PERSONAL INFORMATION



WORK EXPERIENCE

15 01 2017 - now



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climate centre

Romanas Savickas

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Dr. Romanas Savickas fin l

https://www.linkedin.com/in/romanassavickas/ in

Sex Male | Date of birth 09/07/1977 | Residence Denmark

UNEP-CCC, Copenhagen Climate Centre Senior Advisor and Expert for Global Energy, Energy Efficiency, District Energy and Climate Mitigation.

Intercontinental experience developing and managing Energy Efficiency and Climate Mitigation projects. Expertise and area of responsibility covers: Energy, Energy Efficiency, District Energy, District Heating, District Cooling, Renewable Energy, Financial assessment, Business Models, Legal/Regulatory/Policy, Socio-economical and etc.

List of Countries:

EU Member Countries, Balkan Countries (Serbia - Belgrade, Bosnia&Herzegovina), Baltic sea region countries (Lithuania), Chile (Santiago, Temuco, Coyhaique, Renca, Recoleta, Independencia, Valdivia), Argentina (General Alvear, Ubajay), Asia region (Mongolia: Ulaanbaatar and other 10 cities), Central Asia (Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, Uzbekistan), Ukraine, CIS countries, Columbia, Brazil.



Developing Business activities to tackle Climate Mitigation by utilising:

District Heating, District Cooling, Energy Efficiency, Renewable Integration, Buildings Efficiency, Digitalisation, Hydrogen and other technologies:

1. Collaboration with National / Local Governments to increase Energy Efficiency and reduce GHG emissions.

2. Creation, Engagement and Coordination of Public-Private-Academia Stakeholders group. Assisting to better understand existing Climate, Technical and Financial issues.

3. Capacity building, training and other direct support to National and Local authorities.

4. Masterplanning, Heating and Cooling planning, identification of potential policy opportunities, including technical and financial estimates, development of long term Energy strategy.

4. Development and Conduction of Rapid Assessment to identify potential technologies and to assess Technical-Financial-Environmental viability, identification of potential Business Models

5. Development and Conduction of Feasibility Studies to assess the Technical-Financial-Environmental viability of the selected technology, identification of viable Business Model. Identification of short and long-term potential.

6. Assisting on a Tendering process for implementation of viable Business Model and Technologies:

7. Technical assistance for the project implementation.

8. Assisting on further MRV process.

The main activities in UNEP-CCC Copenhagen Climate Centre organisation covers "District Energy in Cities" Initiative (http://www.districtenergyinitiative.org/). The objective is to encourage national and local governments for Climate Mitigation, to increase Energy Efficiency, implement/rehabilitate District Heating and Cooling utilities, integrate Renewable Energy, reduce GHG emissions, improve airquality, reduce health costs, increase energy security, decrease fuel poverty and implement other means for the Climate Mitigation. Encourage countries under emerging economies to strengthenpolitical/regulatory/legal environment for the Climate Mitigation and Energy Efficiency increase.

Primary roles: Technical, Financial, Economical and Legal expertise and assistance for national/local governments developing, managing and implementing Energy Efficiency related projects. By the help of Rapid assessments/Pre-Feasibility Studies/Feasibility Studies/Deep Dive Studies for the potential cities/countries are identified short and long-term technical, financial, economical, regulatory potentials of district heating, analysis of barriers for project development, identification of potential policy options, preparation of project pre-feasibility studies, including financial estimates, conduction of pre-assessments of city potential and opportunities in focus regions, development of Energy Strategy, Heat and hot water metering strategy for energy production and final customers, expertise and technical assistance, advice on heating or cooling planning, training and other direct support to city/country authorities, development of best practice guidance for wider city use based on pilot activities, to build an overall work plan. Lead, management and preparation of Rapid assessments/Pre-Feasibility Studies/Feasibility Studies/Feasibility Studies/Deep Dive Studies. GCF Full Funding Proposals preparation. Management of external engagements in alignment with project goals, Energy Mapping, Metering Strategies, etc.

