

# Annual Report 2021/2022

## *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

Agustín González de Cossío 821

Colonia del Valle, 03100

Benito Juárez, Mexico City, Mexico

**Website:** [www.energypartnership.mx](http://www.energypartnership.mx)

**Authors**

Secretariat of the German - Mexican Energy Partnership

**Design and production**

SK3 Creative Studio, Mexico City

Edelmann GmbH

**As at**

20/05/2022

**Photography and illustrations**

p.1: Lifestylememory - Prakasit John Khuansuwan - [www.freepik](http://www.freepik).

p.2: wxwangsong shutterstock 41928828

p.4: © GIZ / Photothek

p.5: © GIZ / Photothek

p.8: Lifestylememory - Prakasit John Khuansuwan - [www.freepik](http://www.freepik).

p.9: Thanit Pkc shutterstock 27650697

p.13: Lifestylememory - John Khuansuwan - [www.freepik](http://www.freepik)

p.15: Edson Garcia - shutterstock 64963041

p. 17: Phase One P45 mieten - Shutterstock 1854686467,

p.17: © GIZ / Photothek

p.19: [www.freepik.es/fotos/ingeniero-ambiental](http://www.freepik.es/fotos/ingeniero-ambiental)">Khuansuwan

GIZ is responsible for the content of this publication. On behalf of the Federal Ministry for Economic Affairs and Climate Action (BMWK).

**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH

---

# Executive Summary

---



Six 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. Recently, the EP has focused its work on key aspects to promote a just energy transition, such as:

- Energy transition on subnational level,
- Green hydrogen,
- Innovation and start-ups in the energy sector.

In 2021, the EP successfully organized and implemented numerous activities, mostly online or hybrid 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.

To promote a just and inclusive energy transition, the EP mainstreams the gender perspective in all its activities. In this way, it has successfully achieved greater involvement and empowerment of women in the energy sector.

Additionally, the EP has consolidated new ties with public institutions of sub-national and international levels and with the private sector organizations, aiming to promote and enhance cooperation in the energy sector, contributing to the mitigation of 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 technical dialogue, designed to enhance exchange of information and best practices between competent authorities, regulatory bodies, energy system operators and other relevant actors involved in the energy sector.

The main aim of this partnership is to enhance the energy transformations in both countries towards a sustainable energy system, characterized by a more efficient use of energy and renewable energy.

## High-Level Steering Group

The overall steering of the EP is done via the High-Level Steering Group. This group is composed of high-level representatives of both governments and led by the German Federal Ministry for Economic Affairs and Climate Action (BMWK) 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, BMWK 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 BMWK and SENER in the implementation of its agreed priorities. The Secretariat ensures the implementation of related activities and serves as a point of contact for key actors.

