

CURRICULUM VITAE

Proposed position in assignment:

1. **Family name:** Dedinec
2. **First names:** Aleksandar
3. **Date of birth:** October 22, 1986
4. **Nationality:** Macedonian
5. **Civil status:** Married
6. **Education:**

<i>Institution</i>	<i>University "Ss. Cyril and Methodius" Faculty of Electrical Engineering and Information Technologies, Skopje</i>
<i>Date: from:</i> <i>to:</i>	<i>March 2012</i> <i>April 2018</i>
<i>Degree(s) or Diploma(s) obtained:</i>	<i>Doctor of Technical Sciences, Electrical Engineering and Information Technologies</i>
<i>Institution</i>	<i>University "Ss. Cyril and Methodius" Faculty of Electrical Engineering and Information Technology, Skopje, 2009-2011</i>
<i>Date: from:</i> <i>to:</i>	<i>November 2009</i> <i>July 2011</i>
<i>Degree(s) or Diploma(s) obtained:</i>	<i>Master of Science in Electrical Engineering and Information Technologies</i>
<i>Institution</i>	<i>University "Ss. Cyril and Methodius" Faculty of Electrical Engineering and Information Technologies</i>
<i>Date: from:</i> <i>to:</i>	<i>October 2005</i> <i>July 2009</i>
<i>Degree(s) or Diploma(s) obtained:</i>	<i>Bachelor of Science in Electrical Engineering and Information Technologies</i>

7. Language skills:

<i>Language</i>	<i>Reading</i>	<i>Speaking</i>	<i>Writing</i>
Macedonia	5	5	5
English	5	5	5
Serbian and Croatian	5	4	4
Bulgarian	4	3	2

8. Membership of professional bodies:

1. The Association of Energy Engineers (AEE)
2. International Centre for Sustainable Development of Energy Water and Environment Systems (SDEWES)

9. Other skills:

Programming languages: Pascal, C#, Payton, C, C+
 Operating systems: Unix, Linux, Windows
 Other: MARKAL, GACMO, GAMS, GHG protocol, CRF reporter, LEAP, ENERGYPLAN, MAED, IPCC GHG inventory, Top-down indicators tool, RET Screen, MATLAB, Step 7, Microsoft Visual Studio, Macromedia Dreamweaver, Hades Microsoft Robotics Studio, Macromedia Flash, Microsoft Office, Joomla

10. Present position: Researcher, Research Center for Energy and Sustainable Development, Macedonian Academy of Sciences and Arts, Macedonia, Macedonia.

Independent consultant

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11. Years within the firm: more than 7

12. Key qualifications (relevant to the programme):

- Specific knowledge of Third energy package, EU RES, EE, LCPD and other Directives
- Expert on the MARKAL energy strategy modeling
- Development of the GHG inventory
- Modeling of the SEE power network
- Modeling of the SEE energy
- Selection of Option for Establishing or Joining a PX
- In depth knowledge and understanding of sustainability, renewable energy, energy efficiency and climate change (participation in a lot of projects and development of lot of documents)
- Experience in prioritization of energy projects using the MARKAL and other energy models (prioritization of energy projects is done in all projects where MARKAL model is used)
- Direct knowledge of development of a lot of scenarios with different amount of biomass using the official data from the State Statistical Office and data from the CRES study.
- Direct knowledge of development of a lot of scenarios with renewable energy sources and their impact on climate change (reducing the GHG emissions).
- Policy and strategy design on national level.

13. Specific experience (including experience in the region):

<i>Country</i>	<i>Date: from (month / year) to (month / year)</i>
Macedonia	2011-present
Energy community contracting parties	2013-2016
SEE countries	April 2014-December 2015

14. Professional Experience Record:

<i>Date: from (month / year) to (month / year)</i>	January 2011-present
<i>Location:</i>	Macedonia
<i>Company:</i>	Macedonian Academy of Sciences and Arts – Research Center for Energy and Sustainable Development
<i>Position:</i>	Researcher
<i>Description:</i>	Responsible for energy modelling including renewable energy, energy efficiency and climate change Reviewer Acquisition of new projects Presentations, lectures and debates Trainer

