



Alianza Energética  
Energiepartnerschaft  
MÉXICO - DEUTSCHLAND

# Annual Report 2022/2023

*German - Mexican Energy Partnership*



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# Imprint

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# 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 on topics of relevance in the energy sector. Recently, the EP has focused its work on key aspects to enhance a just energy transition, such as:

- Energy transition at the subnational level,
- Green hydrogen,
- Innovation and startups in the energy sector.

In 2022, the EP successfully organized and implemented numerous activities, mostly in virtual or hybrid mode due to the circumstances arising from the global pandemic. The activities included workshops, challenges and competitions of ideas, studies, analysis, events and specialized publications. Thus, the EP has promoted and strengthened dialogue and knowled-

ge exchange between experts/representatives of the public, private, academic and civil society sectors in Mexico and Germany.

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.

In addition, the EP has consolidated new bonds with public institutions at the sub-national and international levels and with private sector organizations, seeking to enhance cooperation in the energy sector, contributing to climate change mitigation and easing global competition for increasingly scarce energy raw materials.





# Milestones







# The German–Mexican Energy Partnership

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## How did it all start?

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 Energy Partnership?

The EP is a platform for political and technical dialogue, designed for the exchange of information and good practices between authorities, regulators, energy system operators and other relevant actors in the energy sector.

The main partnership's objective is to enhance energy transformations in both countries towards a sustainable energy system, characterized by the sustainable use of energy.

## High Level Management Structure

The two governments define the priorities and thematic approaches of the Energy Partnership. The themes of the Energy Partnership were discussed within the framework of the Binational Technical Commission on Economy, Energy, Trade, Investment and Tourism. Additionally, a high-level round table was established with participation from the Embassy of the Republic of Germany in Mexico, senior representatives of the Mexican Government, and German companies.

## Local business council

To promote dialogue with German companies installed in Mexico related with the energy sector, the local business council composed of German companies in the sector meets periodically. The council discusses issues that contribute to the development of the market to deepen trade and industrial relations between the two countries and inform the political dialogue.

## Secretariat

The EP is supported by a Secretariat with representatives and contact points in Mexico City and Berlin.

The Secretariat's role is to support both BMWK and SENER in the implementation of the Partnership's priority activities and to act as a point of contact for key stakeholders in the sector.

## The Energy Partnership team



**Marco Hüls**  
Coordinator,  
Mexico City



**Adriana Aragón**  
Advisor,  
Mexico City



**Stephan Franz**  
Advisor,  
Berlin



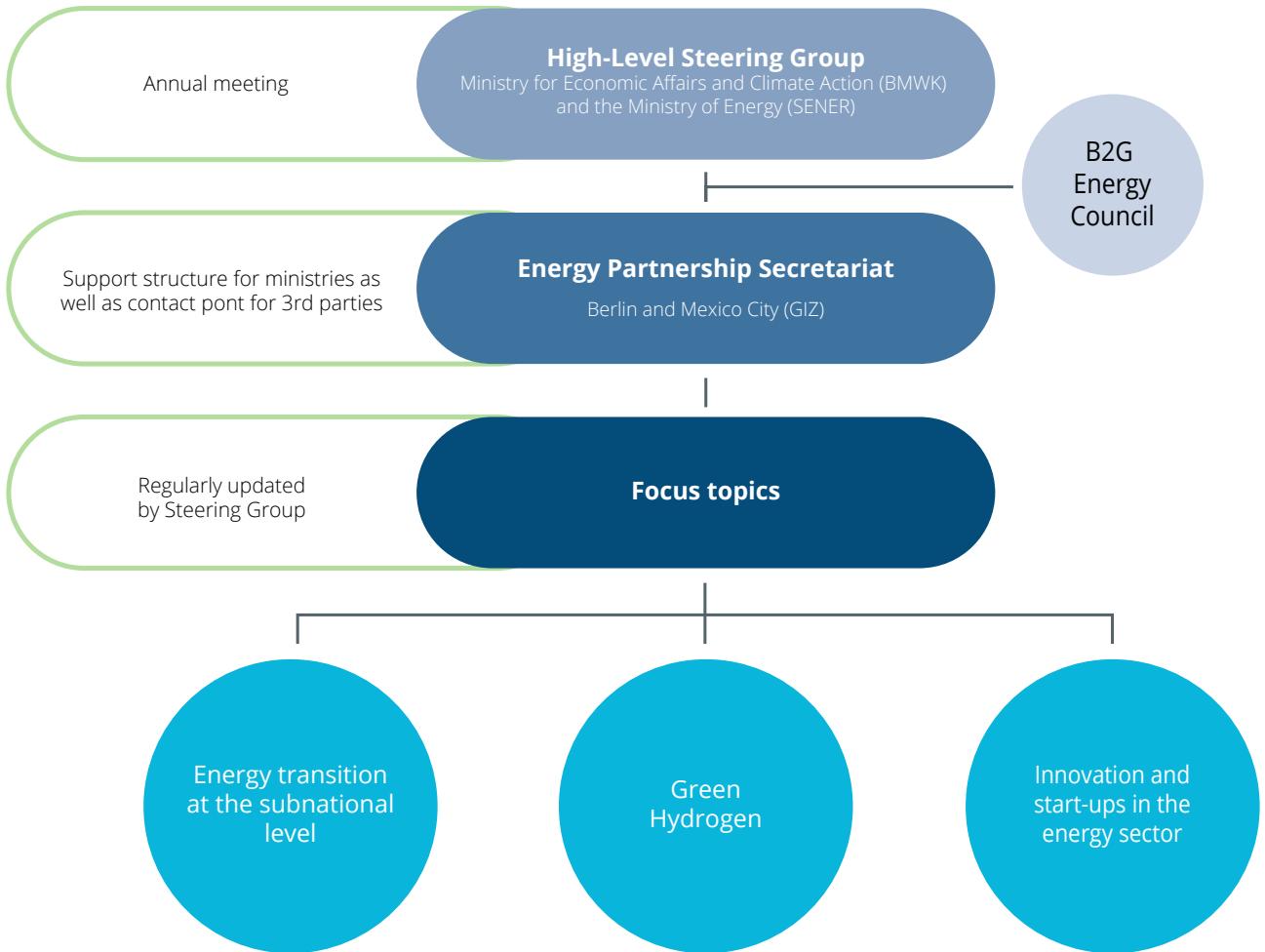
**Carolina Guerrero**  
Advisor,  
Mexico City



