

---

# Annual Report 2020/2021

---

*German - Mexican Energy Partnership*



---

# Imprint

---

Commissioned and published by:  
Deutsche Gesellschaft für Internationale  
Zusammenarbeit (GIZ) GmbH  
Registered offices  
Bonn and Eschborn, Germany

Project: Bilateral Energy Partnerships in  
Developing and Emerging Countries  
Contact: German – Mexican Energy Partnership  
Av. Insurgentes Sur 688, 6th floor, Office 602  
03100, Del Valle, Benito Juárez, Mexico City

Marco Hüls  
Email: marco.huels@giz.de  
Website: www.energypartnership.mx  
Tel.: +52 55 5536 0330

As at  
April 2021

Design  
SK3 Estudio Creativo, Mexico City  
Edelman GmbH, Berlin

## Photo credits

- © BMWi: pages 13, 17.
- © GIZ Mexico | Celsa Calderoni, Francisco Contreras,  
Marco Hüls, Jonas Russbild: pages 2, 5, 6.
- © SENER: pages 1, 9.
- © Shutterstock | (Edson García), (elxeneize): pages 2,15.
- © Siemens Energy Mexico | Viviana Cruz: page 5.

Text:  
German – Mexican Energy Partnership Secretariat

GIZ is responsible for the content of this publication.

On behalf of the  
Federal Ministry for Economic Affairs and Energy  
(BMWi)

---

# Executive Summary

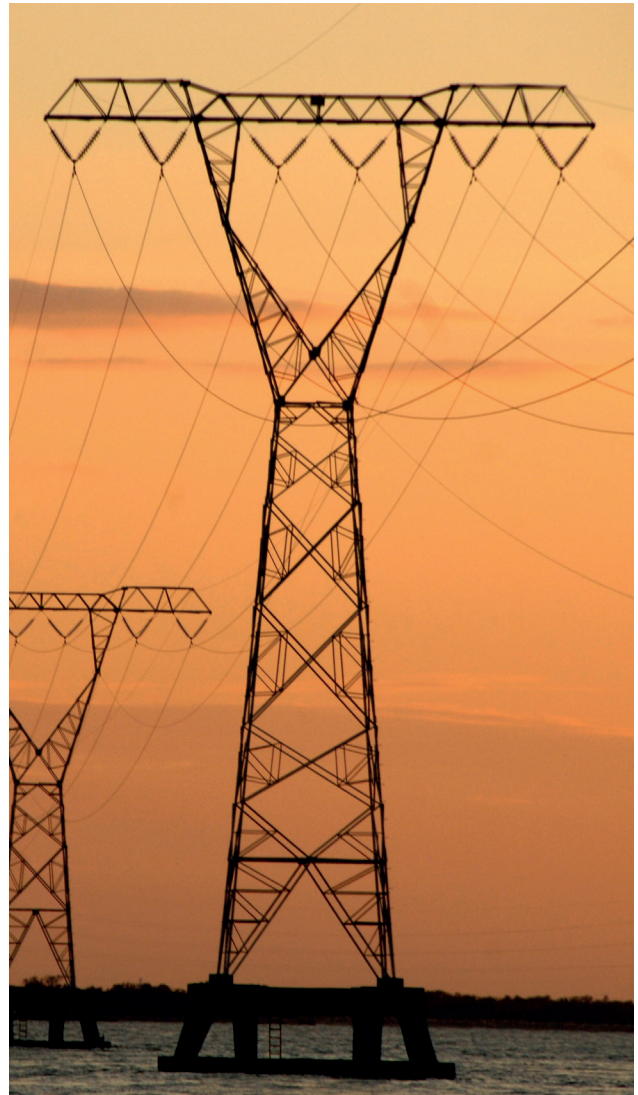
---

Five years after the beginning of its implementation, the German - Mexican Energy Partnership (EP) has consolidated its role as a platform for dialogue and exchange between both countries concerning relevant topics for the energy sector. The EP has focused its work on key aspects to promote a fair and ordered energy transition, such as:

- Energy transition decentralization,
- Digitalization and Blockchain,
- Innovation and start-ups.

In 2020, the EP successfully organized and implemented numerous activities, mostly online due to the special circumstances caused by the global pandemic. The activities included workshops, challenges and ideas contests, as well as studies, analysis, events and specialized publications. Thus, the EP has fostered and strengthened the dialogue and information exchange among expert Mexican and German representatives of the public, private, academic and civil society sectors.