<i>Date: from (month / year) to (month / year)</i>	October 2013 – Present
<i>Location:</i>	Macedonia, SEE countries
<i>Company:</i>	Tetra Tech, Winrock, REC, E4Tech, UNDP, ATC, Hevoje Pozar, SEE Change Net Foundation, Engility ACT,
<i>Position:</i>	Consultant
<i>Description:</i>	Modelling of energy sector, development of methodologies for renewable energy sources and GHG, Energy and Energy efficiency law development, Transposition of the RES and EE directive, Development of support scheme for RES including wind and solar, presentation, trainer

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<i>Date: from (month / year) to (month / year)</i>	October 2009 – December 2009
<i>Location:</i>	Macedonia
<i>Company:</i>	Faculty of Electrical Engineering and Information Technologies, Skopje, (University “Ss. Cyril and Methodius” – Skopje)
<i>Position:</i>	Junior Teaching Assistant
<i>Description:</i>	Taught laboratory exercises in Physics I. Advised and mentored students.

<i>Date: from (month / year) to (month / year)</i>	October 2009 – December 2009
<i>Location:</i>	Macedonia
<i>Company:</i>	Faculty of Electrical Engineering, Radovich, (University “Goce Delcev” – Shtip)
<i>Position:</i>	Junior Teaching Assistant
<i>Description:</i>	- Taught laboratory exercises in Information. Advised and mentored students

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A. Project Experience

		Duration	Project location / country	Client	Role in project	Description of the activity performed
	<i>Work done within Macedonian Academy of Sciences and Arts, Research Center for Energy and Sustainable Development</i>					
1	National Energy Development Strategy for the Republic of Macedonia until 2040	August 2018 – March 2019	Macedonia	UK Department for International Development (DFID) -The Good Governance Fund	Modeller, analyst	- Participation in the whole process
2	Development of an on-line tool for the households heating in the City of Skopje	January – March 2018	Macedonia	UNDP	Developer, analyst	- Develop an on-line calculator that shall enable citizens to compare various heating options for their homes and shall suggest the most efficient and least polluting heating system,
3	Assessing the GHG mitigation policies and actions from road transport in the City of Skopje	January – March 2018	Macedonia	UNDP	Modeller, analyst	- Development of detailed transport module in the MARKAL-Skopje model and analyses of the introduction of different measures and policies in the transport sector
4	Technical Assistance to Modelling Energy Consumption in Households.	May – October 2017	Macedonia	Energy community	Model developer, analyst	- Development of model for calculation of energy consumption by end-use.
5	Supporting the preparation of the Second Biennial Update Report on Climate Change	September 2016- March 2017	Macedonia	UNDP	Modeller, analyst, trainer	- Participation in the whole process; Development of the GHG Inventory for 2012-2014 and development of the mitigation scenarios. Coordinate the migration part of the project in which additional two studies are developed (Study on the heating in the City of Skopje - Analysis of policies and measures STUGRES, Study on the Transport sector - Analysis of policies and measures STUTRA)
6	Technical support to the Energy Community and its Secretariat to assess the candidate Projects of Energy Community Interest in electricity, gas and oil infrastructure, and in smart grids deployment, in line with the EU Regulation 347/2013	February 2016 – November 2016	Energy community countries + neighbouring	REKK via Energy Community	Modeller, analyst	- Participation in the process of modelling and analyzing of the electricity transmission network in the Energy Community countries

