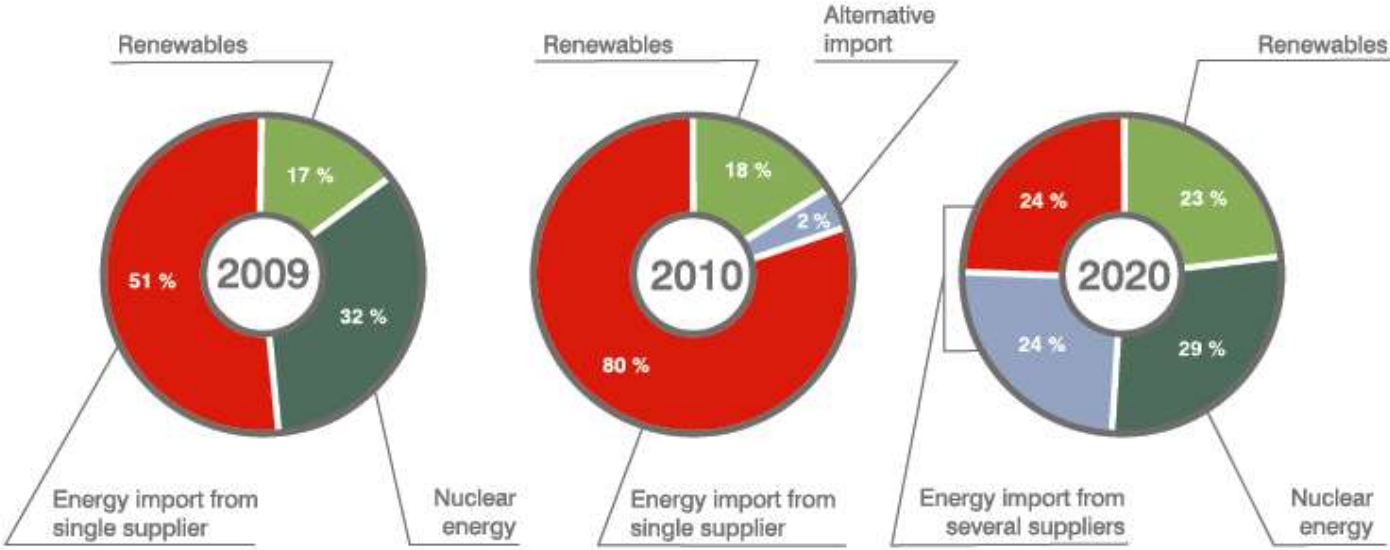


# Visaginas NPP – a regional Baltic project in Lithuania

Baltic Electricity Market Mini-Forum  
3 June 2011

Dr. Rimantas Vaitkus  
External Affairs Director  
“Visagino atominė elektrinė”

# Structure of Lithuanian energy sources



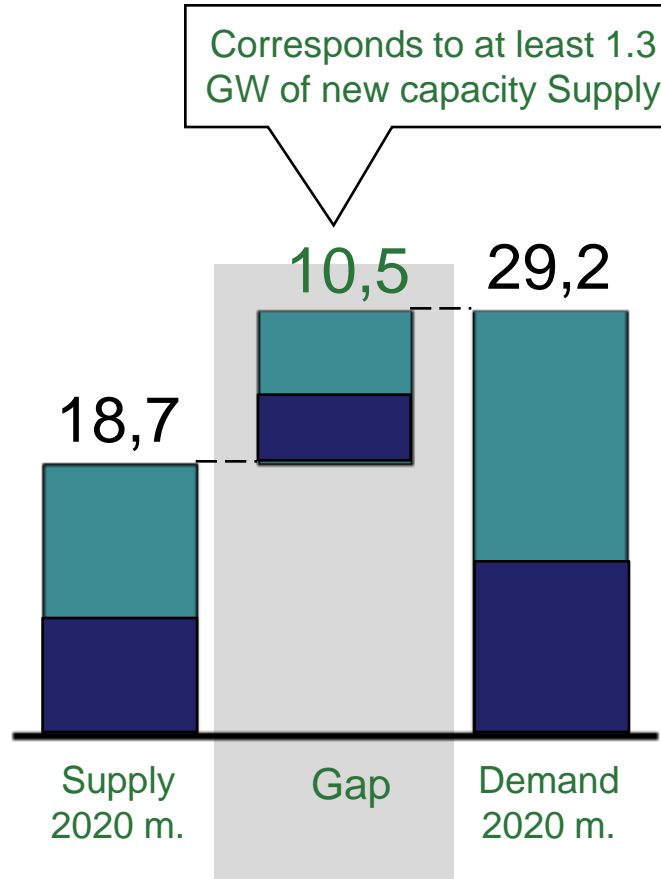
# Electrical energy demand in the Baltic States