## Team



Marco Hüls

**Coordinator**  
Mexico City



William  
Jensen Díaz

**Advisor**  
Mexico City



Rainer  
Brohm

**Advisor**  
Berlin



Carolina  
Guerrero

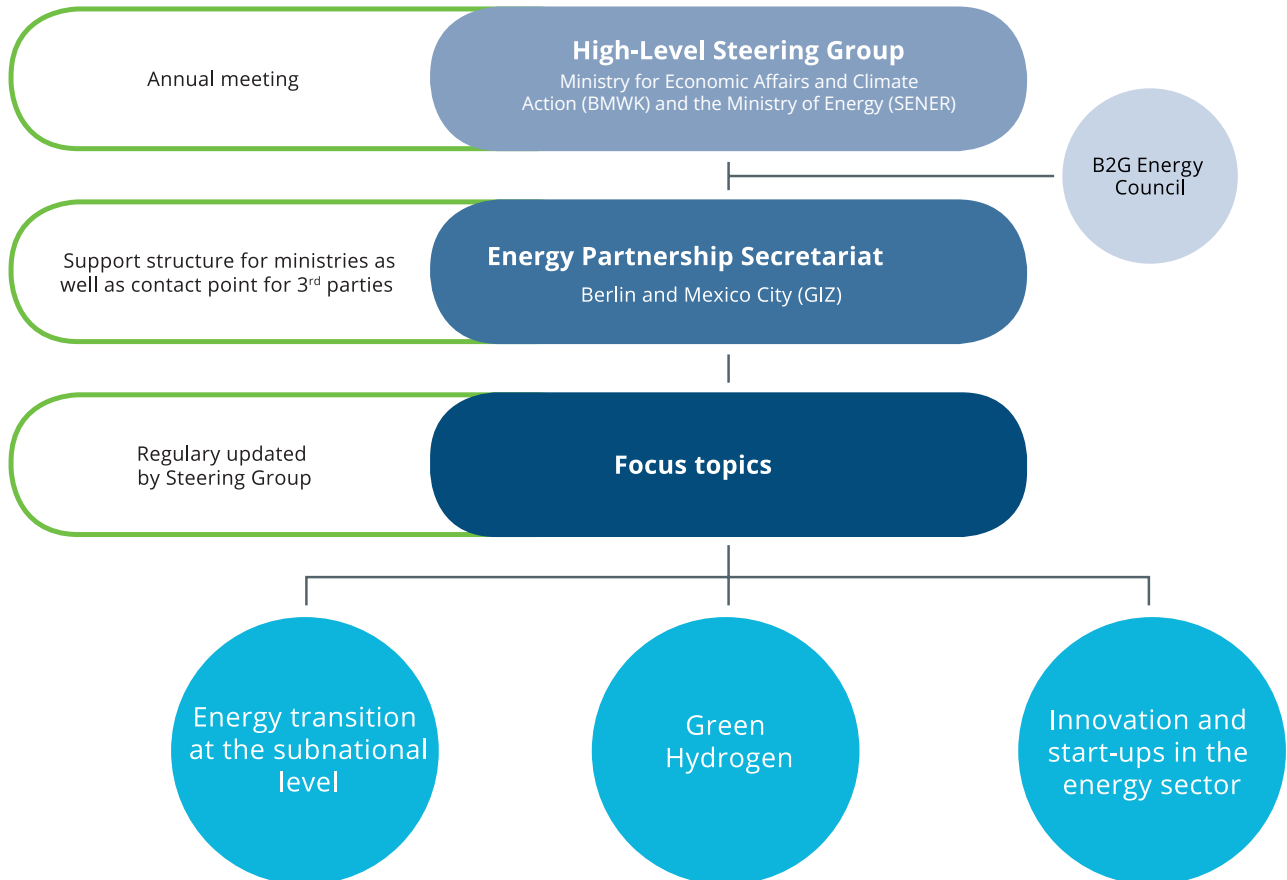
**Advisor**  
Mexico City



Sofia  
Medina

**Jr. Advisor**  
Mexico City

# Structure



---

## Thematic Focus

---

### Energy Transition at the subnational level

Dialogue on the energy transition increased due to due to both the transition's major economic potential and the reinforced commitments to climate action seen across the globe.

In this regard, both Germany and Mexico enhance dialogue to transform their energy systems; searching and implementing cost-effective instruments to promote renewable energy, while maximizing benefits for the society. Always keeping in mind, the importance of developing sustainable, country-specific approaches to the challenges posed by the energy transition.

### Green Hydrogen

Green Hydrogen is a key element to ensure the longterm success of the energy transition and to make progress on climate change mitigation.

In the past year the level of public interest for the usage and leverage of this sustainable energy vector remains high in Mexico and Germany, since it has the potential to make decisive steps towards decarbonization of different sectors such as aviation, steel and chemical industries among others.

With the development and analysis being made, both countries, through the EP, are feeding into the expert dialogue between Mexican and German stakeholders.

### Innovation and start-ups in the energy sector

Experience and knowledge exchange on applying innovative solutions to the energy sector helps Mexico and Germany to successfully face challenges. In this regard, the EP has deepened and boosted its work with innovative start-ups that enhance the energy transition through the implementation of disruptive technologies, such as blockchain in the energy sector.







# Timeline of Highlights 2021 / 2022

2021



**APRIL**

**Signing of Memorandum of Understanding** between the Federal Electricity Commission (CFE), the National Institute of Electricity and Clean Energy (INEEL) and GIZ in Mexico