The EP has consolidated new ties with public institutions of subnational and international levels and with the private sector, aiming to promote and enhance cooperation in the energy sector, contributing to the fight against climate change and relieving the global competition for energy resources that are becoming increasingly scarce.





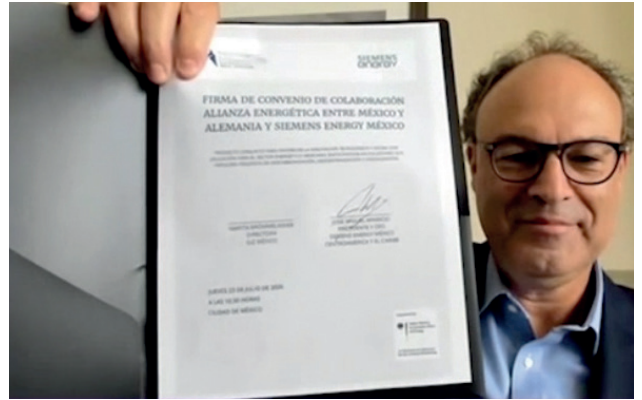
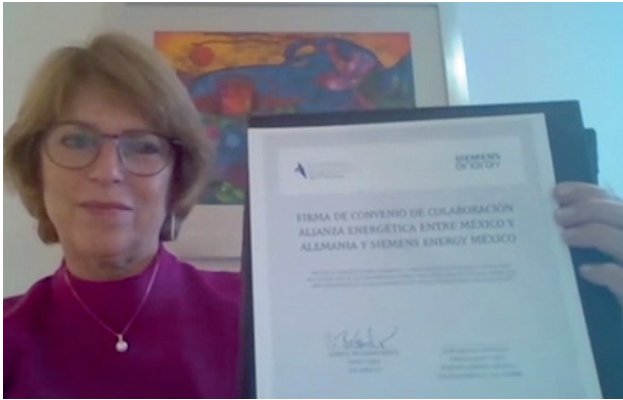




# Milestones









---

# The German – Mexican Energy Partnership

---

## How it all began?

On April 12<sup>th</sup>, 2016, with the signing of the “Joint Declaration of Intent on the Energy Partnership between the Government of the United Mexican States and the Government of the Federal Republic of Germany”, the EP was established.

## What is the EP?

The EP is a platform supporting political and strategic exchange of information and best practices between competent authorities, regulatory bodies, energy system operators and other relevant actors involved in the energy industry.

The main aim of this partnership is to promote the far reaching and profound energy transitions that are ongoing in both countries by exchanging knowledge on the development of a sustainable energy system, which is characterized by more efficient use of energy and enhanced use of renewable energy.

## High-Level Steering Group

The overall steering of the EP is done via the High-level Steering Group (HLSG). This group is composed of high-level representatives of both governments and led by the German Federal Ministry for Economic Affairs and Energy (BMWi) and the Mexican Ministry of Energy (SENER). The HLSG sets the priorities and defines the thematic focus of the EP.

## B2G Energy Council

To further enhance the collaboration between the German and Mexican energy ministries and the energy industries of both countries, BMWi and SENER have agreed upon guidelines to form a German–Mexican Business-to–Government (B2G) Energy Council.

## Secretariat

The EP is supported by a Secretariat with contact persons in both Mexico City and Berlin.

The role of the Secretariat is to support both BMWi and SENER in advancing its agreed priorities. The Secretariat ensures the implementation of related activities and serves as a point of contact for key actors.