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7	Supporting the preparation of the Intended Nationally Determined Contribution to the UNFCCC	2015	Macedonia	UNDP	Modeller, analyst	<ul style="list-style-type: none"> - Participation in the whole process; Development of the mitigation scenarios and creation of the Macedonian target for Paris, development of job creation model and calculation of the green jobs
8	Development of a National Energy Strategy for the Republic of Macedonia for the period 2015-2035	February 2014 – January 2015	Macedonia	USAID via Tetra Tech	Modeller, analyst	<ul style="list-style-type: none"> - Development of reference scenario, energy efficiency and renewable and energy efficiency scenario, based on the sustainable principles. - Sensitivity analysis including creation of more than 30 scenarios including analysis on renewable energy sources with special attention to biomass. - Prioritization of the energy projects - Indicators
9	INT2013 Supporting nuclear power infrastructure capacity building in Member States introducing and expanding nuclear power	April 2014 - February 2015	Macedonia	IAEA via ELEM	Modeller, analyst	-Development of demand side sectors in Macedonia using MAED model and development of scenarios for the next 30 years period
10	Development of methods for strategic planning in the energy sector	January 2014- December 2017	Macedonia	Macedonian academy of sciences and arts and Bulgarian academy of sciences	Modeller, analyst	<ul style="list-style-type: none"> - In this project different methods for energy planning will be created using the MARKAL, LEAP and some other energy planning models. Also, development of own optimization model for the electricity system in Macedonia is planned. After this, in cooperation with the Bulgarian Academy of Science energy planning model for Bulgaria will be developed.
11	Mitigation analyses and strengthening the QA/QC system related to the GHG Inventory, Macedonia's First Biennial Update Report	December 2013 - September 2014	Macedonia	UNDP	Modeller, analyst, trainer	<p style="text-align: center;">Strengthening the QA/QC system related to the GHG Inventory</p> <ul style="list-style-type: none"> - Analytical work: Improvement of the Mitigation Scenarios using MARKAL model - Provide analytical and technical support of the participatory activities - Capacity building
12	Assessment of the impact of the Energy Efficiently Directive, 2012/27/EU, if this is adopted by the Contracting Parties of the Energy Community (EC)	November 2013 -July 2014	Energy community contracting parties	Energy community	Modeller, analyst	<p style="text-align: center;">Assist in addressing issues identified during the EC-LEDS preparation of the original model , including, but not limited to:</p> <ul style="list-style-type: none"> - Assess the NREL energy efficiency database with an eye towards updating the residential sector new device options;

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						<ul style="list-style-type: none"> - Become familiar with and take "ownership" of the following EC-TIMES regions: Albania, BiH, Croatia, Montenegro and Macedonia; - assist with improving the model organization (and future management) by moving the future technology options (demand devices and power plants) from VFE Base Year (BY) templates to SubRES scenario files; - Assist with moving and consolidate other BY and Scenario files to improve the organization and handling of the EC-TIMES VFE templates; - Assist in building out the Montenegro demand sectors, and - Pursue other improvements as time permits.
13	Third National Report to UNFCCC:	April 2013 – October 2013	Macedonia	UNDP	Moddeler, analyst	<ul style="list-style-type: none"> - Development of Climate Change Mitigation Scenarios for the key GHG Emitting Sectors. Introduced new demand technologies, defined useful energy demand in Residential, Commercial, Industrial, Transport and Agriculture sectors, developed a baseline scenario and three groups of mitigations scenarios (EU, QERLC and BAU deviation) until 2050 using MARKAL model, with emissions limitation/reduction targets, performed a sensitivity analysis and a comparative assessment of the different scenarios. Worked with waste expert on creating baseline and mitigation scenarios as well as made environment and economic analysis.
14	Green Growth and New Energy Infrastructure Review Study	April 2013 - June 2013	Macedonia	World Bank	Moddeler, analyst	<ul style="list-style-type: none"> - The MARKAL model was adopted to optimize only electricity options on the supply side. The base year was changed from 2009 to 2011, recalibrated to match the base year energy balance and ran the model to debug any problems and reproduce the base year energy balance. Transmission and distribution losses as well as EE demand options were modeled on the supply side. A number of different scenarios were created. Prioritization of the energy projects was done.
15	Program for the realization of the energy strategy of the Republic of Macedonia for the period	September 2011-January	Macedonia	World Bank	Member of the ICEIM-MANU team	<ul style="list-style-type: none"> - Contributed to the chapters on:

