

# Enabling Climate Change Mitigation through Capacity Building – Green Energy Center of Iran (GECI)

Project outline for capacity building activities on Renewable Energy and Energy Efficiency

Prof. Dr. Hans-Liudger Dienel Institute of Vocational Education and Work Studies of Technical University Berlin (TU-IBBA)

#### Technische Universität Berlin



Institute of Vocational Education and Work Studies



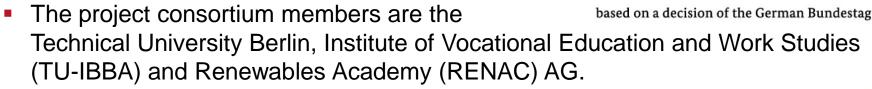


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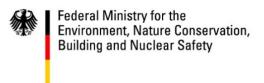


- The Green Energy Center Iran will support
  the market development of renewable energies (RE) and energy efficiency (EE)
  in Iran through capacity building activities for institutions and individuals
  from the public, private, academic and financial sector.
- Partner institution in Iran is the Ministry of Energy
- The project is funded through Germany's International Climate Initiative (IKI) of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB). The project started May 2017 and will last until April 2020.





Supported by:







### **Academic activities 2017-2020 for Iranian Universities**



- The Institute of Vocational Education and Work Studies of Technical University Berlin (TU-IBBA) is the project lead for know-how transfer to Iranian universities.
- The following activities are planned:
  - Assessment and evaluation of existing curricula
  - Co-Creation of curricula and lecture module development
  - Guest lectures: Preparation, implementation and evaluation
  - Integration of photovoltaics and one other key topic from the renewable energy, energy efficiency, or cross-sectoral topics into the existing syllabi





GECI Academic Workshop 26<sup>th</sup> November 2017 Tehran University



#### Talks and collaborations



#### **Authorities and state owned entities**

- Vice Presidency for Science and Technology
- Ministry of Energy,
- Ministry of Industry, Mine and Trade,
- Mashad Municipality
- SATBA Renewable Energy Organization
- Iran Grid Management Co. (IGMC),
- MAPNA, Renewable Energy Company

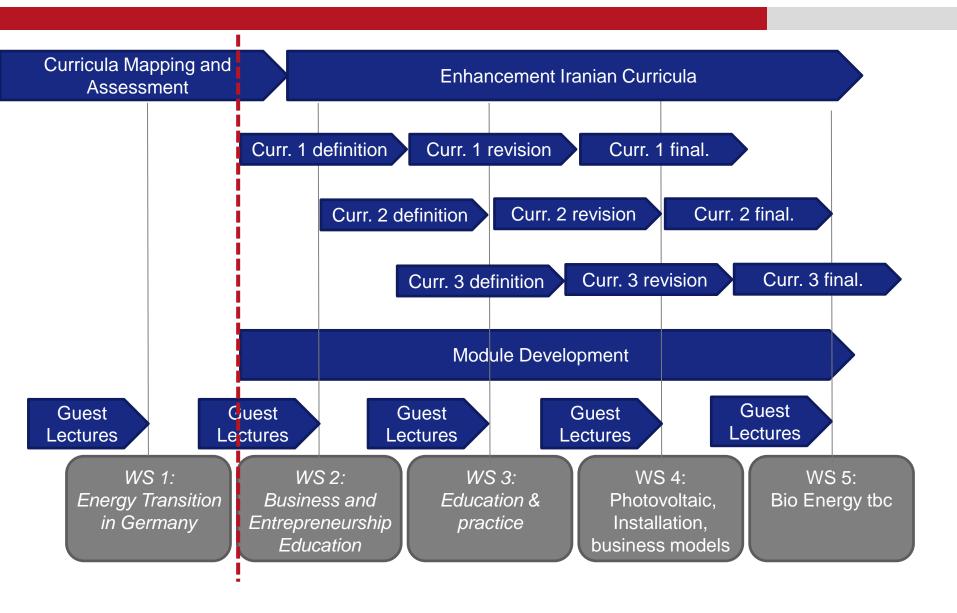
#### Universities and Research Institutes

- Tehran University (main cooperation partner)
- Shahid Beheshti University
- Amir Kabir University
- Ferdowsi University of Mashhad
- Tabriz University
- Sharif University
- IRNEF/ ESRI (Environmental Sciences Research institute)
- Sharif Energy Research Institute (SERI)