Marco  
Hüls  
Coordinator  
Mexico City



Farhanja  
Wahabzada  
Advisor  
Berlin

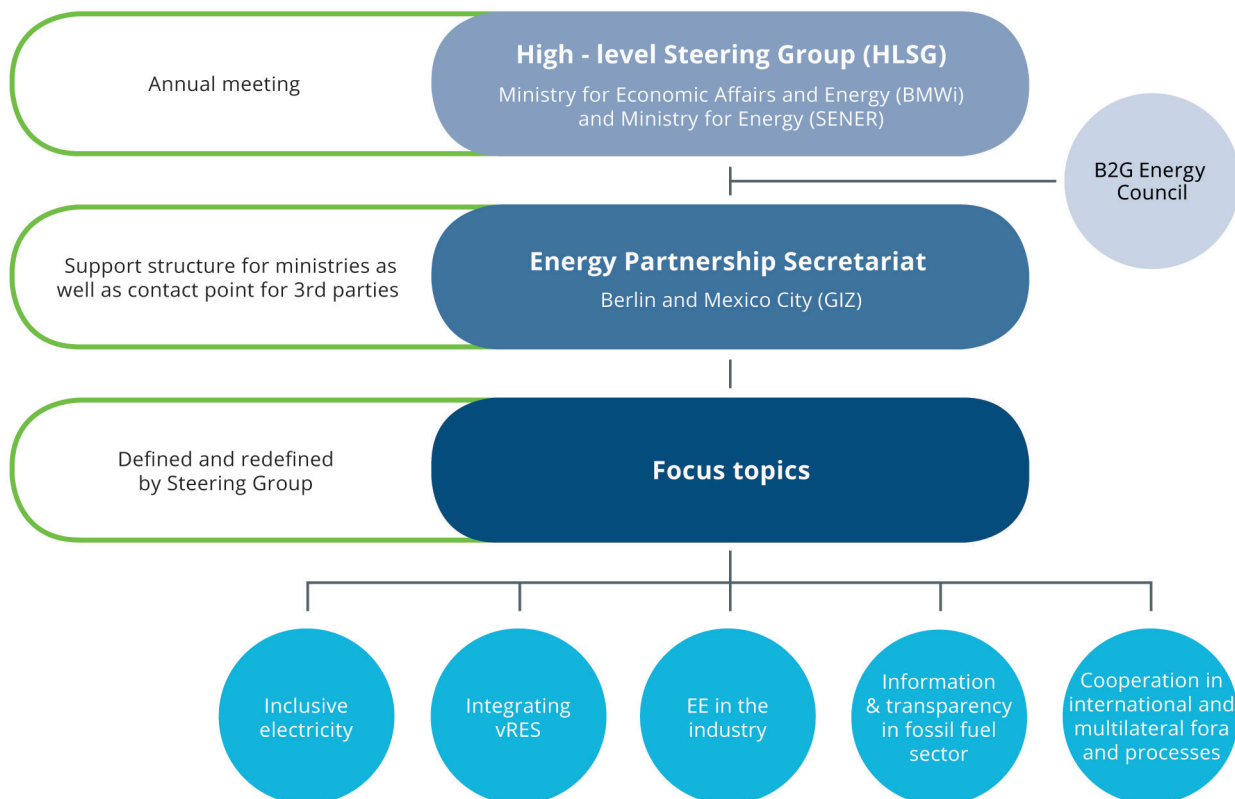


William  
Jensen Díaz  
Advisor  
Mexico City



Francisco  
Contreras  
del Valle  
Advisor  
Mexico City

# Structure



---

# Thematic Focus

---

## Inclusive Electricity

Both Germany and Mexico are transforming their electricity sectors, incorporating newly designed energy market schemes, new or transformed institutional settings as well as new support mechanisms for renewable energy.

Like other countries around the globe, Germany and Mexico search for and implement cost-effective instruments to promote renewable energy, while maximizing benefits for the society. Furthermore, the institutional strengthening is a key element to guarantee the operation of the power sector.

## Integrating vRES

Variable renewable energy sources (vRES) are increasing their participation in the energy mix. For this reason, integrating vRES into energy grids and systems is one of the main challenges for a country's energy transition.

Experience and knowledge exchange on applying innovative solutions to the energy sector, can help both countries to successfully face those challenges.

## Enhancing energy efficiency in the industry

The industrial sector plays a crucial role for economic growth. With an efficient use of energy, industries can increase the cost-effectiveness of their processes while contributing to the reduction of GHG emissions.

Peer-to-peer planning and better policies of energy efficiency constitute key factors to implement a successful energy transition.

At the same time, both Germany and Mexico are confronted by the challenge of ensuring and amplifying the attractiveness of efficiency measures in and for the industry.

## Increasing information and transparency in the fossil fuel sector

Open information available for citizens and industry, especially regarding the fossil fuel sector, is a concern for both governments. Increasing economic efficiency in the use of public resources in that sector is also key.

## Cooperation in international and multilateral fora and processes

Germany and Mexico are both members of various international organizations and initiatives, such as: Group of Twenty (G20), International Renewable Energy Agency (IRENA), Clean Energy Ministerial (CEM), just to name a few.

Synergies and common efforts of both countries in those organizations should, where applicable, be supported and enhanced within the bilateral EP. Moreover, at quite a number of international occasions and events, both countries collaborate on energy matters.





