# Legislative impact on significance of RES in the Latvian Energy market

**Peteris Shipkovs**
Prof., Dr.habil.sc.ing., LZA full member
Energy Resources Laboratory
Institute of Physical Energetics
E-mail: shipkovs@edi.lv
http:/www.innovation.lv/fei
http:/www.lza.lv/scientists/shipkovs.htm

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# Presentation content

- RES in Latvia among other energy resources
- Latvian Energy Policy and Strategy
- Financial support for RES
- Conclusions

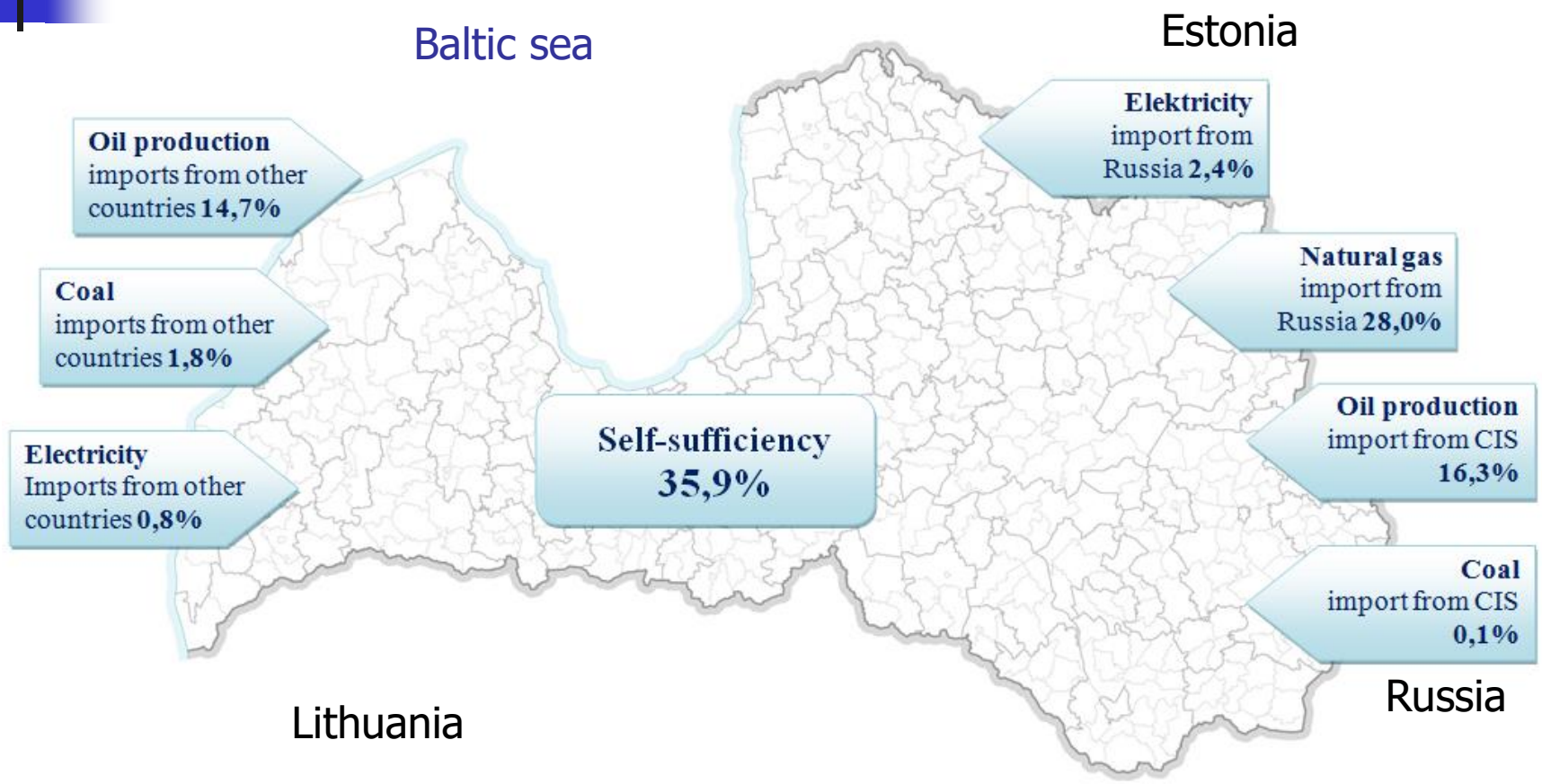
**In the EU, support for the RES use has become an integral part of its energy policy.**

In the world, a tendency is developing fast – that of step-by-step replacement of the traditionally employed energy carriers by those of higher quality, with inclusion of renewable energy resources - biomass, solar and wind energy.