**MAY**

**Energy Innovation Days**  
virtual forum



**JULY**

**Specialized workshops** at the subnational level with the Mexican-German Chamber of Commerce and Industry (CAMEXA)



**JUNE**

**Latin America Energy Week:**  
*"Forging the Future of Energy"*



**AUGUST**

**Fourth Webinar** of the Virtual Regional Forum on Energy Transition



**SEPTEMBER**

**Second Edition of the Climate Change Action Groups (GACC)**

**Online event:** *"Puebla: Determining the potential of Green Hydrogen at the Local Level"*

**XXI International Congress of the Mexican Hydrogen Society**

2022

### MARCH

**Fifth session (virtual)** - Local Business Council.

**Innovation and Energy Program** for Mexican start-ups

**Workshops** on energy transition at the subnational level

**Breakfast** for specialized energy media

**Berlin Energy Transition Dialogue**



### FEBRUARY

**Participation** in Hydrogen Expo in Monterrey

**Strategic alliance** with the Mexican Hydrogen Association

**Awards ceremony** of the "INC Tech & Social Impact Energy Challenge"



### JANUARY

**Virtual participation in:** "Hydrogen in Mexico"

**Virtual presentation of the study:** "The potential for production and use of green hydrogen in Tamaulipas"



### DECEMBER

**Virtual participation** in the Poblano Energy Forum 2021

**Virtual participation** in the panel discussion: "Implementation of green hydrogen in Mexico"



### OCTOBER

**Hybrid event:** "Meeting the climate change goals: the potential of green hydrogen for Mexico and its economy"

**Presentation of the specialized study:** "Green hydrogen in Mexico: decarbonizing the economy"

**Hybrid conference** "Expo Energía Veracruz 2021"

**Virtual participation** in "SET Tech Festival 2021 Start Up Energy Transition"



### NOVEMBER

**Presentation of the study:** "Entrepreneurship and Energy in Mexico, innovation for the transformation of the energy sector"

**Organization of the:** "Women in the energy sector: celebrating the global network of women for the energy transition" forum





---

# Milestones 2021 / 2022

---

## 2021

### April

#### **Signing of Memorandum of Understanding between the Federal Electricity Commission (CFE), the National Institute of Electricity and Clean Energy (INEEL) and GIZ in Mexico**

To lay the foundations for a constant and permanent dialogue for the development and transformation of the electricity sector, on April 13<sup>th</sup>, 2021, the Federal Electricity Commission (CFE) through the Network Business Sub-Directorate (SNR) of the Corporate Directorate of Operations (DCO), the National Institute of Electricity and Clean Energy (INEEL) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) signed a Memorandum of Understanding.

The signing contributes to the implementation, through collaboration, of beneficial actions to the environment, the economy and society by enhancing joint actions for the consolidation of energy generation from renewable sources, the new technologies of green hydrogen economy, the strengthening of transmission grids and the distributed generation of electricity in Mexico.

### May

#### **Energy Innovation Days virtual forum**

In the margins of the virtual forum “Energy Innovation Days”, organized by Siemens Energy Mexico and El Financiero, from May 11<sup>th</sup> to 13<sup>th</sup>, 2021; the German-Mexican Energy Partnership (EP) participated in

the third day of the forum, “Tomorrow’s Energy”, discussing and moderating a panel on Mexico’s potential regarding the production and use of green hydrogen.

The forum functioned as a platform for dialogue and exchange of initiatives and inquiries among experts in the Mexican energy sector regarding the energy transition

### June

#### **Latin America Energy Week: “Forging the Future of Energy”**

On June 24<sup>th</sup>, 2021, the German-Mexican Energy Partnership (EP) participated in the Latin America Energy Week, virtual forum: “Forging the Future of Energy”, organized by Siemens Energy, in a panel entitled: “Advancing the energy transition through the co-creation and innovations focused in the future”.

The EP highlighted the importance of dialogue and global cooperation to foster innovation throughout society and achieve inclusive solutions in the energy sector.

## July

### ***Specialized workshops at the subnational level with the Mexican-German Chamber of Commerce and Industry (CAMEXA)***

From July 20<sup>th</sup> to August 17<sup>th</sup>, 2021, the Mexican-German Chamber of Commerce and Industry (CAMEXA) and the German-Mexican Energy Partnership (EP) held a series of five specialized workshops with the energy agencies of ten Mexican states (Aguascalientes, Mexico City, Durango, Jalisco, Nuevo Leon, Puebla, Tabasco, Tamaulipas, Veracruz and Yucatan) to strengthen existing networks between subnational actors and joining efforts to achieve the energy transition at the subnational level.

The central topics of the workshops were: platforms for the exchange of experiences; financing; internal and external communication; project development in energy infrastructure; and the promotion of innovation. The workshops with states were followed by public-private exchange formats at the subnational level.

