WOMEN IN SCIENCE
Current state of energy sector in Latvia

Dr.habil.sc.ing.Dagnija Blumberga, professor
Director of Institute of Energy Systems and Environment
Riga Technical University
Structure of the Institute

Institute of Energy Systems and Environment

- Department of Energy Systems and Environment
- Information and Study Centre on Sustainable Development
- Bioeconomy Centre

Laboratories of Scientific Research

- Laboratory of Environmental Monitoring
- Laboratory of Energy Efficiency
- Laboratory of Bio-systems
- Laboratory of Combustion Processes
- Laboratory of Solar Systems
Scientific and academic personnel

- 6 professors
- 2 associate professors
- 11 assistant professors
- 9 lectors
- Research personal - 45

The average age – 36

In total: 55 persons

2 – habilitated doctors, 27 – doctors (incl. 22 – young scientists),
26 – Experts of the Latvian Academy of Science,
15 – EU experts
Research topics

- Zero emission technologies
- Demand side management, consumers/prosumers
- Smart energy management
- Combustion technologies
- Environmental and energy management
- Renewable energy
- Bioeconomy
- Sustainable development
- Environmental monitoring
- Cleaner production
- Ecodesign
- Energy efficiency in buildings
- Bioresources
- Environmental modelling: system dynamics and LCA

- H2020 project:
  - Leadership: 2 projects
  - Partnership: 2 projects
- Interreg programme:
  - Partnership: 3 projects
- Nordic Energy Research programme:
  - Partnership: 2 projects
- ERA-NET programme:
  - Partnership: 1 project
- Erasmus and Erasmus+:
  - Partnership: 1 project
- Norwegian Grants:
  - Partnership: 2 projects
  - Leadership: 5 projects

International project portfolio since 2004: 57 projects
WOMEN RESEARCHERS BY COUNTRY

Just one in five countries has achieved gender parity, whereby 45% to 55% of researchers are women.

LATVIA
52%

Source: UNESCO Institute for Statistics

Source: http://uis.unesco.org/apps/visualisations/women-in-science/#overview!region=40530
Not all doctors are included in Latvian Council of Science database.

FEMALE RESEARCHERS IN LATVIA

Doctors of Science

- Women in Latvia are underrepresented in technical sciences

Doctorates of science in Latvia according to the field (2009)

Scientific personnel (scientists, professionals, project managers) in Latvia according to age and gender (2016)

LATVIA GOVERNMENT BUDGET IN 2017

- Total budget in 2017: 8327,5 MEUR

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EXPENDITURE ON RESEARCH AND DEVELOPMENT

Figure. Funders by type (state, international, enterprise, higher education) in 2015 and 2016

Figure. Funding by sector (higher education, government, enterprise) in 2016

Source: Central Statistical Bureau http://data.csb.gov.lv/pxweb/lv/zin/zin/ZI0030_euro.px/table/tableViewLayout2/?rxid=ce8aac91-f2b0-4f13-a25d-29f57b1468fb
EXPENDITURE ON R&D BY FUNDING (I)
EXPENDITURE ON R&D BY FUNDING (II)

- Majority of available funding is spent on basic and applied research.
- Total funding has decreased between 2014 – 2016
- Between 2010 and 2016 ~45% of total funding has been spent on higher education

Source: http://data.csb.gov.lv/pxweb/lv/zin/zin/zin__zin/ZI0031.px/table/tableViewLayout2/?rxid=ce8aac91-f2b0-4f13-a25d-29f57b1468fb
In higher education sector most of available funding is spent on basic research (53%), 39% is spent on applied research, but only 8% is spent on experimental development.

EXPENDITURE ON R&D IN NORTHERN EUROPE

Expenditure on R&D as a percentage of GDP, %

Year


Denmark Sweden Finland Norway Latvia Iceland Lithuania Estonia

Source: https://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS?locations=LV

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Conclusions

- We have a lot of possibilities to reach women involvement in energy sector
International journal
Environmental and Climate Technologies

- Open access Journal
- Indexed in SCOPUS (SNIP 1.316) and Web of Science
- 2 issues per year
- Publisher: De Gruyter
- Submit your paper at ect-journals.rtu.lv
- Bioeconomy and low carbon development
- Biofuels and alternative fuels
- Energy and carbon markets
- Energy and environmental modelling
- Energy efficiency improvement
- Energy management, policy and economics
- Green transport systems

- Heat and power generation, incl. district heating and/or cooling
- Pollution prevention
- Renewable energy
- Resilience
- Resource efficiency, circular economy and eodesign
- Smart energy and zero carbon technologies
- System approach integration in energy sector

- Four special Conference issues indexed in SCOPUS and Web of Science since 2014

- More info: conect.rtu.lv
dagnija.blumberga@rtu.lv
www.videszinatne.lv
GROSS DOMESTIC EXPENDITURE ON RESEARCH AND DEVELOPMENT (GERD)

figure. Gross domestic expenditure on R&D as a percentage of GDP