

## CURRICULUM VITAE

**Proposed position**                                  **Local Expert**

1. **Family name:**                                  **TIRSU**
2. **First names:**                                    **Mihai**
3. **Date of birth:**                                  Feb. 27<sup>th</sup> 1972
4. **Nationality:**                                    Moldova
5. **Civil status:**                                  Married, 2 daughters
6. **Education:**

<i>Institution</i>	Technical University, Moldova
<i>Date: from (month / year): to (month / year):</i>	09/1989 – 06/1994
<b><i>Degree(s) or Diploma(s) obtained:</i></b>	<b>Diploma of Engineer in Systems Automatization</b> Specialization: Control and command of technical systems

<i>Institution</i>	Institute of Power Engineering, Moldova
<i>Date: from (month / year): to (month / year):</i>	01/1996-12/2003
<b><i>Degree(s) or Diploma(s) obtained:</i></b>	<b>PhD in technical sciences</b>

**7. Language skills:**

Mother tongue(s)      **Romanian**

Foreign language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C1	C1	C1
Russian	C2	C2	C2	C2	C2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user

**8. Membership of professional bodies:**

- Member of Moldavian Competent centre for using of renewable energy sources
- Member of Scientific Council of Power engineering Institute
- Member of Moldova Electrotechnical Committee

**9. Other skills:** Computer tools: MATLAB, SIMULINK, LEAP, Excel, Word, Training courses in elaboration of energy audit, etc.

**10. Present position:**    Verification Expert

**11. Years within the firm:**    20+

**12. Key qualifications (relevant to the programme):**

Mihai has **over 25 years of professional experience** and is an expert in developing and implementation of innovative projects covering both technical and financial components. He has been involved as national expert in development of various strategic documents and financial instruments for their successful implementation. **Mihai is an approved Verification Expert** under several **contracts for Verification Consultant including assignments in Moldova (MoSEFF) and DCFTA-facility for SMEs** with practical verification experience for both **on-site and desk-based verification approach**.

Furthermore, he contributed to a number of feasibility studies, business plans and project implementations, and has experience in working with international companies implementing projects financed by **EBRD, WB, USAID, EC, EIB** etc.

His key experience can be summarized as follows:

- **Verification of projects after completion** against set of pre-defined criteria,
- **Verification Expert under EBRD's DCFTA programme for SMEs,**
- **Verification Expert under EIB GGF Technical Assistance Facility**
- **Verification Expert under EBRD's MoSEFF in Moldova,**
- Expert in renewable energy both design and expertise;
- National expert in energy sector;
- National expert in developing mitigation actions for CO2 reduction;
- Professional researcher in field of use and conversion of renewable energy sources;
- Authorised Energy Auditor;

**13. Specific country experience:**

<b>Country:</b>	<b>Date from – to</b>
Moldova	ongoing
Romania	ongoing
Ukraine	2019-ongoing

**14. Professional Experience (selected projects):**

<b>Project:</b>	<b>Verification Consultant for DCFTA SMEs Programme</b>
<b>Date:</b>	2016 – ongoing
<b>Location:</b>	Moldova, Ukraine
<b>Client:</b>	<b>EBRD</b>
<b>Position:</b>	Verification Expert
<b>Description:</b>	the EC jointly with the EBRD has put in place the DCFTA Facility for SMEs ( <a href="http://www.eu4business-ebdcreditline.com/">http://www.eu4business-ebdcreditline.com/</a> ). The DCFTA programme for SMEs is a wide-ranging regional initiative of the EU, which aims to provide support to SMEs in the Eastern Partnership to tackle the challenges impeding them from reaching their full potential. Within this DCFTA-programme Mihai works as Verification expert under ALLPLAN sub-Consultant Agreement and verifies successful implementation of sub-projects after completion ( <b>compliance with one of the EU-Directives, determination of investment cost, determination of incentive level, reporting of findings in a CVR,...</b> ).

<b>Project:</b>	<b>Verification Consultant for Moldovan Sustainable Energy Financing Facility (“MoSEFF”)</b>
Date:	11/2009 – 12/2017
Location:	Moldova
Client:	<b>EBRD</b>
Position:	Verification Expert
Description:	MoSEFF ( <a href="http://www.moseff.org">www.moseff.org</a> ) was a credit line that provides on-lending in sustainable energy projects in Moldova. Under MoSEFF in frame of Agreement with ALLPLAN monitors the quality of technical assistance provided by the Project Consultant and verifies the successful implementation of completed projects against technical and/or other loan documentation (e.g. Energy Audit reports, Energy Performance Assessment reports, etc.). Further Mihai has been establish the level of incentives to be paid by the partner banks to the sub-borrower after the project is successfully completed.

<b>Project:</b>	<b>Staff Training and Energy Audit Services for Microinvest Financial Institution under GGF Technical Assistance Facility, TAF activity No. 16/2014</b>
Date:	03/2015 – 03/2016
Location:	Moldova
Client:	<b>JLC MFO MICROINVEST LLC</b>
Position:	Verification Consultant
Description:	GGF TAF was a credit line that provide on-lending in clean energy projects in Moldova. Under GGF TAF in frame The Consultant has been trained FI staff and identified eligible projects under GGF criteria and performing energy and CO2 reduction estimation.

<b>Project:</b>	<b>Staff Training and Energy Audit Services for Total Leasing Finance (TLF) Financial Institution under GGF Technical Assistance Facility, TAF activity No. 16/2014</b>
Date:	01/2016 – 01/2018
Location:	Moldova
Client:	<b>Total Leasing Finance</b>
Position:	Verification Consultant
Description:	GGF TAF was a credit line that provide on-lending in clean energy projects in Moldova. Under GGF TAF in frame The Consultant has been trained FI staff and identified eligible projects under GGF criteria and performing energy and CO2 reduction estimation.