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	2013-2017.	2013				<ul style="list-style-type: none"> - <i>Monitoring and Evaluation Program (responsible for identifying indicators for Energy Efficiency and GHG Emissions)</i> - <i>Financial Aspects of the Realization Plan</i> - <i>Activities after 2017</i>
16	<i>Third National Report to UNFCCC: Development of a Case Study of Climate Change Mitigation Potential of the Transport Sector.</i>	October 2012 – December 2012	Macedonia	UNDP	Moddeler, analyst	<ul style="list-style-type: none"> - <i>Conducted a comprehensive assessment of the climate change mitigation potential of the national transport sector, evaluating appropriate mitigation options in terms of their environmental effectiveness (volume of GHG emissions reduction) and economic effectiveness (specific cost of reduction) using a bottom up approach and GACMO methodology.</i>
17	Green Growth and Climate Change Analytic and Advisory Support Program – Energy Sector Modeling.	December 2011- December 2012	Macedonia	World Bank	Moddeler, analyst	<ul style="list-style-type: none"> - <i>Changed the base year in the MARKAL model from 2006 to 2009, recalibrated to match the base year energy balance and ran the model to debug any problems and reproduce the base year energy balance. Expanded the model till 2050 and developed baseline scenario. The technologies that were included in the model were reviewed and new technologies were introduced. A number of mitigation scenarios at energy supply side were developed and quantified in terms of economic and environmental effectiveness.</i>
18	Regional Energy Security and Market Development (RESMD) - Phase II, USAI.	September 2011- June 2012	Macedonia	USAID via IRG	Moddeler, analyst	<ul style="list-style-type: none"> - <i>Updated the MARKAL (MARKet ALlocation) Macedonia model to reflect up-to-date information on technology options, economy growth rates, and world/regional energy prices. Included the Transportation and Refinery sectors in the model as well as hurdle rates to reflect impediments in the market place to the uptake of more efficient yet expensive (upfront) devices. Re-calibrated the model for each demand sector. Developed a suite of policy scenarios: baseline scenario with Transportation and Refinery sectors, Energy Efficiency, Renewable, combination of Renewable and Energy Efficiency, Lignite limitation, Hydro limitation, and CO2 mitigation scenarios.</i>

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19	Regional Environmental Network for Accession (RENA)	November 2011 – April 2014	Macedonia	<i>Energy Community, Directorate General Environment</i>	<i>Moddeler, analyst</i>	- Development of the 2008 and 2009 GHG emissions inventories using IPCC GHG inventory software and CRF (Common Reporting Format) tool
20	Development of Methods for Strategic Planning in Energy Sector.	February 2011 - December 2013	Macedonia	<i>Macedonian Academy of Sciences and Arts</i>	<i>Moddeler, analyst</i>	- Applied the MARKAL model for strategic planning in the national energy sector.
-	-	- <i>Work done as independent consultant</i>				
1	Development of Regional Energy Markets (DREM)	December 2017- September 2018	Macedonia	<i>USAID via TetraTech via ACT</i>	<i>Consultant</i>	<p><i>Main tasks:</i></p> <ul style="list-style-type: none"> - Member of the core team that working on developing of new Energy Law <ul style="list-style-type: none"> - Development of almost all bylaws deriving from the Energy Law - Member of the core team that working on developing of new Energy Efficiency Law <ul style="list-style-type: none"> - Development of the bylaws deriving from the EE Law - Responsible for analysis on the FiP as a support mechanisms for increasing the RE generation - Responsible for development of the Third Progress Report on Renewable Energy
2	Development of methodology and algorithm of an online calculator for household heating	December 2017- February 2018	Macedonia	<i>UNDP</i>	<i>Consultant</i>	- National Consultant for development of methodology and algorithm of an online calculator for household heating
3	Fuel economy	October 2017 – December 2018	Macedonia	<i>The Regional Environmental Centar for Central and Eastern Europe (REC)</i>	<i>Consultant</i>	<ul style="list-style-type: none"> - Reform of the existing vehicle tax regime: <ul style="list-style-type: none"> - Develop an excel simulation tool for a one-off vehicle tax payable upon the first registration, based on suitable criteria, including CO2 emissions (CO2gr/km) - Estimate the expected CO2 emissions reduction if the taxes are implemented - Fuel Economy Policy Paper (FEP) for the Republic of Macedonia - Draft a comprehensive Fuel Economy Policy Paper, using the Outline presented in Annex 1 of this ToR and