**Sofía Medina**  
Advisor Jr.,  
Mexico City



# Structure



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# Thematic focus

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## Energy transition at the subnational level

The dialogue on the energy transition has increased, due to the great economic potential of the transition and because of the strengthened climate action commitments seen around the world. For the execution and planning of the energy transition the states are key stakeholders, currently subnational governance has been strengthened for the energy, environment and economy sectors that promote the energy transition, through the strengthening of networks, the creation of energy agencies and energy clusters. The role of the states in collaboration with the private sector for the compliance of climate goals and energy transition based on their geographical characteristics has been revitalized.

In this sense, both Germany and Mexico promote dialogue to transform their energy systems, seeking and applying cost-effective instruments to promote renewable energies, while maximizing the benefits for society. Always bearing in mind the importance of developing sustainable and specific approaches to the challenges that each country faces in the energy transition.

## Green Hydrogen

Green hydrogen is a key element to ensure the long-term success of the energy transition and to advance climate change mitigation. In the last year the level of public interest in the leverage and use of this sustainable energy vector remains high in Mexico and Germany, as it has the potential to take decisive steps towards decarbonization of different sectors such as aviation, steel and the chemical industry among others.

With the development and analysis that is being done, both countries, through the EP, are feeding the expert dialogue between Mexican and German actors.

## Innovation and startups in the energy sector

The exchange of experiences and knowledge on the application of innovative solutions in the energy sector helps Mexico and Germany to successfully face the challenges. In this sense, the EP has deepened and promoted its work with innovative startups that enhance the energy transition through the implementation of disruptive technologies, such as blockchain in the energy sector.