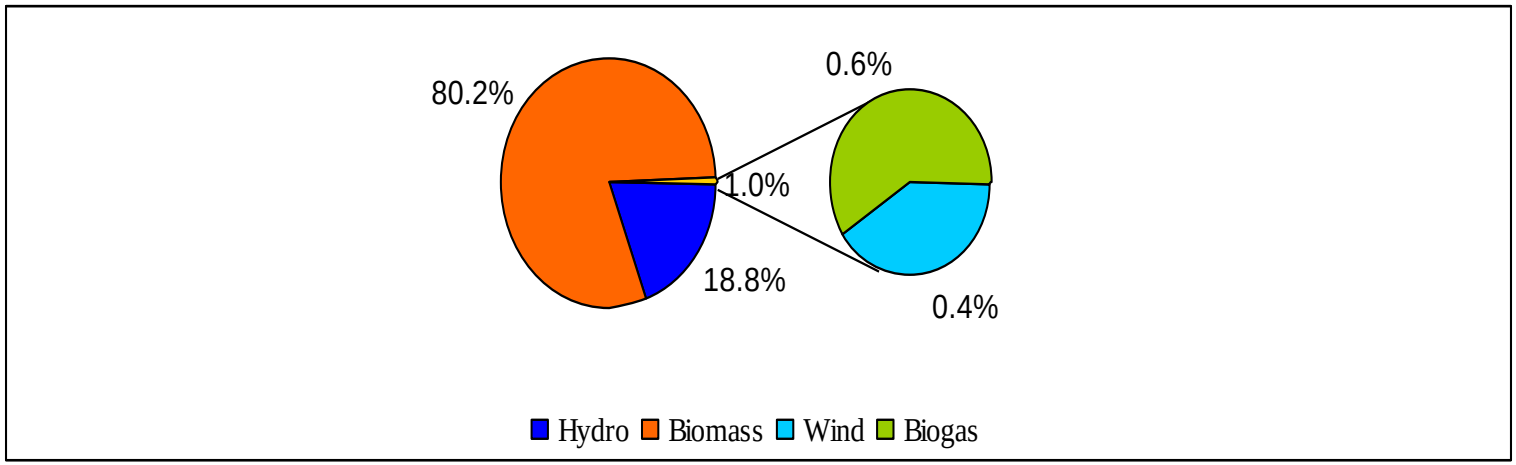
For **Latvia** (as for other European countries) this issue is especially topical. Latvia has not own energy resources except renewables – the main are hydro resources and biomass.

The use of local renewables and energy efficiency improvement became the priority objectives in diversification efforts and promotion of self-sufficiency in Latvia.