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						<p><i>integrating all findings / recommendations formulated during the Project:</i></p> <ul style="list-style-type: none"> - Fuel Economy Baseline - Registered Vehicles` Data Sharing Platform - Vehicle Tax Reform - Consumers / Drivers` survey - Develop a survey questionnaire intended to test the public opinion on the proposed vehicle tax regime – the new vehicle tax and the converted environmental fee paid upon annual vehicle registration
4	Air pollution City of Skopje	July-August 2017	Macedonia	UNDP	Consultant	- Perform additional analyses for the air pollution report (City of Skopje)
5	Prime Contract Enhancing Capacity for Low Emission Development Strategy	August 2016 February 2017	Macedonia	USAID via International Resources Group, an Engility Company	Consultant	<ul style="list-style-type: none"> - Assist on Implementation Plan for Electricity Market Opening - Assist on Selection of Option for Establishing or Joining a PX
6	Study on Examining the Implementation of the EU Acquis on Value Added Tax in the Energy Community Legal order	August 2016 December 2016	Macedonia	Energy community via Energy Institute Hrvoje Pozar	Consultant	
7	Low Emission Development and Clean Energy Investment	June 2016 June 2017	Macedonia	USAID via Winrock International	Consultant	<p><i>Transposing EU RES Directive.</i></p> <ul style="list-style-type: none"> - Develop Methodology for calculation of the energy generated from renewable sources and from high-efficient combined facilities that is applied for calculating the indicative trajectory for determining the dynamics for achieving the mandatory targets -Develop Methodology for calculation of gross final energy consumption from renewable energy sources -Support the Project RE specialist in drafting the Decision for determining the national mandatory targets for the share of energy from renewable sources and of the high-efficient combined facilities in gross final energy consumption in 2020 and for the share of energy from renewable sources in the final energy consumption in 2020, as well as for the indicative trajectory targets

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						<ul style="list-style-type: none"> - develop the new biennial RE Progress Report (2014-2015) - develop Annual Report on Implementation of the 5-year Program for implementation of the Energy Strategy, which according to the Energy Law should be completed by July 31, 2016. - Alternatives to Increase RE Production Share <ul style="list-style-type: none"> - Analysis on introduction of alternative incentives to increase the RES power generation, - Analysis with methodologies on the impact of the FiT on the electricity price. - Introduction of Electronic Energy Data Collection and Sharing System <ul style="list-style-type: none"> -providing input and feedback during the process of software development to the company that will be selected by the MoE for that purpose, to ensure that the software is reliable and meets all requirements defined in the Study -directly involved in the process of development of the energy balance as an indicative and planning document. - Transposition of the New EU EE Directive <ul style="list-style-type: none"> - involved in the whole process of transposition of the EE Directive explained under 2.4. Transposition of the New Energy Efficiency EU Directive, and will be participating in the working group established for that purpose. - Modeling of Data Collected by SSO in Household Energy Use Survey/ Revision of the percentage of the RES share in total energy consumption based on the biomass data (revision of the NREAP).
8	Low Emission Development and Clean Energy Investment	September 2015 February 2016	Macedonia	USAID via Winrock International	Consultant	<ul style="list-style-type: none"> - Developing a feasibility study for establishment of the electronic system for data collection and data sharing for the energy balance

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9	Low Emission Development and Clean Energy Investment	September 2015 January 2016	Macedonia	<i>USAID via Winrock International</i>	Consultant	- <i>Improving the capacities for energy data collection and preparing the energy balance. Trainings and presentation of the new forms that will be used for collection of the energy data necessary for development of the energy balance. Energy balance was developed in accordance with the new methodology (EUROSTAT).</i>
10		October 2015	Macedonia	<i>Ministry of Economy</i>	Consultant	- <i>Update of the Renewable energy action plan of the Republic of Macedonia up to 2025 with vision to 2030</i>
11	Resilient Skopje	June 2015 September 2015	Macedonia	<i>UNDP</i>	Consultant	- <i>Development of MARKAL model for the City of Skopje and creation of GHG mitigation measures</i>
12	Strengthening the administrative capacity of the energy department in the Ministry of Economy and the Energy Agency (IPA project),	July 2015 August 2015	Macedonia	<i>ATC consultant</i>	Consultant	- <i>Participation in the process of proposal for feed-in tariffs for high efficient CHP</i>
13	Strengthening the administrative capacity of the energy department in the Ministry of Economy and the Energy Agency (IPA project),	July 2015 August 2015	Macedonia	<i>ATC consultant</i>	Consultant	- <i>Participation in the process of development of key strategic documents important for the further improvement of the energy sector – biomass. Analyzing the biomass consumption with a view to sustainability, development of different scenarios on biomass consumption, drafting report on biomass and scenarios to become part of the RES strategy update.</i>
14	Strengthening the administrative capacity of the energy department in the Ministry of Economy and the Energy Agency (IPA project),	July 2015 August 2015	Macedonia	<i>ATC consultant</i>	Consultant	- <i>Participation in the process of collection of information on energy projects in Macedonia, development of model for prioritization of energy projects (using the methodology developed under the project), draft list of prioritized energy projects in Macedonia.</i> -
15	Strengthening the administrative capacity of the energy department in the Ministry of Economy and the Energy Agency (IPA project),	June 2015 – July 2015	Macedonia	<i>ATC consultant</i>	Consultant	- <i>Propose and prepare methodology and criteria for prioritizing energy projects</i>