## August

### **Fourth Webinar of the Virtual Regional Forum on Energy Transition**

On August 19<sup>th</sup>, 2021, the EP, together with the State of Puebla, the Energy and Climate Change Policy Convergence Project (CONECC) and the Program to Supporting Energy Transition in Mexico (TrEM), held the fourth and last webinar of the series “Global Trends in the Energy Transition and mitigation of Climate Change: Actions at the Subnational Level”.

The event, through three simultaneous roundtables, addressed the opportunities and challenges in



the implementation of three public policy tools applicable to energy transition matters with the aim of exchanging experiences and best practices to improve the energy performance of organizations and local governments.

## September

### Second Edition of the Climate Change Action Groups (GACC)

In the margins of the second edition of the Climate Change Action Groups (GACC), on September 2<sup>nd</sup>, 2021, the EP moderated, together with the Energy Transition Support Programme in Mexico (TrEM), a roundtable named: “Energy Transition Facing Climate Change: Actions at the Subnational Level”.

The objective of this session was to address the experiences and results acquired from the activities developed at the subnational level with the Ministry of Ecology and Environment of the State of Quintana Roo and the Ministry of Environment, Sustainable Development and Land Management (SMADSOT) of the State of Puebla in the field of energy transition.

### Online event: “Puebla: Determining the potential of Green Hydrogen at the Local Level”

To enhance the subnational energy transition based on new technologies and vectors, such as green hydrogen, on September 23<sup>rd</sup>, 2021, the Energy Agency of the State of Puebla (AEEP) in collaboration with the EP and the GIZ program: Energy Transition Support Programme in Mexico (TrEM) held the successful event: “Puebla: Detonating the potential of Green Hydrogen at the Local level”

The EP and TrEM in coordination with the consulting firm Hincio, presented the key data contained in the study: “Green Hydrogen in Mexico: decarbonizing the economy” to highlight the key role of the energy vector to meet international climate commitments.

### XXI International Congress of the Mexican Hydrogen Society

On September 24<sup>th</sup>, 2021, in the margins of the XXI International Congress of the Mexican Hydrogen Society, the Secretariat of the German-Mexican Energy Partnership (EP) presented the conference entitled: “Green Hydrogen - Bridge between Germany and Mexico”, which pointed out the opportunities for the usage and leverage of green hydrogen in Mexico to adopt it for different industries.

With this participation, the EP propitiates the exchange of knowledge with the academic sector in Mexico to continue working and promoting together a global energy transition.

## October

### Hybrid event: “Meeting the climate change goals: the potential of green hydrogen for Mexico and its economy”

On October 14<sup>th</sup>, 2021, the Embassy of the Federal Republic of Germany, the Mexican-German Chamber of Commerce and Industry (CAMEXA) and the GIZ in Mexico, through the German-Mexican Energy Partnership (EP) and the Energy Transition Support Programme in Mexico (TrEM), successfully held the event: “Meeting climate change goals: The potential of green hydrogen for Mexico and its economy”.





The event was attended by high-level participants from the public, private and academic sectors to discuss and raise awareness of the potential of enhancing green hydrogen in Mexico as an alternative to accelerate the energy transition.

### **Hybrid conference at “Expo Energía Veracruz 2021”**

As part of the “Expo Energía Veracruz 2021” organized on October 15<sup>th</sup>, 2021 by the government of the state of Veracruz, through the Secretariat of Economic and Port Development (SEDECOP) and the Veracruz State Energy Agency (AEEV), the EP presented a conference entitled “Blockchain in the Mexican Energy Sector”.

The session presented technological alternatives to improve digital transformation, sustainable development and energy transition in Mexico and the world.

### **Virtual participation in the “SET Tech Festival 2021 Start Up Energy Transition”**

At the fifth edition of the “SET Tech Festival 2021 Start Up Energy Transition” organized by the German Energy Agency (dena) in cooperation with the World Energy Council (WEC), on October 20<sup>th</sup>, 2021 the secretariat of the German-Mexican Energy Partnership (EP) moderated a virtual panel with the aim of fostering dialogue regarding the energy innovation and entrepreneurship ecosystem in Latin America.

