



Institute of Physical Energetics, Experience and the Best Practise in Energy Projects

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"EE21 Steering Committee and the Ad Hoc Group of
Experts on Energy Efficiency Investments for Climate
Mitigation", 29 - 31 May 2006, Geneva



Institute of Physical Energetics (IPE) was
established in 1946; at present, the
staff of Institute is 106, including 44
Habilitation Doctors of Sciences
(Dr.habil.) and Doctor of Sciences (Dr.),
working at 13 research laboratories and
groups.

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Investments for Climate Mitigation", 29 - 31 May 2006, Geneva



The IPE is the leading institute in Latvia for energy research concerning strategies and policies in relation to long-term energy development.

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The main research fields include:

- energy - environmental policy studies,
- renewable energy resources,
- energy economics,
- modelling energy - environment interactions,
- decision-support systems relating investments in new technologies.

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Research of the IPE within the area of renewable energy is focused to:

- Background studies for the preparation and implementation of European energy policy in Latvia with respect to renewable energy;
- Feasibility studies on using of renewable energy and implementation of pilot projects in heat and power supply systems;
- Research on organic materials for RES advanced technologies;
- Undertaking a wide range of dissemination activities;
- Economic instruments to promote renewables in liberalised energy market.

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EU RTD Framework projects

- ERA-Bioenergy strategy,
- The European Network for Energy Economics research,
- NAS – Enerbuild,
- NAS – Bionorm,
- PV-NAS-NET,
- Bruntland City Network,
- INTERREG IIIC project REGENERGY – Network of pioneering communities and regions working on innovative heat energy solutions.

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NAS-Enerbuild RTD

„NAS-Enerbuild RTD“ (NNE5-2001-00837) – Thematic Network focusing on the theme of Energy in the Built Environment.

Partners: Latvia (IPE ERL), Lithuania (Lithuanian Energy Institute), Great Britain, Germany, Ireland (Energy Research Group), Belgium, Czech Republic, Hungary, Poland etc.

Coordinators: Ireland Energy Research Group University College Dublin.

Project related with JOULE and CRAFT building-related Energy R&D projects. Project key action is Cleaner Energy Systems, including Renewable Energies.

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NAS - Bionorm

„NAS - Bionorm“ - Pre-normative work on sampling and testing of solid biofuel for the development of quality assurance systems. NNE5-2001-00874.

Partners: Latvia (IPE ERL), Germany (IEE), Austria (OFI and TUV), Netherlands (ECN), Denmark (DFLRI), Greece (CPERI), Spain (CIEMAT), Great Britain (GLR, Ltd) etc.

Coordinator: Germany (Institute for Energy and Environment).

The main aim of the Projects is to create the solid biofuel standardisation system for the EU countries. The results of the Project will be used for the implementation of the CEN-TC 335 „Solid biofuel“. The main goal of the Project - to promote the more effective use of solid biofuel in Energy Sector.

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PV-NAS-NET

"PV-NAS-NET" (NNE5-2002-00046).

Partners: Latvia (IPE ERL), Poland (WUT), Bulgaria (CLSENEs), Czech Republic (Solartec), Estonia (TTU), Hungary (Solar-System Ltd.), Lithuania (SPI), Romania (NARE), Slovakia (SUT), Slovenia (APE), Netherlands (Novem B.V.), Switzerland (NET), Greece (CRES), Austria (Arsenal Research), Finland (NAPS), Ispra (JRC), United Kingdom (DTI), Italy (ENEA).

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PV-NAS-NET

The activities of the PV-NAS-NET project described in the report on "Status of Photovoltaics and Recommendations for PV Development in the European Union New Member and Candidate States" which is a review of PV RTD, demonstration and dissemination activities in the NM&CS. This document is a pioneering study concerning state-of-the-art of photovoltaics in EU NM&CS and it was a base for benchmarking which provided an input to recommendations to governments and the European Commission.

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Brundtland City Energy Network

„Brundtland City Energy Network“ (NNE5-2001-00766).

Partners: Latvia (IPE ERL), ISES-Europe, Estonia (Termox), Hungary (SZIUG), Denmark (Esbensen Ltd.), Poland, Greece, Austria and Ireland.

Coordinator: Denmark „Esbensen Ltd.“.

Promotion of Renewable Energy Use on the regional and state level.

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INTERREG IIIC project REGENERGY

INTERREG IIIC project REGENERGY – Network of pioneering communities and regions working on innovative heat energy solutions.

Partners: Latvia (IPE), Poland, Hungary, Lithuania, Greece, Germany, Italy, Spain, Denmark.

Coordinator: German Federal Ministry of Finance, Dr. Brigita Kauers.

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There are several projects **financing mechanism** that have been used and are available for heat sector projects in Latvia. The main of them are the following:

1. commercial loans – in case of municipalities usually are guaranteed by municipal budget (case study – Tukums),
2. involvement of private investor and signing pay-or-take contract for produced heat (case study – Ludza),
3. state support scheme – partly grant from the state budget through state investment program,
4. attracting of European structural funds financing – in case of heat sector it is European regional development Fund (ERDF),
5. attracting of other donor financing and bundling of small projects (case study United Nations Development Program (UNDP) and Latvian Environmental Investment Fund (LEIF) financing scheme for small scale projects).

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Realisation of insulation works



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The renovated building



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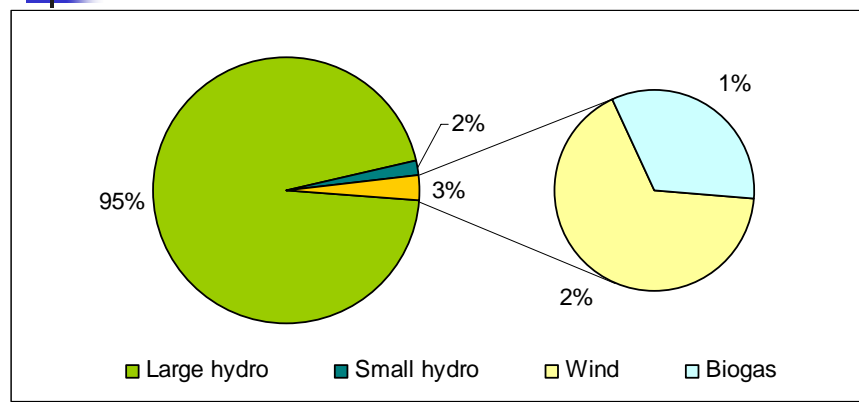
Installation of solar heat collectors in Aizkraukles boiler house



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RES-e in Latvia, year 2004



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