<b>Project:</b>	<b>Impact Assessment Services under GGF Technical Assistance Facility, TAF activity No. 06/2019</b>
Date:	05/2019 – ongoing
Location:	Moldova
Client:	<b>Total Leasing Finance</b>
Position:	Verification Consultant
Description:	GGF TAF was a credit line that provide on-lending in clean energy projects in Moldova. Under GGF TAF The Consultant has been trained FI staff and providing Impact Assessment for the projects identified as eligible under imposed criteria.

<b>Project:</b>	<b>Development of the means, technical and technological solutions for an effective utilisation of traditional and renewable power resources for successful functioning of a power complex</b>
Date:	01/2015 – ongoing
Location:	Moldova
Client:	The Supreme Council for Science and Technological Development of Academy of Sciences of Moldova
Position:	Project manager
Description:	Providing researches for improving energy efficiency in energy sector,

	including innovative solutions for energy use (both – traditional and RES)
<b>Project:</b>	Assessment of local power generation options in Moldova
Date:	02/2019 – ongoing
Location:	Moldova
Client:	USAID and Ministry of Economy and Infrastructure
Position:	Consultant
Description:	Project is financed by USAID and is implemented by Worley parsons company (USA). Next tasks should be performed by Consultant: Assessment of existing CHPs and related DH facilities; Heat and Electricity Demand and Supply; Gas and Water Supply; Land and Structural Issues; Legal and Regulatory Considerations.
<b>Project:</b>	Promoting Energy Efficient Light in Moldova
Date:	10/2015 – 08/2016
Location:	Moldova
Client:	UNDP
Position:	Expert
Description:	Elaboration of NAMA (National Appropriate Mitigation Actions) on “Promoting Energy Efficient Light in Moldova” financed by UNDP.
<b>Project:</b>	Analysis of the impact of individual thermal power plants (CTIs) on natural gas on public health and the environment
Date:	03/2018 – 10/2018
Location:	Moldova
Client:	TERMOELECTRICA S.A.
Position:	Project manager
Description:	Estimation of individual gas boiler emissions influence on health and environment, including measures for overcome of existing situation
<b>Project:</b>	Identification of solutions for increasing thermal load in DH by connecting / reconnecting different types of buildings
Date:	03/2018 – 04/2019
Location:	Moldova
Client:	TERMOELECTRICA S.A.
Position:	Project manager
Description:	Elaboration of innovative solutions for increasing interest of public organisations in connection of their buildings to district heating.
<b>Project:</b>	Technical Assistance for Environmental Audit of CHP-1 site
Date:	03/2016 – 03/2018
Location:	Moldova
Client:	Moldova Energy Project Implementation Unit (MEPIU)
Position:	Local expert
Description:	Elaboration of scenarios for electrical part of CHP-1 in Chisinau
<b>Project:</b>	Technical assistance to Government of R.Moldova
Date:	06/2012 – 11/2013
Location:	Moldova
Client:	Exergia S.A. Energy and Environment Consultant (Greece)
Position:	Non-key senior expert
Description:	Support to key expert in elaboration of Action Plan, identification of barriers, proposing of scenarios, development of steps necessary to follow in order to implement Energy strategy, elaboration of timetable for each action.

**15. Publications and presentations:**

1. Tîrșu M., Uzun G. *Renewables as important energy source for Moldova*. The Eurobiotech Journal, Review, Environmental technology, © 2018 European Biotechnology Thematic Network Association, Volume 2, Issue 1, p.1-6.
2. Tîrșu M., Calinin L., Zaițev D., Golub I., Kaloshin D. *Means and methods for active and reactive power exchange/regulation*. Monografie, LAMBERT Academic Publishing, OmniScriptum GmbH & Co. KG, Haroldstr. 14, pp.137.
3. Dumbrava V., Lazaroiu G.-C., Leva S., Balaban G., Teliceanu M., Tîrșu M. *Photovoltaic production management in stochastic optimized microgrids*. U.P.B. Sci. Bull., Series C, Vol. 79, Iss. 1, 2017, ISSN 2286-3540.
4. Ciupăgeanu D.-A., Lăzăroiu Gh., Tîrșu M.. *Carbon Dioxide Emissions Reduction by Renewable Energy Employment in Romania*. Proceedings of The 11th International Conference on Electromechanical and Power Systems (SIELMEN 2017), 11 October 2017 Iasi / 12-13 October 2017, Chisinau, pp.281-285, <http://ieeexplore.ieee.org/document/8123333/>, DOI: 10.1109/SIELMEN.2017.8123333
5. Sima C. A., Lazaroiu G.-C., Dumbrava V., Tîrșu M. *A Hybrid System Implementation for Residential Cluster*. Proceedings of The 11th International Conference on Electromechanical and Power Systems (SIELMEN 2017), 11 October 2017 Iasi / 12-13 October 2017, Chisinau, pp.275-2806, <http://ieeexplore.ieee.org/document/8123332/>, DOI: 10.1109/SIELMEN.2017.8123332
6. Tîrșu M., Zaițev D., Golub I., Calinin L., Lazaroiu G.-C. *Estimation of the Wind Power Plants Capacity to be Integrated in Actual Power System of Moldova*. Proceedings of The 11th International Conference on Electromechanical and Power Systems (SIELMEN 2017), 11 October 2017 Iasi / 12-13 October 2017, Chisinau, pp.223-226, <http://ieeexplore.ieee.org/document/8123322/>, DOI: 10.1109/SIELMEN.2017.8123322

Certification:

I, the undersigned, certify that to the best of my knowledge, these data correctly describe me, my qualifications and my experience.



---

Mihai Tîrșu

Signature

12.05.2020  
Date