# Latvian energy self-sufficiency and import (2009)



# RES structure in 2009 in Latvia



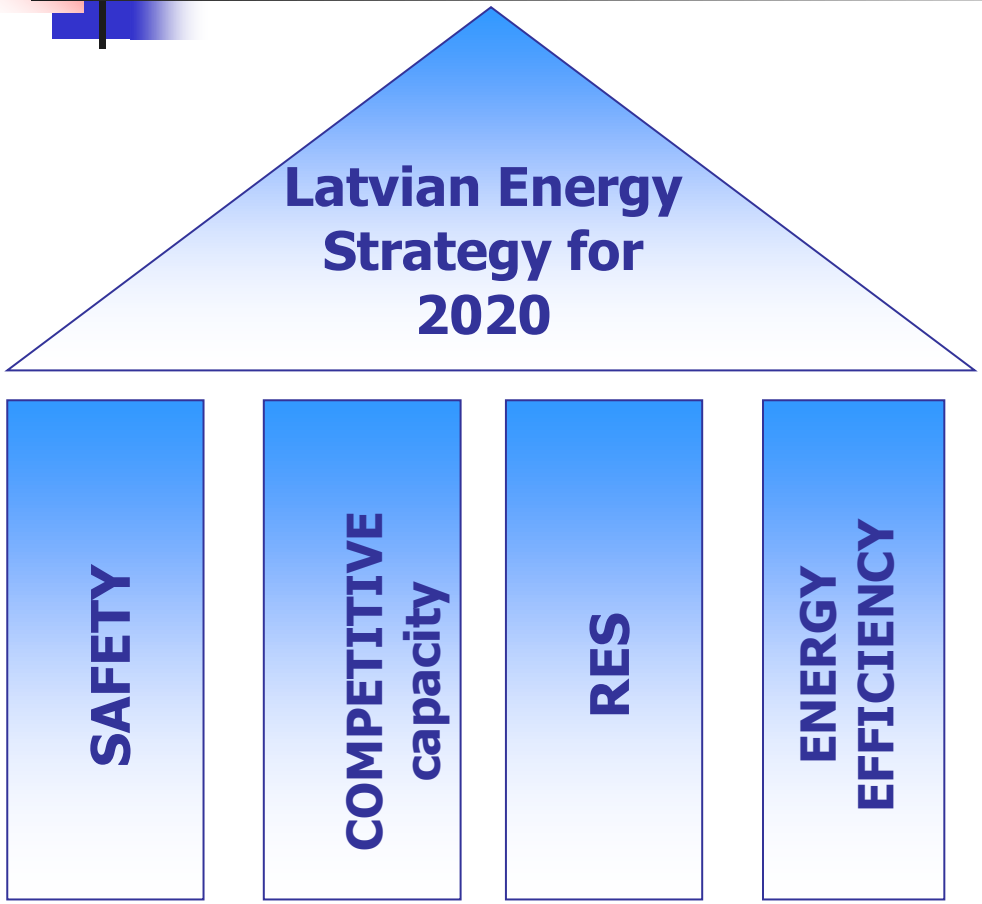
# RES advantages in the Latvian energy balance

In 2010, the RES share in the Latvian final energy consumption reached 34.6%.

The *local RES share:*

- in heating was 45-50%,
- in district heating – 18%, and
- in electricity production – > 40%.