The Assessments under my responsibility:

- Rapid Assessment for Belgrade City, Serbia (2017).
- · Feasibility Study of Astrakhan City, Russia.
- Rapid Assessment for Temuco City, Chile (2018).
- · Rapid Assessment for Santiago City, Chile (2018).
- Rapid Assessment for Independencia City, Chile (2018).
- Rapid Assessment for Renca City, Chile (2018).
- Rapid Assessment for Recoleta City, Chile (2018).
- Rapid Assessment for Coyhaique City, Chile, (2018).
- Financial assessment for development of District Heating in Temuco City Centre area (2019).
- Deep Dive Assessment for Belgrade City, Serbia (2019).
- Rapid Assessment for 10 cities in Mongolia (2018-2019).
- Feasibility Study of Solar Thermal integration into Belgrade District Heating Network (2019).
- Feasibility Study for the 3 cities in Mongolia (2019).
- Feasibility Study for the Khmelnytskyi city, Ukraine (2020).
- Rapid Assessment for Quinto Burgos, Coyhaique City, Chile (2020).
- Rapid Assessment for Escuela Agricola, Coyhaique City, Chile (2020).
- Belgrade Energy Strategy for the period 2025-2040 (2020).

Other Assessments under my responsibility:

• GCF Full Funding Proposal preparation for the Low Carbon Technologies implementation in Mongolia (Rapid Assessment, Feasibility Study, Environmental-Social-Gender Assessment, GCFFull Funding Proposal). District Heating and Renewable Energy (2020).

• Waste for heating and cooling: how district energy transforms losses into gains (development of six case studies of District Energy Systems in Cities in different countries, analysis how waste energy can be utilized by the help of district heating, analysis of their business models, identification of replication strategies, exploration of opportunities for promotion of the Eco Energy Town approach internationally), (2017).

• Energy efficiency improvements in Astrakhan city's (Russia) buildings and district heating system. (developed methodology to improve energy efficiency of buildings and district heating system in Astrakhan, which includes a statement of work and selection of pilot projects, a walk-through technical audit of pilot utilities, development of a technical proposition, evaluation of financial-economic parameters and selection of a business and financing models), (2017).

Heat Metering Strategy for the Serbia (heat metering in the context of reduction of energy consumption and GHG emissions, switching into consumption based billing by thermal energy and hot water metering, Implementation of necessary legal framework, Installation of the heat meters, Billing and tariff setting, Transition to new tariff system, Financial mechanisms, End users, Poor housing and vulnerable consumers, Communication with end users), (2018).

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Description of activities in Ukraine:

Feasibility Study to assess District Heating system rehabilitation in Khmelnytskyi city, Ukraine, a technical and economic validation of the proposal provided by Khmelnytskyi District Heating utility company, investigation of further optimisation potential for Khmelnytskyi City.

The suggested renovations are analysed from a technical and economic perspective. Technical analysis:

Assessment the dimensioning of the components, Evaluation the suggested new units and their effect in theDH system such as the efficiency increase. The same assessment carried out for pumps and pipes. Assessment the calculations of efficiency gains such as reduced gas consumption. Calculation of the GHG reduction of the renovation projects. Economic analysis:

Overall budget of the investment cost for the suggested components including cost of work for building newpipes and installing new equipment. Estimate of the savings that the increase of efficiency is expected to yield. This take into account the reduced fuel consumption.

Presented the main directions of reconstruction and the types of activities that may be of interest for implementation in terms of energy savings of the enterprise and as separate projects for the production of additional heat for district heating and DHW supply.

A description of the current situation in Khmelnytskyi city was presented, including its geographical location and average annual temperature and other necessary data. The situation of both heat generating Utilities in the city isalso described. The current states and prospects of development of Utilities in the field of energy efficiency and energy saving are considered. All materials provided by Utilities have been elaborated and implemented in this report. The structures of tariffs for heating and hot water supply are considered.

The legal framework of Ukrainian legislation in the field of heat generation from traditional and alternative energy sources was considered and analysed. The information analysed was presented in the table for a better understanding of Ukrainian legislation.

The modernization projects of the Utilities according to the TOR and in accordance with the discussions that took place during the visit to Khmelnytskyi were analysed. As a result of the work and visits, 5 projects were chosen for review and analysis, three for the Pivdennio-Zakhidni Teplomerezhi and two for Khmelnytskteplokomunenergo.