# Timeline of Highlights 2020 / 2021

2020



**FEBRUARY**

Working trips to Villahermosa, Tabasco and Puebla, Puebla



**APRIL**

Online Conference "Energy and Innovation: Blockchain in the Energy Transition"



**JUNE**

Webinar on Subnational Energy Transition



**MAY**

Online workshop series "Blockchain in the Mexican Energy Sector"



**JULY**

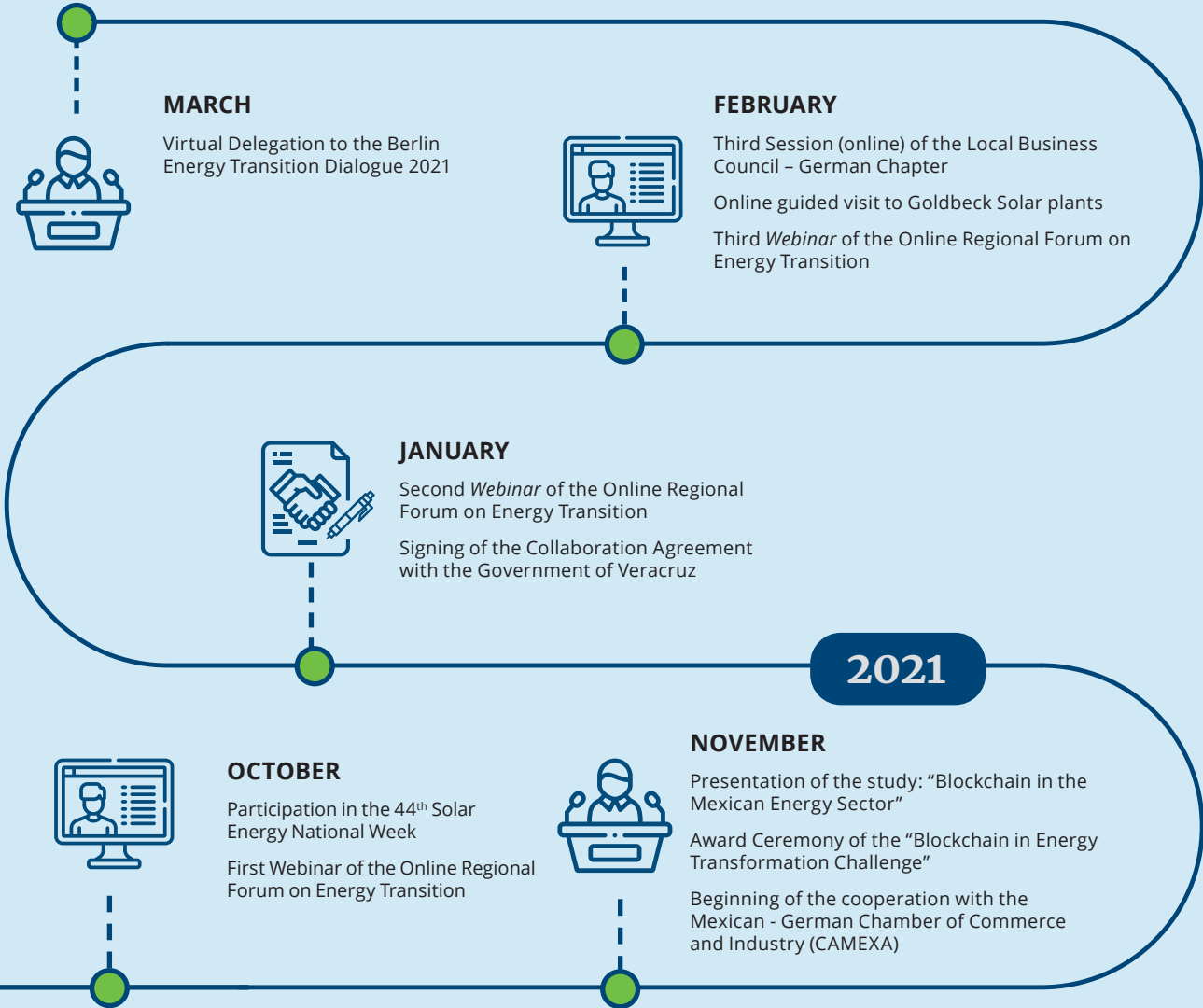
Signing of the Collaboration Agreement between the German - Mexican Energy Partnership and Siemens Energy Mexico



**SEPTEMBER**

Workshops on digitalization and start-ups

Beginning of the study, "Diagnostic for Green Hydrogen as Energy Vector in Mexico"





---

# Milestones 2019 / 2020

---

## 2020

### February

#### **Working trips to Villahermosa, Tabasco and Puebla, Puebla**

Aiming to the advancement of cooperation and communication channels on energy related topics, the EP has begun cooperation with various subnational governments including Tabasco and Puebla.