In order to balance electricity demand and supply in 2020 in the Baltic States, at least 1.3 GW of new capacity has to be built

TWh, all Baltic States, "Middle case" macroeconomic scenario

## Supply

- **Supply in 2020** is composed of
  - **Existing units**, running potentially with higher utilization
  - **New builds** (CCGT in Lietuvos elektrinė; 5th unit of Kruonis Pumped Storage Plant)
- Excluding units to be decommissioned before 2020 and Visaginas NPP



## Demand

- Key drivers of electricity demand in 2020** are the post-crisis **GDP growth** and future **energy efficiency** improvements
- Depending on macroeconomic scenario, demand in the Baltic States might vary in the range from 27 to 33 TWh per year

# Visaginas NPP - the most viable alternative

## Nuclear scores well on all the criteria...



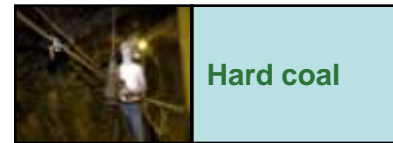
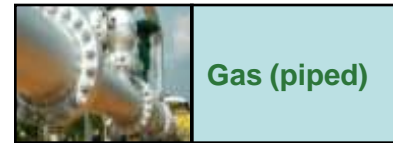
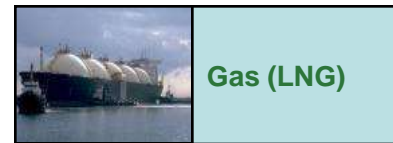
Criteria	Nuclear Power Plant
 <b>Energy independence</b>	<ul style="list-style-type: none"> <li>High energy independence due to the possibility to import fuel potentially from <b>multiple countries</b></li> <li><b>It is a regional project ensuring additional generation capacities for Estonia, Latvia, Lithuania and Poland</b></li> </ul>
 <b>Competitiveness</b>	<ul style="list-style-type: none"> <li>Positive impact on <b>export balance</b></li> <li>Potential boost of economy during construction period</li> <li><b>From the economic point of view, more attractive than other options</b></li> </ul>
 <b>Sustainability</b>	<ul style="list-style-type: none"> <li><b>No CO2 emissions,</b></li> <li>High contribution to EU's CO2 emissions reduction targets</li> </ul>






## Alternative technologies

Option	Drawbacks
 <b>Hard coal</b>	<ul style="list-style-type: none"> <li><b>High environment pollution</b></li> <li><b>Economically unattractive</b> due to high CO2 emission price</li> </ul>
 <b>Gas (piped)</b>	<ul style="list-style-type: none"> <li><b>Low energy independence</b> – fuel coming from one source</li> <li>10-years payments for imported gas equal to investment into nuclear</li> </ul>
 <b>Gas (LNG)</b>	<ul style="list-style-type: none"> <li><b>Business case not attractive</b> due to unstable fuel prices</li> </ul>
 <b>Import only</b>	<ul style="list-style-type: none"> <li><b>Very low level of energy independence</b></li> <li>Negative impact on export/import balance</li> </ul>