## **November**

### **Presentation of the study: “Entrepreneurship and Energy in Mexico, innovation for the transformation of the energy sector”**

In the margins of the largest entrepreneurship festival in Latin America: INCmty 2021, held on November 8<sup>th</sup>,

9<sup>th</sup> and 10<sup>th</sup>, the German-Mexican Energy Partnership (EP) announced together with Siemens Energy Mexico and INCmty the launch of the “Inc Tech and Social Impact Energy Challenge”.

Additionally, during the festival, the German-Mexican Chamber of Commerce and Industry (CAMEXA) presented the key findings of the study: “Entrepreneurship and Energy in Mexico: The potential for transformation”, developed in collaboration with the EP. The objective of the presentation was to show the challenges and opportunities of the entrepreneurship ecosystem for startups in the Mexican energy sector.

### **Organization of the: “Women in the energy sector: celebrating the global network of women for the energy transition” forum**

On November 23<sup>rd</sup>, 2021, the German-Mexican Energy Partnership (EP) organized the forum: “Women in the energy sector: celebrating the global network of women for the energy transition” with the aim of recognizing the urgency of promoting gender equality in the energy sector and celebrating the launch of the “Woman Energize Woman” campaign, a communication initiative of the Federal Ministry of Economics and Climate Protection (BMWK) implemented in the country by the GIZ in Mexico.

At the event, several professionals and women researchers in the energy sector agreed that it is necessary to have a cross-cutting gender approach that involves women equally in all processes and positions, including leadership positions to promote the energy transition and mitigate climate change effectively.

## **December**

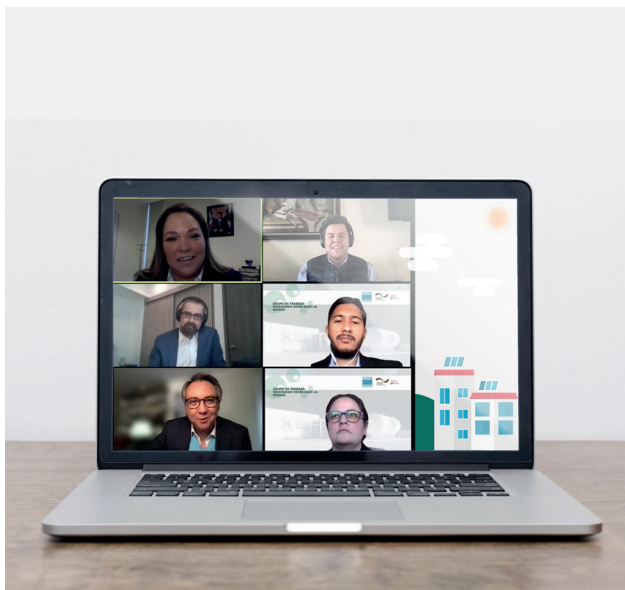
### **Virtual participation in the Poblano Energy Forum 2021**

On December 1<sup>st</sup> and 2<sup>nd</sup> the Poblano Energy Forum 2021, was held and organized by the Energy Agency of the state of Puebla. The objective of the event was to discuss and exchange experiences and opinions on innovation and financing trends to promote a more sustainable and inclusive energy sector in Mexico.

During the forum, the German-Mexican Energy Partnership (EP) participated together with specialists from the British Embassy and the consulting firm Sherpas in the panel: “International cooperation towards sustainable development”, with the purpose of discussing cooperation strategies in the energy sector.

### **Virtual participation in the panel discussion: “Implementation of green hydrogen in Mexico”**

On Thursday, December 13<sup>th</sup>, 2021, the German-Mexican Energy Partnership (EP) and the Energy Transition Support Programme in Mexico (TrEM), together with the Mexican Hydrogen Society organized the panel discussion: “Implementation of green hydrogen in Mexico” with the aim of expanding the dialogue about which joint actions need to be taken to promote the successful use of this technology.



## 2022

### January

#### Virtual participation in: “Hydrogen in Mexico”

On January 26<sup>th</sup>, 2022 the event: “Hydrogen in Mexico”, organized by the Energy Cluster of Nuevo Leon was held.

The Energy Alliance between Mexico and Germany (AE) participated with a presentation showing the great potential for the use of green hydrogen that exists in Mexico, as it is associated with the large photovoltaic solar energy generation capacity in the country.