Some of the topics discussed with both governments include: energy transition and renewable energy integration plans; supporting dialogue, exchange and training on energy efficiency and climate change policies; and training on policies and technologies that could potentially be implemented in Mexico at a subnational level to achieve climate and clean energy generation goals.

### April

#### **Online Conference “Energy and Innovation: Blockchain in the Energy Transition”**

On April 29<sup>th</sup>, over 200 attendees participated in the reflection and discussion about the preliminary results of the specialized study “Blockchain in the Mexican Energy Sector” and the application of new and innovative technology solutions, particularly Blockchain, for today’s energy sector problems in Mexico and the rest of the world.

### May

#### **Online workshop series “Blockchain in the Mexican Energy Sector”**

As part of the preparation process for the development of the specialized study “Blockchain in the Mexican Energy Sector” and with the support of the International Consulting Firm KPMG Mexico, the EP organized and implemented online workshops with national and international experts on energy, digitalization, and Blockchain.

As a result of the workshops, the EP identified various use cases for the Blockchain technology in the Mexican Energy Sector, such as the application of Clean Energy Certificates (CELs) in decentralized markets; the Recording and Automation of Contracts, and Decentralized Energy Markets for Industrial Parks.

### June

#### **Webinar on Subnational Energy Transition**

In close collaboration with the Ministry of Environment, Sustainable Development and Land Use Planning of the State of Puebla and various GIZ projects in Mexico, and with the participation of the *Agentur für Erneuerbare Energien* (AEE) e.V., the EP organized and implemented the Webinar “Energy Transition and Climate Change: Subnational Level Actions”.

During the session, experts on energy transition, climate change and subnational level actions presented, to over 100 participants, some mechanisms, policies, and technologies that could be potentially implemented

at the subnational level in Mexico in order to achieve climate and clean energies' generation goals.

Additionally, Elena Cantos, AEE e.V.'s representative, presented several initiatives and local reference cases from Germany to promote the energy transition.

## July

### Signing of the Collaboration Agreement between the German - Mexican Energy Partnership and Siemens Energy Mexico

On July 23<sup>th</sup>, 2020, the GIZ in Mexico, through the EP, signed a Collaboration Agreement with Siemens Energy Mexico, to promote the transformation of the Mexican energy sector while fostering the use of renewable energies and energy efficiency.

Both organizations, through three different work streams: contextualization of the disruptive

technologies, social impact and leadership in decarbonization; seek to enhance the cooperation between public and private organizations, civil society and academia to accelerate the energy transition in Mexico and strengthen the international cooperation between Germany and Mexico.

## September

### Workshops on digitalization and start-ups

As part of the implementation of the "Blockchain in Energy Transformation Challenge", the EP and Siemens Energy Mexico organized a series of workshops and info-sessions, in collaboration with start-up and digitalization experts, to introduce an open platform specifically designed to find the best Blockchain-based ideas, innovative solutions and business models, that could pave the future of the Mexican energy sector.



## **Beginning of the study, “Diagnostic for Green Hydrogen as Energy Vector in Mexico”**

In Mexico, as in other countries around the world, hydrogen is considered as a key topic for the future of the global energy transition.

The EP, in collaboration with HINICIO, began the development of a wide-range study on hydrogen’s potential for the Mexican Energy Sector. Results will be available in 2021 and will be incorporated to the technical dialogue between Mexican and German industry participants.

## **October**

### **Participation in the 44<sup>th</sup> Solar Energy National Week**

With the Conference “Digitalization and Solar Industry”, the German–Mexican Energy Partnership Secretariat participated in the 44<sup>th</sup> Solar Energy National Week, celebrated between October 5<sup>th</sup> – 9<sup>th</sup>, 2020 and organized by the National Association of Solar Energy (ANES).

### **First Webinar of the Online Regional Forum on Energy Transition**

On Tuesday October 27<sup>th</sup>, 2020, representatives from the Mexican Federal Government, the German Embassy in Mexico and the Government of Puebla, discussed the role and relevance of subnational governments in the global-local Energiewende (energy transition), the international commitments designed to fight climate change and the dialogue and best practices exchange regarding energy and climate change.

The “Global Trends in Energy Transition and Climate Change: Subnational Level Actions” webinar contributed to the generation and exchange of

knowledge and best practices on energy, energy transition, environment, and climate change. It also represented an ideal platform to reflect on Mexico’s key international role in the aforementioned topics.