## **GECI Co-Creation process**







## **GECI Schedule for Academic Activities**



Mai 17	June 17	July 17	Aug 17	Sep 17	Oct 17	Nov 17	Dez 17	Jan 18	Feb 18	Mrz 18	Apr 18
	FFM Iran, 09-15 June	= Ac	ademic Op ademic Wo ademic Co ECI Busine	orkshops		Mee Iran	24 No GECI Dec esentation in conferences	GECI Presentation Conferences orking with Various	30 Jan-0		
May 18	June 18	July 18	Aug 18	Sep 18	Oct 18	Nov 18	Dez 18	Jan 19	Feb 19	Mrz 19	Apr 19
				EV5 burg/Berlin ug-02 Sep	<b>O</b> EV2	Iran, Tehrai 12/16 May				EV8  EV4  G Iran, T	Iran, Tehrar 01-05 Mar <sup>T</sup> ehran, 05 M
May 19	June 19	July 19	Aug 19	Sep 19	Oct 19	Nov 19	Dez 19	Jan 20	Feb 20	Mrz 20	Apr 20
O EV10	Iran, Tabriz Early May Fehran, Early	r May			☐ EV	Iran, Tehr Mid Oct n, Tehran, M			*	EV7 Stakeholde Exhibition Iran, Tehra Feb	



#### **Cooperation with Iranian universities** to develop 3 new Master programs (Curriculum)



GECI team has close cooperation with three universities to develop 3 new Renewable Energy programs :

M.Sc. in Sustainable Energy Development

Main Partner: Ferdowsi University of Mashhad (Engineering and Economy Faculties



M.Sc. Renewable Energy and Environment Engineering

Main Partner: Tehran university "Environment Faculty" "Mashhad Municipality"



M.BA in Renewable Energy Management

Main Partner: Amir Kabir University of Technology





## **GECI Academic Workshop 26th November 2017**



#### **Topic: Energy Transformation**

- Prof. Dr. Hermann E. Ott: "Achievements of and Challenges for Renewable Energy Sectors in Germany"
- Dr. Ulrike Lehr: "Employment Effects of Renewable Energy"
- Thomas Korbun: "Energy Transformation in Different Sectors"
- Michael Krug: "Overview of Selected Support Schemes for Bioenergy in Germany"
- Participants: 40 academics from 6 universities, 9 faculties and 6 fields related to Renewable energy.







### **Some pictures of GECI Events**





Energy Council of Science and Technology Vice-Presidency of I.R. Iran



 $\begin{tabular}{ll} MOU signing meeting on $30^{th}$ November between TU Berlin and Mashhad \\ Municipality \end{tabular}$ 



4<sup>th</sup> International Solar Energy conference and Exhibition





## Main findings so far



#### High interest in cooperation

- Participation in seminars and events
- Research collaboration, joint projects
- Joint study programs
- ...
- High level of academic excellence at Iranian Universities
- Main collaboration areas
  - Practice in laboratories in academic education
  - Lab to field and lab2market
  - Business Models for renewable energies and entrepeneurship education



## Time schedule for planned activities



Activity		2017		2018	2019	2020
Coordination, consultation and factfinding						
mission (TU-IBBA, RENAC, BEC)						
University cooperation (TUIBBA, BEC)						
Scholarships for short / long term trainings for public and private energy sector (RENAC)						
Concept and business plan development for Green Energy Centre of Iran (RENAC / TU IBBA)						













- GECI Project Website: www.geciran.net
- Technical University Berlin, Institute of Vocational Education and Work Studies (TU-IBBA)

Prof. Dr. Hans-Liudger Dienel (Lead), Christoph Henseler, Maryam Kohansal Nodehi, Hamid Mostofi Marchstraße 23, D-10587 Berlin, Germany <a href="https://www.technik.tu-berlin.de">www.technik.tu-berlin.de</a>, christoph.henseler@tu-berlin.de

Renewables Academy AG (RENAC)

Albrecht Tiedemann (project director and key contact for scholarships for short/long term trainings; tiedemann@renac.de) and Bernd Wollwerth-Carl (key contact for photovoltaic; wollwerth@renac.de)
Schönhauser Allee 10-11, D-10119 Berlin, Germany
<a href="https://www.renac.de">www.renac.de</a>

Consultant / focal point:
 Senior Ass. Prof. Dr. Lutz Mez Uhlandstr. 79,
 10717 Berlin, Germany, <a href="https://www.berlin-ec.com">www.berlin-ec.com</a>





## Thank You!