Project 1. Modernization of main heat generating equipment (gas boilers) at Kurchatova house (BH), full replacement of all types of pumps systems, fans, exhausters, burners, chemical preparation of water system, controland automatic systems. All equipment must have frequency regulation systems, and comply with the requirements of energy saving and energy efficiency

-Installation of the heating network between the Kurchtova BH and Pivnichna BH to combine the heating districts and domestic hot water (DHW) districts into one. For these purposes, it is necessary to use modern pre-insulated pipes with integrated alarm system in them.

-Construction of a 5-6 MW biomass solid fuel BH on free part of land at the Kurchatova BH for substitution of naturalgas for DHW produce in the summer. During the heating period this BH can be used as heat exchanger of the return water of DH and DHW networks before gas boilers of the Kurchatova BH.

Project 2. Full replacement of pipelines for DH and DHW networks in Kurchatova 8/1 G BH and Pivnichna 2 BHareas, which will significantly reduce losses, organize monitoring and control system of networks at the DH Utilitycompany, and reduce temperature schedules during the heating period.

Project 3. Installation of necessary quantity of individual heat substations (IHS) by the project to improve using of DHsupply for consumers.

Project 4. The project provides the major reconstruction of Kamenetska 46/1-48 BH with disconnection of Kamenetska 63 BH. The BHs are located in the city centre in 500 m distance to each other. The project envisages afull renovation of the Kam 46/1 BH with the replacement of all technological equipment.

Project 5. Replacement of the most emergency Zarichanska 30 BH DH and DHW networks with pre-insulated pipes, and IHS installation for 96 multi-storey buildings.

SWOT-analysis shows the main advantages and disadvantages of these projects as a whole for the city and forinvestors.

Assessed investigation of further technical improvements, identified improvements including an estimate of the total economy, a holistic analysis of the interplay of production, distribution and consumption, including but not limited to lowering temperatures in the heating networks and utilizing storage for lowering peak production, development of recommendations for data collection in the district heating system, therefore the following areas have been identified as most advantageous:

1. Utilisation of Solar Thermal and Energy Storage for Solar Thermal and Peak Load

reduction;

2.Demand Side Management;

3.Heat and Hot Water Metering and Data

Collection; 4. Hot Water Supply 24/7;

5 Investigation of further optimisation potential to increase Energy Efficiency in Production Chain by the Economisers;

6. Assessment of Low Temperature District Heating Network;

7. The Interconnection of Different Districts and Boiler Houses in between and Container Boiler House utilisation for the Reliability Increase;

8. The Optimisation of the "Project 1. "Pivdenno-Zakhidni Teplomerezhi". Interconnection of Kurchatova & Pivnichna".



Business or sector: Energy, District Heating, Renewables, Buildings Efficiency, Climate Mitigation, Financial, Legal, Government, Local government, Project Management, Public organisations, Private sector

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UNECE (United Nations Economic Commission for Europe)



Vice Chair of Group of Experts on Energy Efficiency (GEEE) Vice Chair of Task Force on Digitalisation in Energy

Following UNEP-CCC Copenhagen Climate Centre collaboration with UNECE Group of Experts on Energy Efficiency.

The Group of Experts on Energy Efficiency (GEEE) was established to carry out results-oriented activities that help significantly improve energy efficiency in the region, contributing to climate change mitigation efforts; and strengthen regional cooperation, with a view to reducing greenhouse gas emissions. The GEEE focuses on regulatory and policy dialogue addressing financial, technical and policy barriers, and on sharing best practices, including strengthening institutional capacity in the field of energy efficiency.

Ongoing activities: Improving the energy efficiency of the global building supply chain industry and its products to deliver high performance buildings; Energy Efficiency increase; Digitalisation in Energy Efficiency.

Countries: Armenia; Georgia; Kyrgyzstan; Republic of Moldova; Tajikistan; Ukraine; Uzbekistan, etc.



Agency for Science, Innovation and Technology (MITA) Energy expert, 2009 - 2017

External Expert and Consultant: Expertise and Assessment of LT and EU funded projects, Evaluation of R&D and innovation proposals Evaluation of periodic reports of the R&D and innovation projects approved



European Commission EASME Energy Expert, 2012 - 2017

External Expert and Consultant: Advice on preparation, implementation and evaluation of EU programmes and design of policies. Expertise and Assessment of EU funded projects (Horizon 2020, etc.); Evaluation of proposals, prize applications and tenders; Monitoring of actions, grant agreements, public procurement contracts;



Veolia Energy in Lithuania (JSC "Vilniaus energija") Head of Engineers Analysts Office

Activities 1.