# Latvian energy strategy for 2020



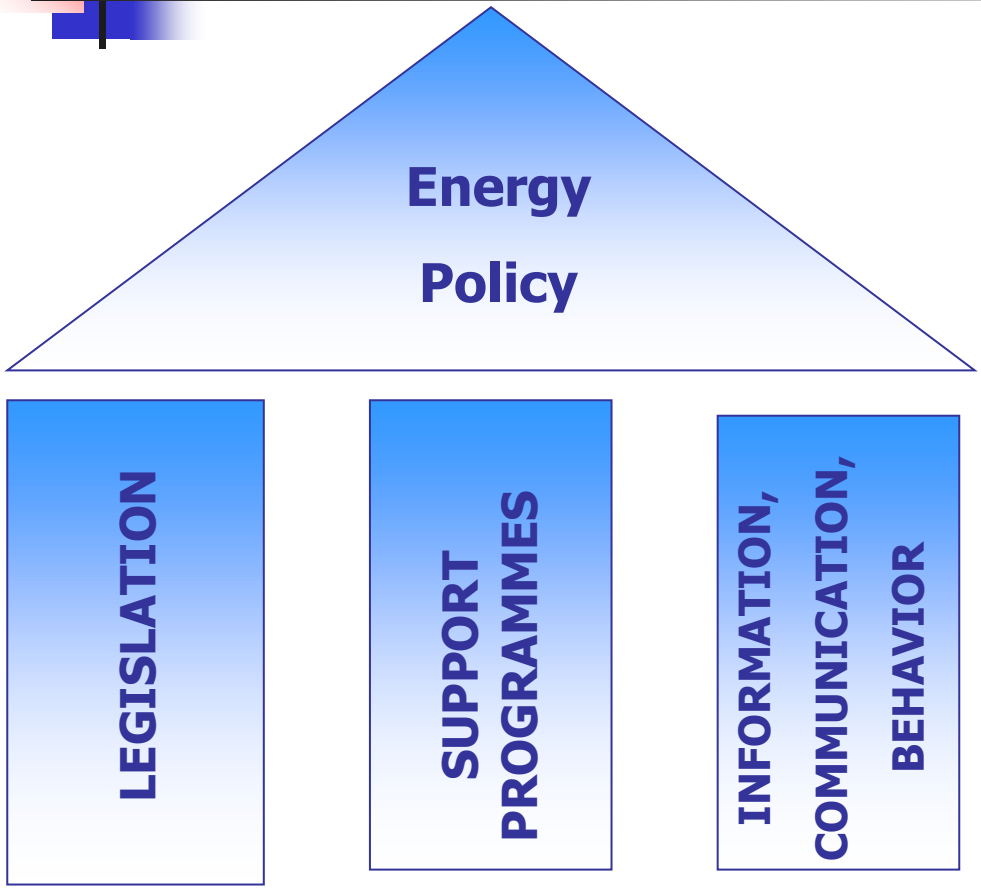

It is of vital importance to increase the Latvian energy independence.

Therefore, it is obligatory that the Government energy strategy for 2020 includes the RES development.

# Objectives of the strategy for RES promotion:

- Increase of the RES share in the energy mix (mainly in the heating and transport sectors).
- Introduction of sustainable support mechanisms for RES.
- Priority for economically attractive technical solutions.
- Promotion of RES and related technologies by raising investments.
- Development of a sustainable and cost-based support mechanism for the RES use.
- Achievement of the 40% RES share in the final energy consumption by 2020.

# Policy instruments




To reach the goal – to prepare Energy Policy, is not a single measure but a coherent mix of measures is required.

## Legal Framework:

The legal framework includes:

- **EU Directives and**
- **National laws & regulations.**

The Latvian government and Parliament have produced a number of energy-related planning documents and regulations:

- ✓ The framework strategic planning document is Latvian National Development Plan 2007-2013.
- ✓ The Principles of Energy Sector Development 2007-2016 (adopted in 2006).
- ✓ The Principles of Renewable Energy Resource Use 2006- 2013.

# Energy policy framework documents:

## Guidelines for Energy Sector Development for 2007-2016:

- The main goal of the Energy Policy is to develop the guidelines for ensuring security of supply in the country.
- The next in importance are the goals:
  - to increase self-sufficiency and
  - to achieve greater diversification of energy resources.

# RES legislation in Latvia

- **Energy Law** – the legislative base for Energy Sector.
- Electricity market is regulated by **Electricity Market Law** that entered into force in 2005. This Law reinforces **RES** promotion and their access to the grid on fair conditions.
- **Renewable Energy Law** is accepted (15.02.2011) by the Cabinet of Ministers, but not approved yet by the Parliament.

**In Latvian NREAPlan (**National Renaweble Energy Action Plan**)** Share of RES in Gross Final Energy Consumption by year 2020:

- 2010 – RES total in Energy mix 29,9%;
- **2020 - 40%**.
- 2010 - RESe electricity in the electricity mix 48,5%.
- **2020 - RESe - 60% (Share of RES in gross electricity consumption), from which:**
  - Hydro – 58,8%
  - Solar (2 MW) - 0,1 %
  - Wind - 17,5%
  - Biomass – 23,6 %.

# The RES Law

The targets of the Law are as follows:

- To promote production, utilization and export of local RES;
- To determine stable long-term investment environment for production, utilization and export of local RES;
- To contribute to the technologies reducing the GHG emissions.

# RES use in Buildings

One of the issues associated with utilization of energy resources (in particular, RES) is heat consumption in buildings.

In accordance with the Latvian "Law on the Energy Performance of Buildings", the environmental and economic considerations as well as binding regulations of local governments and other regulatory enactments should be taken into account in designing buildings, in order to evaluate the possibility to implement RES as an alternative solution in the relevant heating systems.