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16	SLED project	December 2014 March 2015	Macedonia	<i>The Regional Environmental Center for Central and Eastern Europe (REC) Szentendre Hungary</i>	Consultant	- Providing input data for the reference scenario and two GHG reduction scenarios to the EEMM modeling team and working on harmonization of MARKAL model and EEMM electricity model
17	Low Emission Development and Clean Energy Investment	November 2014 December 2014	Macedonia	<i>USAID via Winrock International</i>	Consultant	- Development of the first biennial progress report on promotion and use of energy from renewable sources under Directive 2009/28/EC
18	Sustainability criteria for biofuels.	October 2014 December 2014	Macedonia	<i>E4tech, London United Kingdom</i>	Consultant	- Quality control of the provided documents and data
19	Development of energy balance	October 2014 December 2014	Macedonia	<i>Energy Agency of the Republic of Macedonia</i>	Consultant	- Preparation of the energy balance of the Republic of Macedonia for the period 2015-2019 using the current methodology and rulebook
20	Low Emission Development and Clean Energy Investment	July 2014- December 2014	Macedonia	<i>USAID via Winrock International</i>	Consultant	- Development of methodology and capacity buildings for the estimation of GHG emission reduction as a result of the use of renewable energy
21	South East Europe Sustainable Energy Policy	April 2014- October 2014	SEE countries	<i>SEE Change Net Foundation</i>	Consultant	- Support the SEE SEP modelling team
22	Low Emission Development and Clean Energy Investment	July 2014- September 2014	Macedonia	<i>USAID via Winrock International</i>	Consultant	- Developing analysis and action plan for proper combustion and heating in households, with special attention of biomass as a source for heating.
23	Enhancing Capacity for Low-Emissions Development Strategy (EC-LEDS)	October 2013- December 2014		<i>USAID via Tetra Tech EC</i>	Consultant	- Development of a proposed solution for streamlining data collection by Government of Macedonia (GoM) entities from energy producers and distributors and assist in implementing of the proposed solution; Collaborate with Energy Community Secretariat team providing technical assistance to the State Statistical Office (SSO) to design and pilot test a Household Energy Consumption Survey; Design a data collection system and process for data from vehicle mandatory inspections to be provided by the Ministry of Interior to SSO and Ministry of Economy (MoE) to improve estimates of energy consumption from transport

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						<i>activity; Provide assistance to USAID LED-CEI in drafting a legal action to require energy distribution companies to report monthly and annual energy consumption using NACE; Develop an Energy Performance in Buildings Database, based on the data collected for energy consumption in non-residential buildings for the Green Growth Program.</i>
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15. Others:

Certificates:

- Certified Measurement and Verification Professional, **The efficiency Valuation Organization and the Association of Energy Engineering**
- e-Learning Course- Low Carbon Development: Planning and Modelling, **The World Bank Institute**
- Certificate of Training, **Republic of Macedonia SBEM Trainers Course**
- Certification of participation, **multi module training programme, organized by ECRAN, modelling: Long-range Energy Alternatives Planning System (LEAP)**

Statement of Accomplishment:

- Turn Down the Heat: Why a 4°C Warmer World Must be Avoided, **World Bank**

Workshops:

Participation in more than 60 workshops and in most of them he has presented the results from the projects.

Member of commissions

September 2014

September 2018 Member of the commission for energy auditors' exam at the Ministry of Economy.

Reviewer for the following journals with impact factor: Renewable energy, Thermal Science and Journal of renewables and sustainable energy, Applied energy, Energy, Energy Conversion and Management, Energy strategy review.

