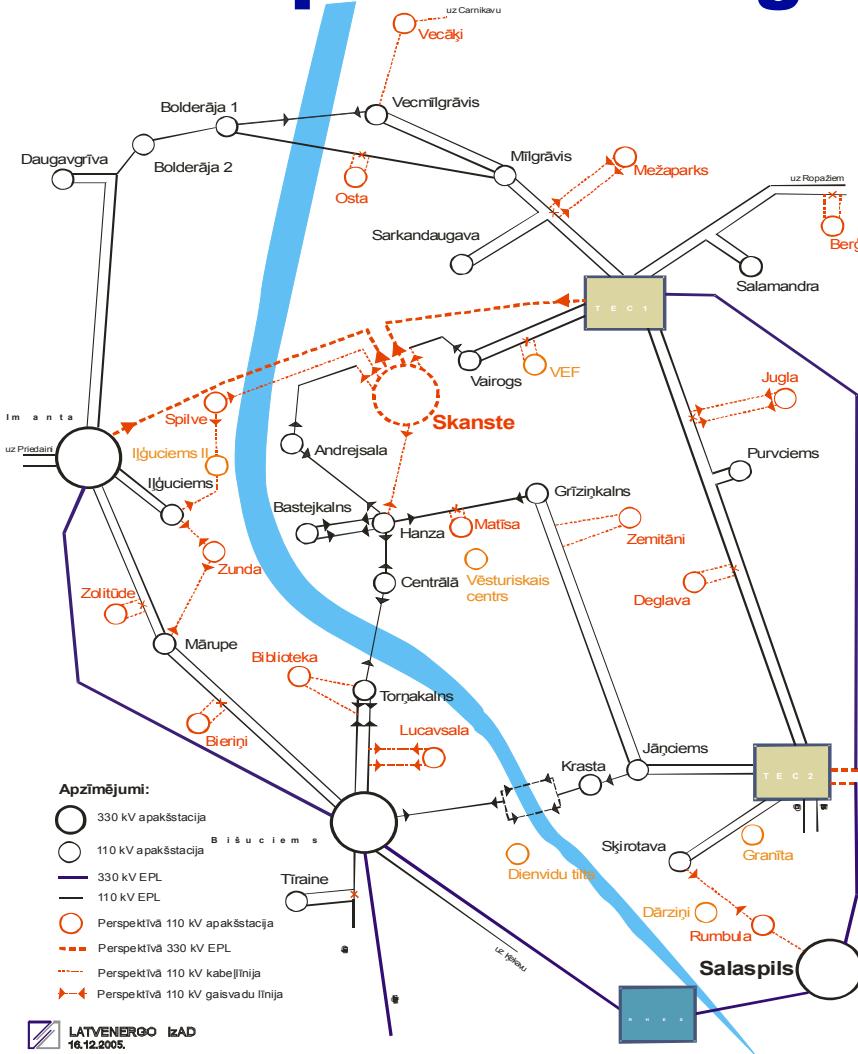
Generation distribution in Latvia



110 kV Transmission Network Development



110 kV Transmission Network Development in Riga Region



Possible Interconnections between Latvian and Neighbouring Power Systems