# Latvian National Renewable Energy Action Plan*

| (TWh) | Expected bruto demand for heating and cooling from RES | Expected bruto demand for electricity from RES | Expected energy demand for transport from RES | Expected demand from RES |
|---|---|---|---|---|
| 2005 | 12.9 | 3 | 0.1 | 16 |
| 2010 | 11.8 | 3 | 0.5 | 15.3 |
| 2011 | 12.4 | 3.2 | 0.5 | 16.1 |
| 2012 | 12.8 | 3.3 | 0.5 | 16.6 |
| 2013 | 13.2 | 3.4 | 0.6 | 17.1 |
| 2014 | 13.3 | 3.7 | 0.6 | 17.5 |
| 2015 | 13.7 | 3.9 | 0.6 | 18.1 |
| 2016 | 14.1 | 4 | 0.7 | 18.8 |
| 2017 | 14.5 | 4.2 | 0.8 | 19.5 |
| 2018 | 14.9 | 4.5 | 0.9 | 20.3 |
| 2019 | 15.4 | 4.8 | 1 | 21 |
| 2020 | 16.2 | 5.2 | 1 | 22.2 |

*The NREAP of the Latvian Republic is intended for implementing Directive 2009/28/EC of the European Parliament and the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC by 2020.

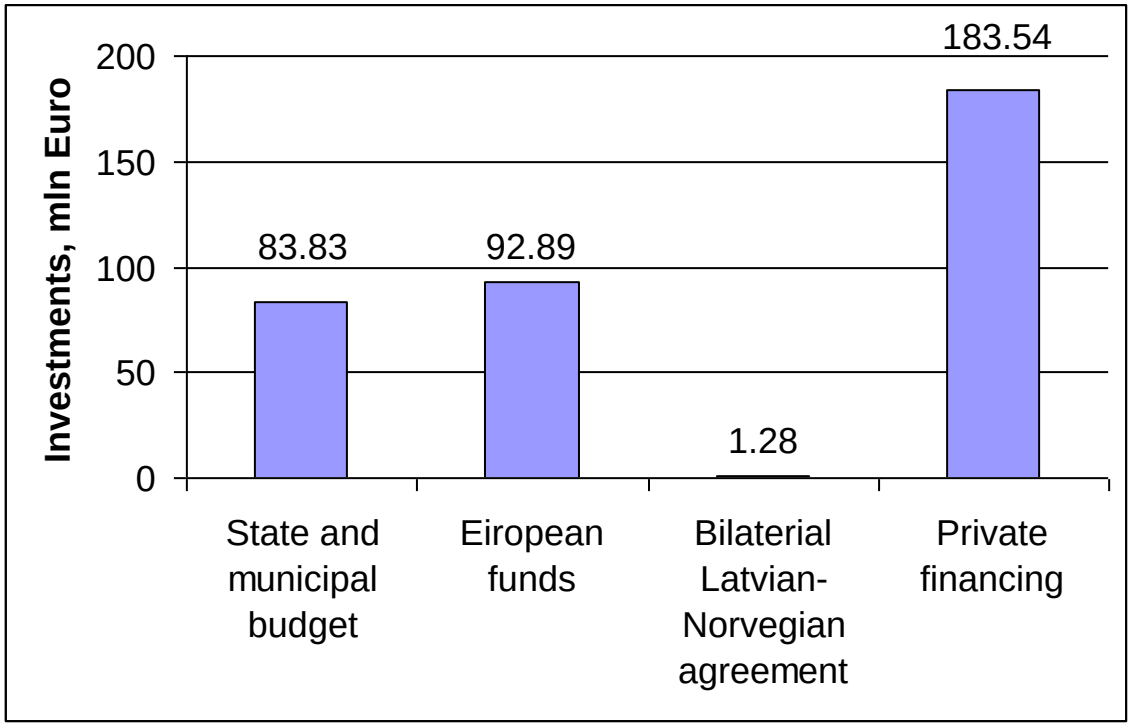
# Investments for RES in the energy sector

Currently the **State support** in the energy sector is only given to the projects linked to adjustment of heat supply system.

The priorities for the use of **EU Structural Funds** are listed in the Development Plan; these priorities are sub-divided into measures, which, in turn are sub-divided into activities.

It is planned to allocate approximately 140 million EUR in the energy sector from the **Cohesion Fund** in the next **Structural Funds** utilization period of 2007-2013. This money will be allocated to the measures for increasing the efficiency of district heating systems, for development of biomass-fuelled cogeneration plants and wind farms in Latvia.

# Potential financial sources in RES development (2006-2013)



# Feed-in tariff

A feed-in tariff (FiT) involves the obligation on the part of a utility to purchase electricity generated by renewable energy producers (used biomass, biogas, wind energy, solar energy) in its service area at a tariff determined by public authorities and guaranteed for a specific period of time (generally 20 years).