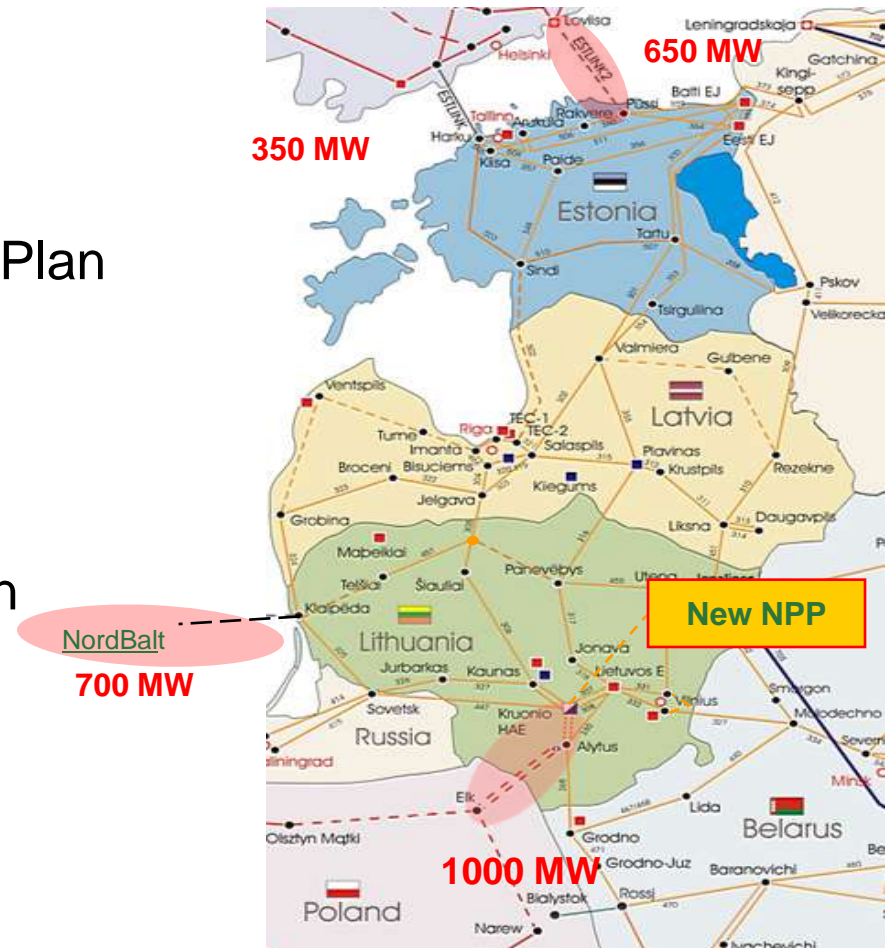





# Regional project with EU support

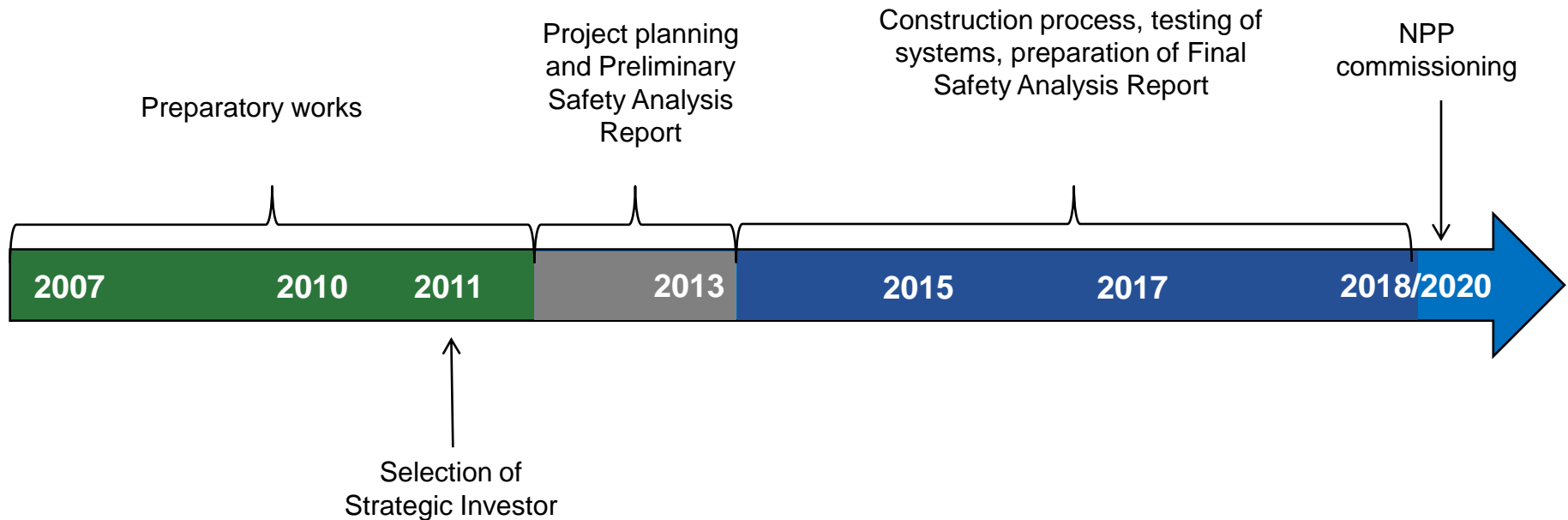
## ➤ Strong Regional support

## ➤ European level support

- Baltic Energy Market Interconnection Plan (BEMIP)
- Liberalization of electricity markets
- Common trade principles
- High Level Nuclear Task Force within BEMIP framework



# Visaginas NPP – one of the most advanced projects in Europe



All preparation works, covering main areas, are completed



IAEA approved

“Sites evaluation in line with IAEA requirements and guides...sites are suitable for construction of Visaginas NPP” (Mission November 2010; full report March 2011)

# Key facts to remember about Visaginas NNP

- **Regional project of importance for EU energy policy**
- **One of the most stable and advanced projects**
  - Significantly advanced project with site readiness – including IAEA approval
  - Existing nuclear regulator and safety conscious ‘nuclear culture’
  - Stable and high public support
- **Momentum in discussions with commercial operation planned by 2020**
  - Investment structure and contractual framework ready to accommodate co-investment interest from a corporate with nuclear expertise
  - Significant progress in process of direct negotiations with potential Strategic Investors