Management of Engineers Analyst Office activities and 10 employees.

Energy Efficiency, Energy Management and Operation/Maintenance of District Heating utilities in 10 Lithuanian cities.

Feasibility Studies and Due Diligence of District Heating Systems and Economy (Lithuania, Romania, etc.).

Assessment of produced, supplied and consumed heat and hot water. Developed a methodology for historical data assessment to identify theoretical monthly energy consumption for every final customer, how to adjust these data according to actual outside/inside air temperature, heated area, building type, etc. and how to compare these data;

Methodology to forecast energy and hot water consumption for the next calendar year for every final customer.

Advising IT department on the development and improvement of IBM Cognos system functionality (BIG Data Management).

Methodology to forecast energy and hot water consumption for the next calendar year for every final customer (building level). As practice shows forecasts were made very precisely with a coefficient of determination R2=99,5 value. Financial department uses these forecasted data to predict sale rates for the next year, so precision is very important as inaccuracy of every percent makes millions of Eur. These forecasted energy consumption data are very important to identify the most sensitive customers with smallest energy efficiency. Later these customers are put on a list for municipality and municipality can encourage them for Building Efficiency (insulation of partitions, reconstruction of heating systems, installation of individual heat metering, etc).

All these excel based calculations, methodologies and improvements were transferred from Excel sheets to one IBM Cognos system. That solved a data collection issue from different people, saved a lot of time in preparation of reports, some data automatically are transferred into Navision Financials.

Activities 2.

Management, control, exploitation, prevention and maintenance of building heating systems by the help of distant smart control and management system ENCO. Development and improvement of smart wireless control and management system functionality.

Assessment, development, improvement and expertise of Energy Legislation and Regulation (implementation of 2012/27 EU Energy Efficiency Directive for individual metering, energy efficiency, heat metering, energy production, preparation of recommendations and strategies for national and local government institutions, state energy inspection, tax/price regulator, ministries and other stakeholders).

Activities 3.

The author of an Interactive Actual Energy Consumption Class (AECC) map. Collaboration with 10 Lithuanian municipalities in the preparation of Interactive Actual Energy Consumption Class (AECC) map.

The Interactive Actual Energy Consumption Class (AECC) map is a tool to stimulate the population in residential buildings to consume heat energy in more efficient way. It was introduced to the Mayor and citizens of Vilnius city in 2013 when the analysis of heat consumption and recommendations were provided for citizens. Actual energy consumption is presented in 15 classes (1 is the best and most efficient building, 15 is worst). This energy efficiency criterion AECC is a unit, from which is eliminated various influencing factors - different heating seasons temperatures, durations, heating area, so by the help of this indicator can be compared different buildings per different heating seasons. Developed a special methodology for the calculation of AECC. Based on AECC Interactive Map, residents can evaluate online how efficient is energy consumption in their buildings, consumers can compare energy consumption between the same project type buildings. This project significantly contributes to the establishment of ESCO model in municipalities. This project attracted attention of the Prime Minister of the Republic of Lithuania Algirdas Butkevičius. Minister of Ministry of Environment of the Republic of Lithuania Valentinas Mazuronis, Mayor of Vilnius City Artūras Zuokas and others. This project is a winner of "Eurocities 2014" for the innovation in energy and contributes to the obligations according to Covenant of Mayors. More about this project:

https://www.youtube.com/watch?v=KiVII7hgsl0

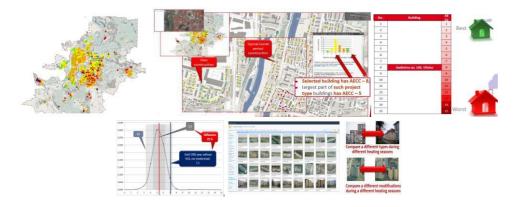
Visit online website: http://www.vilnius.lt/vmap/t1.php?layershow=siluma.

Interactive AECC map for Biržai municipality was presented in 02/2014. Before 2017 AECC was implemented for remaining 7 cities.