In Latvia, the feed-in tariff has been chosen in the mandatory procurement of the energy produced from renewables as a method of support – a straightforward and effective way to reach the relevant targets.

# Feed-in tariff in Latvia

- ***Regulations No. 262 on Production of Electricity from RES (in force since March 2010).*** A feed-in tariff (FiT) involves the obligation for utility to purchase electricity generated by renewable energy producers in its service area at a tariff determined by public authorities and guaranteed for a specific period of time (generally 20 years).
- ***Regulations No. 221 on Production of Electricity in Cogeneration Mode (in force since March 2009).***

# New Investment Schemes for RES Projects

- Funding for Green Investment Scheme (GIS) operation in Latvia is obtained from the state-owned greenhouse-gas (GHG) emissions quota unit (***Assigned Amount Unit or AAU***) sales.
- The principles for using the revenues from the sale of AAUs include a clear provision stating that all income from this sale should be reserved for "greening" projects

# Green Investment Scheme for Financing of RES Projects

The Latvian government requires that financing from GIS should be used for the "greening" purposes, which means:

- **increase in the renewable energy use;**
- improvement of energy efficiency;
- application of innovative low-carbon technologies;
- design and implementation of capacities for climate change mitigation.

# Financing of RES Projects

A special budgetary arrangement (2011) in the framework of the budget programme "Climate change mitigation financial instrument" is financing for the projects concerning the RES use in households - totaly 26.145 million EUR (also fromGIS).

Financial support for each project should not exceed more than 9 960 Euros (7000 LVL), and support intensity not exceed 50% of the total eligible costs.

# Conclusions

## Barriers for the implementation of RES use

1. Political
   - Long legislative drafting and planning process,
   - Quotas system for RES;
   - Strong lobby of traditional energy resources use,
   - Lack of advertising campaigns.
2. Financial
   - Lack of RES funds available for the projects.
   - The high capital cost for investors, a long payback period,
   - The relatively high cost, to join existing networks (gred connection).
3. Infrastructure
   - The monopoly in the electricity market,
   - Long-term power purchase contracts,
   - Organizational barriers for installation of RES equipment (solar collectors and PV on roofs and on the ground, wind generators, etc.)

# Conclusions

- There is a need to simplify the individually-generated electricity transmission network.
- To set up the price list for the network connection. So investors should obtain information about scheduled payments and arrangements and what are the obligations of the parties of this process.
- Given the use of renewable energy of all the range of problems, starting with the fuel market realities, legislative and public policy aspects of renewable energy use is very topical and important for Latvia, so that there is still a problem to replace the aging power generation equipment with advanced technology and imported fuel rising prices encourage renewable energy.

# Conclusions

- In particular, the unified national energy policy should promote energy-saving building as a means of the RES use, the fuel diversification (with the focus on local energy resources), considering the electricity sector from the viewpoint of regional electricity market development and security aspects, as well as providing accurate assessment of past and current support mechanisms and of the impact exerted by changes in the sphere of electricity generation and prices. Based on these considerations an impaired vision of the future energy development could be formed.
- Latvia has significant achievements in RES use for Energy production.
- Significant advantages for renewable energy use for electricity production is the Regulations (Nr.262) Regarding Electricity Production from Renewable Energy Resources **(**Feed-in tariff**).**

Social barriers - the expenses of such procurement shall be covered by all electricity end users in Latvia in proportion to their electricity consumption by purchasing from the public trader a definite part of the electricity, which is produced by using renewable energy resources, or by compensating the expenses of the public trader. Electricity price is 0,153 EUR/kWh from 2011 April and 15% of this is feed-in tariff part.

- Latvia already now has leading position in RES use among EU countries and has ambitious plans for the future.

Solar Energy polygon on IPE roof

Wind park in Grobini

# Thank you very much for your attention!

Feed-in tariff for solar energy is 426,9 EUR/MWh


Peteris Shipkovs
E-mail: shipkovs@edi.lv
Institute of Physical Energetics
Aizkraukles Street 21, Riga, LV-1006, Latvia
Tel./Fax. +371 67553537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