#### Virtual presentation of the study: “The potential for production and use of green hydrogen in Tamaulipas”

On January 28<sup>th</sup>, 2022 the presentation of the study “The potential for production and use of green hydrogen in Tamaulipas”, coordinated by the the German–Mexican Energy Partnership (EP) and the Energy Transition Support Programme in Mexico (TrEM) in collaboration with the Energy Commission of Tamaulipas, was held. In the event, the potential of renewable energy and green hydrogen production in the state of Tamaulipas was presented, as well as its potential for the adoption of green hydrogen in different economic sectors.

With this collaboration, the EP enhances the dialogue and research on green hydrogen to decarbonize the economy and achieve the energy transition at the subnational level.



## February

### Participation in Hydrogen Expo in Monterrey

In the margins of the first edition of “Expo Hidrógeno”, the EP participated on February 15<sup>th</sup>, 2022 in the panel: “Necessary policies for the implementation of a successful roadmap in Mexico” where the secretariat discussed with several experts the opportunities in the short term for a successful use and leverage of green hydrogen.

### Strategic alliance with the Mexican Hydrogen Association

On February 16<sup>th</sup>, 2022, the German–Mexican Energy Partnership (EP) joined the strategic alliances promoted by the Mexican Hydrogen Association (AMH2), with the objective of fostering the exchange of information and best practices to strengthen the development and use of green hydrogen technology in Mexico.

### Awards ceremony of the “INC Tech & Social Impact Energy Challenge”

On February 18<sup>th</sup>, 2022, the award ceremony of the “INC Tech & Social Impact Energy Challenge” was held. The challenge was jointly implemented by INCmty, Siemens Energy Mexico and the German–Mexican Energy Partnership (EP).

With the challenge the design, development, and adoption of innovative technological solutions with a positive social impact was strengthened.

The ceremony ended with the awarding of the winning initiatives that pave the transformation of the Mexican energy sector and enhance the global energy transition.

In the MVP category, Yipi Minimovilidad Sustentable was awarded first place. Meanwhile, for the startup category, first place went to ATOM Innovatec and second place was awarded to ENERYOU.

## March

### Fifth Session (virtual) - Local Business Council

On March 1<sup>st</sup>, 2022, the EP, with the participation of BMWK, the Embassy of the Federal Republic of Germany in Mexico, the Mexican–German Chamber of Commerce and Industry (CAMEXA) and representatives of various organizations of the energy sector in Mexico participated in an important dialogue session for the analysis and exchange of opportunities, best practices, and challenges regarding the energy transition in the industry.

### Innovation and Energy Program for Mexican start-ups

From March 8<sup>th</sup> to March 25<sup>th</sup>, the German–Mexican Energy Partnership (EP), together with the Mexican–German Chamber of Commerce and Industry (CAMEXA) implemented the Innovation and Energy Program for Mexican Start-ups by organizing six virtual workshops with the objective of developing skills, exchanging knowledge, and creating a learning network among startups on entrepreneurship, financing, regulation, competitiveness, communication and innovation in the Mexican energy sector.

### Workshops on energy transition at the subnational level

During the month of March, the EP, together with the Mexican–German Chamber of Commerce and Industry



(CAMEXA), organized a series of virtual workshops with the energy institutions of 10 Mexican states to strengthen collaboration and enhance an energy transition at the subnational level.

The workshops counted with the active participation of: Aguascalientes, Mexico City, Durango, Jalisco, Nuevo Leon, Puebla, Tabasco, Tamaulipas, Veracruz, and Yucatan. Among the topics discussed were cooperation, financing opportunities, communication, infrastructure projects and innovation.

### **Breakfast for specialized energy media**

On March 14<sup>th</sup>, 2022, for the occasion of the publication of all the volumes of the first comprehensive study on green hydrogen in the country: “Green hydrogen in Mexico: decarbonizing the economy”, the German Embassy in Mexico in cooperation with GIZ in Mexico, through the EP, invited journalists specialized in energy issues to learn about the basic concepts of green hydrogen and its potential.

In addition to the presentation of the volumes, the AE announced the launch of five animated videos based on the study to disseminate the potential of this vector.

### **Berlin Energy Transition Dialogue**

Between March 29<sup>th</sup> and 31<sup>st</sup>, the Secretariat of the EP accompanied the Mexican delegation’s participation in the virtual event Berlin Energy Transition Dialogue (BETD 2022), the main forum for the world’s key players in the energy sector.