This project significantly contributes to the establishment of ESCO model in municipalities. Citizens are very interested in this project, as prime minister of the Republic of Lithuania, minister of Ministry of Environment of the Republic of Lithuania, mayor of Vilnius City and other high-level representatives also. This project is a winner of "Eurocities 2014" for the innovation in energy and contributes to the obligations according to Covenant of Mayors. More about this project:

https://www.youtube.com/watch?v=KiVII7hqsl0

Visit online website: http://www.vilnius.lt/vmap/t1.php?layershow=siluma.



Other Activities.

Technical Due Diligence and Feasibility Study of District Heating Rehabilitation in Iasi city, Romania.

Technical Due Diligence and Feasibility Study of District Heating Rehabilitation in Ploesti city, Romania.

Business or sector: Energy, District Energy, Renewable Energy, Buildings Efficiency, Project Management ,Climate Mitigation, Finances, Legal/Regulatory, Government, Local government, Public organisations, Private company



Universidad de la Frontera · Part-time Associated professor and lecturer

Following successful cooperation between UNEP-CCC Copenhagen Climate Centre and Chile national/local government and Academia/Universities, the Course for Students have been developed:

Technologies and design of district heat plants

Heat production technologies (waste heat harvesting, biomass boilers, solar thermal, heat pumps, cogeneration, etc.)

- Step-by-step design process and examples

- CAPEX Economic Assessment.

03 09 2007 - 03 02 2017

Vilnius Gediminas Technical University, Department of Energetics Associated professor/Lecturer Part time (4 hours per day; daytime, evenings, weekends)



VILNIAUS GEDIMINO TECHNIKOS UNIVERSITETAS

22 06 2009, 28 06 2010,



01 01 2014 - 31 12 2016



Teaching disciplines: Energy Systems and Technologies; Buildings Energy Efficiency; Energy Production/Generation; Energy and Water Supply Systems; Building Engineering Systems; Building Engineering Systems maintenance. Renewable Energy.

Supervision of bachelor and master thesis. Business or sector: Academic & Education, Thermal Energy, District Heating, Renewable Energy, Buildings Efficiency, Legal/Policy

Lithuanian Energy Institute Board member and Reviewer of scientific articles in CYSENI Conference on

Energy Issues

Board member and Reviewer of scientific articles in CYSENI Conference on Energy Issues. Annual CYSENI 2009 and CYSENI 2010 conferences. Business or sector: Academic & Education, Thermal Energy, District Heating, Renewable Energy, Buildings Efficiency, Legal/Policy

Lithuanian District Heating Association

The member of the Board of Experts, Independent Expert and Consultant

Assessment and preparation of legal and technical acts; legal and technical consultancy regarding development and management of energy, energy efficiency, district heating, renewable energy, information on new technologies and presentation to Lithuanian government bodies, parliament, ministries, public institutions (State Energy and Price Commission, Energy Committee of LR Parliament, Lithuanian Energy Agency, State Energy Inspectorate, State Tax Inspectorate, Lithuanian Metrology Inspectorate, etc.).

Studies:

- Implementation of 2012/27/EU Energy Efficiency Directive provisions at minimal costs in the district heating sector.
- Distant Smart Metering, monitoring and control system for the implementation of 2012/27/EU Energy Efficiency Directive.
- Heat and hot water metering strategy and implementation to increase energy efficiency in residential multiflat buildings.

Business or sector: Energy, District Heating, Renewable Energy, Buildings Efficiency, Policy/Legal/Regulatory, Public organisation, Academic & Education.

29 08 2000 - 29 10 2010



SC "City Service"

Projects Manager (number of staff under subordination: 50 employee)

Experience running several large scale projects:

• 2000-2010. Project manager of Grand Education Project for Energy Management of all 245 schools and kindergartens (750'000 m²) in Vilnius City. Annual turnover >10 mln. €. More than 50 employees under subordination. Activity - to increase energy efficiency by the help of sustainable and reliable heat energy supply, energy management, maintenance of heat, hot/cold water systems, big data management. The special energy efficiency indicator has been developed to show the change in energy efficiency in every building and in all buildings in total. This indicator was applied to every final customer (building level) and monthly data were consolidated to identify total efficiency. For everyday energy efficiency monitoring in every building have been installed different sensors collecting energy consumption, inside temperature and other data. Energy efficiency has increased by more than 20%, so final energy consumption decreased drastically.