16. Publications:

Publications in Journals with impact factors:

1. Mitrevski, V., **Dedinec, A.**, Mitrevska, C., Bundalevski, S., Geramitcioski, T., Mijakovski, V., Mathematical modelling of far-infrared vacuum drying of apple slices, *Thermal Science* 2018, <https://doi.org/10.2298/TSCI180205143M>
2. Dedinec Aleksandra, Filiposka S., **Dedinec Aleksandar**, Kocarev, L., Deep belief network based electricity load forecasting: An analysis of Macedonian case, *Energy*, Volume 115, Part 3 (2016), pp.1688–1700
3. **Dedinec, A.**, Jovanovski B., Gajduk, G., Kocarev L., Markovska N, Analysis of electric vehicle penetration into energy systems predominantly based on lignite, *European Physics Journal - Special Topics*, 2016, Volume 225, Issue 3, May 2016, pp 595-608
4. Kanevce G., **Dedinec Aleksandar**, · Dedinec Aleksandra, Optimal usage of biomass for energy purposes toward sustainable development - a case of Macedonia, *Thermal Science*, 2016, doi:10.2298/TSCI160208057K
5. Kanevce ·G., **Dedinec Aleksandar**, · Dedinec · Aleksandra, Kanevce Lj. Long-term predictions of the energy development - possibilities and challenges, *Thermal science* 2016, doi: 10.2298/TSCI160126017K
6. **Dedinec, A.**, Taseska-Gjorgievska, V. Markovska, N., Obradovic Grncarovska T., Duic N., Pop-Jordanov J., Taleski R., Towards post-2020 Climate Change Regime: Analyses of Various Mitigation Scenarios and Contributions for Macedonia, *Energy*, 94 (2016) 124-137.
7. **Dedinec A.**, Taseska-Gjorgievska V., Markovska N., Pop-Jordanov J., Kanevce G., Goldstein G., Pye S., Talevski R. Low emissions development pathways of the Macedonian energy sector, *Renewable & Sustainable Energy Reviews*, Year 2016 Vol. 53, pp. 1202–1211.
8. Dedinec Aleksandra, **Dedinec Aleksandar**, Markovska N., Optimization of heat saving in buildings using unsteady heat transfer model, *Thermal Science*, *Thermal Science: Year 2015*, Vol. 19, No. 3, pp. 881-892.

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9. **Dedinec A.**, Markovska N., Ristovski I., Veleviski G., Taseska-Gjorgievska V., Obradovic Grncarovska T., Zdraveva P., Economic and Environmental Evaluation of Climate Change Mitigation Measures in the Waste Sector of Developing Countries, Journal of Cleaner Production, Year, 2016, Vol. 88, pp. 234–241.
10. Taseska-Gjorgievska V., **Dedinec A.**, Markovska N., Pop-Jordanov J., Kanevce G., Goldstein G., Pye S., Exploring the Impact of Reduced Hydro Capacity and Lignite Resources on the Macedonian Energy Sector, Thermal Science, Year 2014, Vol. 18, No. 3, pp. 721-730
11. **Dedinec A.**, Markovska N., Taseska V., Duić N., Kanevce G., Assessment of Climate Change Mitigation Potential of the Macedonian Transport Sector, Energy 57 (2013) 177-187, Elsevier Journal.
12. Taseska V., **Dedinec A.**, Markovska N., Kanevce G., Goldstein G., Pye S., Assessment of the Impact of Renewable Energy and Energy Efficiency Policies on the Macedonian Energy Sector Development, J. Renewable Sustainable Energy 5, 041814 (2013); doi: 10.1063/1.4813401
13. **Dedinec A.**, Taseska V., Markovska N., Kanevce G., Bosevski T., Pop-Jordanov J., The Potential of RES for GHG Emissions Reduction, Thermal Science, 2012, Vol. 16, No. 3, pp. 717-728.

Publications in proceedings:

1. Taseska-Gjorgievska V., Todorovski M., Markovska N., **Dedinec A.**, An Integrated Approach for Analysis of Higher Penetration of Variable Renewable Energy: Coupling of the Long-Term Energy Planning Tools and Power Transmission Network Models, 3rd South East European Conference on Sustainable Development of Energy, Water and Environment Systems – 3rd SEE SDEWES Novi Sad 2018, 30 June - 4 July 2018, SDEWES.SEE2018.0261
2. Dedinec Aleksandra, **Dedinec Aleksandar**, Deep belief networks for electricity price forecasting 8th International Conference on Information Society and Technology, Serbia, 2018, ICIST 2018 Proceedings Vol.1, pp. 155-158
3. Dedinec Aleksandra, **Dedinec Aleksandar** Electricity price forecasting of the South East European power exchanges. 7th International Conference on Information Society and Technology, Serbia, 2017, accepted for publication
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