## **November**

### **Presentation of the study: “Blockchain in the Mexican Energy Sector”**

On the margins of INC Mty 2020 festival, the EP Secretariat presented the study “Blockchain in the Mexican Energy Sector”, with the main objective of providing a general view on the basic technical aspects of such technology, its application, and transforming potential.

Besides identifying three possible use cases: the application of Clean Energy Certificates (CELs) in decentralized markets; the Recording and Automation of Contracts, and Decentralized Energy Markets for Industrial Parks; the study offers a series of recommendations to foster the adoption of Blockchain technology in the energy sector.

### **Award Ceremony of the “Blockchain in Energy Transformation Challenge”**

The EP and Siemens Energy Mexico organized the challenge in the context of the Collaboration Agreement signed in July 2020.

The application process ended with the presentation of 12 projects and proposals designed by experts from Mexico, Chile, Spain, United States of America and Germany; and evaluated by a committee integrated by academic and technical profiles on finances, energy, digitalization, and Blockchain.

The winning teams, chosen after a long process of analysis and reflection, were: “Blockchain Energy



App” from Phineal (Chile); “inCEL” from Energy Web Foundation (United States and Germany); “Genergy” (Mexico) and E.Proof (Mexico and Chile).

### **Beginning of the cooperation with the Mexican - German Chamber of Commerce and Industry (CAMEXA)**

The EP began an extensive process of cooperation with the Mexican - German Chamber of Commerce and Industry (CAMEXA). The focus of the cooperation contemplates the development and advancement of the public-private dialogue on the subnational level, an energy-related entrepreneurship ecosystem analysis, dialogue among Mexican and German start-ups, German companies involvement in the EP’s activities and close collaboration on communication-related topics.

**2021**

### **January**

#### **Second Webinar of the Online Regional Forum on Energy Transition**

The second Webinar from the series “Global Trends in Energy Transition and Climate Change: Subnational Level Actions” was held on Tuesday, January 22<sup>nd</sup>, with the participation of the Secretary of Environment from the Government of Puebla, Beatriz Manrique, and Federal Government representatives.

In the session, organized and implemented in cooperation with the GIZ project CONECC (Enhancing the coherence of climate and energy policies in Mexico), commissioned by the Federal German



Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), topics related to the social and economic co-benefits of the energy transition were discussed.

### **Signing of the Collaboration Agreement with the Government of Veracruz**

On January 27<sup>th</sup>, 2021, high-level representatives from the Government of the State of Veracruz and from GIZ Mexico, signed a Collaboration Agreement to enhance the knowledge and experiences exchange on: Energy Management Systems (EMS); plans and programs to strengthen sustainability in the energy sector and promoting a sovereign energy transition; energy efficiency in buildings; distributed generation, business models and financial mechanisms, and communication, dissemination and creation of new capacities at a local level in order to accomplish the energy transition.

## **February**

### **Third Session (online) of the Local Business Council – German Chapter**

On February 17<sup>th</sup>, 2021, with the participation of BMWi, the Embassy of the Federal Republic of Germany in Mexico, CAMEXA, and representatives from different private organizations of the energy sector in Mexico, participated in an important dialogue session dedicated to the analysis and strengthening of energy policy, and the advancement on the best practices and experiences exchange regarding energy transition and energy efficiency in the industry.

### **(Online) guided visit to Goldbeck Solar plants**

On February 18<sup>th</sup>, in the margins of the Third Session (online) of the Local Business Council – German

Chapter, representatives from the German Embassy in Mexico and German companies in the energy sector, experienced a virtual live guided visit to two distributed generation solar plants developed by Golbeck Solar in the states of San Luis Potosi and Queretaro.

### **Third Webinar of the Online Regional Forum on Energy Transition**

On Friday February 23<sup>rd</sup>, the Government of Puebla and the EP hosted the third Webinar from the “Global Trends in Energy Transition and Climate Change: Subnational Level Actions” series.

During this session, the role of distributed generation of electricity for the energy transition and its implications and benefits for the subnational level was discussed. The session was organized in cooperation with the GIZ project Supporting the Energy Transition (TrEM), commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ).

## **March**

### **Virtual Delegation to the Berlin Energy Transition Dialogue 2021**

From March 16–19, the EP Secretariat accompanied the participation of the Mexican delegation to the virtual *Berlin Energy Transition Dialogue* (BETD 2021), a leading international forum for key stakeholders of the energy sector.