Energy efficiency and energy management have been made by the help of Smart Wireless distant cloud based data control, monitoring and management system, which at early 2000 year was absolutely novelty and innovative high-tech technology. Development and improvement of Smart Wireless control and management system functionality. One of the project issues was that you never can expect to have 100% data, especially working with Big Data Management and different key indices, so you always have to work on that applying different statistical or other methodologies to solve these issues.

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• 2000-2010. Project manager for energy audits, energy efficiency means for public, office and residential sector buildings, technical, economical and legal due diligences (TDD, EDD & LDD). Consultation of real estate companies how to manage energy consumption in buildings, decrease costs for energy and increase overall energy efficiency. Following the conclusions and recommendations of my TDD&LDD diligence, successfully was sold a business centre (Saltoniškių str. 2, Vilnius, Lithuania) – it was one of the largest real estate contracts in Baltic States countries in 2009.



• Development of new business activities, projects and markets. One of projects – assessment and identification of business financial indicators, related to maintenance of building constructions, HVAC, boiler house, steam, hot/cold water, sewerage, compressed air, gas, electricity systems, cleaning services, employee leasehold, employee transportation, canteen services, etc.) for Philip Morris industrial plant.



PHILIP MORRIS INTERNATIONAL

• 2004-2008. Project manager for development of Facility Management, Energy Efficiency and heat economy maintenance. The Facility Management services and activities successfully developed for 2/3 of residential multiflat buildings in Kaunas City (second largest city in Lithuania). Before all these activities, buildings have been owned and managed by the public sector (municipality). I have worked with local government to transfer these activities from public to liberalised private sector market, to develop and describe terms of reference, to put these activities under different public tenders. The strategy how does the Business Model should work for the Facility Management services in Kaunas City and participation in public tenders for privatisation was successful, so our company finally managed to get 2/3 of all the market share.

Business or sector Energy, Project Management, Business Development, District Heating, Renewable Energy, Buildings Efficiency, Policy/Legal, Private company

03 05 1999 - 02 05 2000

JSC " Rubikon Apskaitos Sistemos" Energy Engineer

JSC "Vilniaus Vatas" was reorganised and connected to a bigger JSC "Rubikon Apskaitos Sistemos" company group, transferring all employees, so the same tasks as in the previous company.

Design of energy efficient heat substations for buildings converting open type District Heating systems into independent type with heat exchangers for heating and hot water preparation and advanced automatics. Heating and hot water systems/utilities maintenance inside buildings, technical and maintenance issues for energy efficient exploitation keeping OPEX as low as possible.

Business or sector Energy, Energy Efficiency, District Heating, Small scale projects coordination, Private company

01 07 1998 - 03 05 1999 JSC "Vilniaus Vatas" Energy Engineer

Design of energy efficient heat substations for buildings converting open type District Heating systems into independent type with heat exchangers for heating and hot water preparation and advanced automatics. Heating and hot water systems/utilities maintenance inside buildings, technical and maintenance issues for energy efficient exploitation keeping OPEX as low as possible.

Business or sector Energy, Energy Efficiency, District Heating, Small scale projects coordination, Private company

EDUCATION AND TRAINING

2002-2007	PhD, Doctoral degree Energy and Thermal Engineering, Vilnius Gediminas Technical University
2000-2002	Master degree, Energy and Thermal Engineering, Vilnius Gediminas Technical University
1996-2000	Bachelor degree, Energy and Thermal Engineering, Vilnius Gediminas Technical University

PERSONAL SKILLS

Mother tongues Lithuanian, Russian

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Duccion	00	00	00	00	00
Russian	C2	C2	C2	C2	C2
Lithuanian	C2	C2	C2	C2	C2
Ukrainian	B1	B1	B1	B1	B1

Communication skins	 Intercontinental national and local government institutions; Intercontinental energy sector private companies; Intercontinental public sector organisations, associations and other organisations; Business; Academy.
Computer skills	 Expert level in MS Excel, Big Data analysis, Statistical analysis, etc., some basic programming knowledge; Expert level in MS Word; Expert level in MS Power Point; Pascal - basic knowledge; Basic - basic knowledge; macOS; Many other work related computer programs.
Driving licence	• B from 1997.

ADDITIONAL INFORMATION

Honours and awards

Communication skills

Communication skills:

Awarded as a "GLOBAL ENERGY ELITE 2019" by "SMART ENERGY INTERNATIONAL". http://spintelligentpublishing.com/Digital/SmartEnergy/GlobalSmartEnergyElites2019/index.html



Honours and awards W

Winner of "Eurocities 2014" (organisation covers all Europe Cities): first place for the Innovation in Energy in EU.

I am an author and manager of Interactive Actual Energy Consumption Class (AECC) map, which is a tool to stimulate the population in residential buildings to consume heat energy in efficient way. I am strongly experienced in the analysis of actual energy consumption, introduction and calculation of energy efficiency criteria thorough final energy consumer in buildings analysis. The project is acknowledged by prime minister of the Republic of Lithuania, minister of Ministry of Environment of the Republic of Lithuania, mayor of Vilnius City and others.

This project is a winner of "Eurocities 2014" (organisation of all Europe Cities): First place for the Innovation in Energy.

More about this project: <u>https://www.youtube.com/watch?v=KiVII7hqs</u>I0

Visit online Interactive map website:

http://www.vilnius.lt/vmap/t1.php?layershow=siluma



Honours and awards

In October 2016 my project was recognised worldwide and I have presented Interactive Actual Energy Consumption map in a **World Energy Congress (WEC)** in Istanbul.



Publications

Publications with International Standard Serial Number (ISSN):

1. Savickas R., Skrinska A. Analysis of Legionella pneumophila risk assessment of the hot water supply system with continuous circulation. Energetika. ISSN 0235-7208. Vilnius: Lithuanian Academy of Sciences, 2006, nr. 2, p. 57–62.

 Savickas R., Skrinska A. Probabilistic analysis of hot water consumption uniformity. Energetika. ISSN 0235-720. Vilnius: Lithuanian Academy of Sciences, 2006, nr. 4, p. 50–58.
 R. Savickas, A. Skrinska. Analysis of efficiency and uncertainty of consumption of hot water metering systems in multiflat buildings. Energetika. ISSN 0235-7208. Vilnius: Lithuanian Academy of Sciences, 2007, nr. 4, p. 76–83.

4. Savickas R. Heating systems management and maintenance using distant control, monitoring and management system Rubisafe. National conference "Engineering systems", 2004-02-27 conference, Vilnius Gediminas technical university, material for an article (ISBN 9986-05-712–4). Vilnius: Technika, 2004, p. 66–69.

5. Savickas R. Determination of trends for hot water preparation energy. Conference "Young Scientists on Energy Issues 2006". 2006-06-08 conference, material for an article (ISBN 9986-492-92-0), 8 pages., CD–rom (ISBN 9986-492-91-2). Kaunas: Lithuanian energy institute, 2006.

6. Savickas R. Influence of building shape indicator on building energy consumpion efficiency. Conference "Young Scientists on Energy Issues 2009. CYSENI 2009". 2009-05-28 - 2009-05-29, material for an article (ISSN 1822-7554), 10 pages. Kaunas: Lithuanian energy institute, 2009.

7. Baronas R., Cikanaitė A., Miliauskas I., Savickas R., Zabarauskas R. Facility management guides for multiflat buildings / Vilnius: Europe social fund, 2010. 49-79 p.

8. Savickas R. Influence of heat measurement method on consumed amount of heat in multiflat dwelling houses. Conference "9th international conference of young scientists on energy issues CYSENI 2012, on 24-25th may". 2012-05-24 - 2012-05-25 conference, material for an article (ISSN 1822-7554), 9 pages. Kaunas: Lithuanian energy institute, 2012.

9. Savickas R. Precise evaluation of heat energy for hot water for energy efficiency calculations. Conference "9th international conference of young scientists on energy issues CYSENI 2012, on 24-25th may". 2012-05-24 - 2012-05-25 conference, material for an article (ISSN 1822-7554), 10 pages. Kaunas: Lithuanian energy institute, 2012.

10. Savickas R., Jaugielavičius R. Potential and possibilites of a new smart heat network. Šiluminė technika. ISSN1392-4346. Vilnius: Šiluminė technika, 2013, no.2 (No. 55) July, p. 20–22.

11. Savickas R., Stasiūnas V., Paulauskas M. Forecasting energy consumption and payments for heating and hot water preparation for 2013–2014 heating season. Šiluminė technika. ISSN1392-4346. Vilnius: Šiluminė technika, 2013, no.3 (No. 56) October, p. 3–6.

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