# Timeline of Highlights 2022 / 2023

2022



**APRIL**

**Exchange workshops** for the development of green hydrogen projects for the Federal Electricity Commission (CFE).

**MAY**

**Study tour** with Mexican and Chilean energy startups to Germany

**Participation** in the first "WomenEnergize Women" conference in Munich, Germany

**3rd meeting** of the Technical Commission for Economic, Energy, Trade, Investment and Tourism (TCEE)



**JULY**

**Participation** in the fourth edition of Solar Power Mexico 2022



**AUGUST**

**1st Regional Green Hydrogen Encounter** in Latin America and the Caribbean





## MARCH

**Berlin Energy Transition Dialogue**  
2023

**Second round table Mexico-Germany**



## FEBRUARY

**Promotion of Green Hydrogen in Mexico** at the Hydrogen Expo in Monterrey

# 2023



## DECEMBER

**Event:** "Energy Day 2022: Energy Transition at the subnational level"

**Moderation and organization of a panel** through the EP at the event: "Climate action from the business perspective"



## OCTOBER

**Participation** in the Jalisco Energy Congress 2022

**Event:** "Promoting synergies for a diverse and equitable energy sector"



## NOVEMBER

**Support for the Inter-American Development Bank's (IDB) Sustainable Energy Blockchain Challenge**

**Participation** in the World Solar Energy Forum 2022

**6th Local Business Council**

**Workshop** on Energy Transition at subnational level for 15 States in Mexico



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# Milestones 2022/ 2023

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## 2022

### April

#### **Exchange workshops for the development of green hydrogen projects for the Federal Electricity Commission (CFE)**

In April the German-Mexican Energy Partnership (EP) and the program for the implementation of the energy transition (TrEM) delivered a workshop series for the Federal Electricity Commission (CFE), with the aim of exchanging best practices in the development of green hydrogen projects.

The workshop consisted of 8 modules, divided into 4 weeks, covering the following topics: Green hydrogen, enabling axis of the energy transition; present and future global market; value chain and current technologies; applications; uses and projects industry; mobility and exportation; power to X: Tecno-economics; outlook of hydrogen in Latin America and safety regulations of hydrogen projects in the world and Mexico.

With this workshop the EP strengthened its technical support to the CFE on energy uses of green hydrogen.

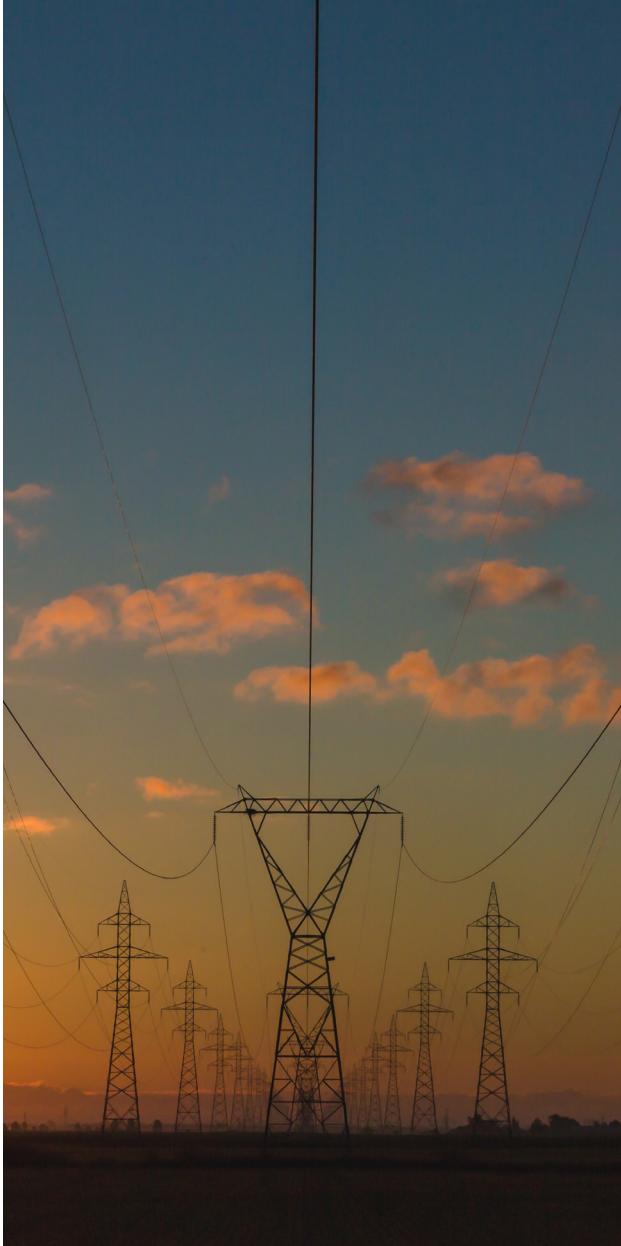
### May

#### **Study tour with Mexican and Chilean energy startups to Germany**

From May 9th to 13th, 2022, the German-Mexican Energy Partnership together with the Mexican-German Chamber of Commerce and Industry (CAMEXA) organized a successful study tour with Mexican and Chilean energy startups, winners of various activities implemented by the EP, to Germany.

It was attended by: Yipi Minimovilidad Sustentable and Atom Innovatec, winners of the INC Tech & Social Impact Energy Challenge; Phineal, winner of the Blockchain in Energy Transformation Challenge; and Sunbank, selected by the EP and CAMEXA.

The aim was to facilitate the linkage and exchange with key stakeholders of the German entrepreneurship ecosystem through dialogues, networking sessions, workshops and personalized assesment to strengthen business models, make strategic alliances, exchange best practices and create a learning network; promoting the energy transition in the world.



### **Participation in the first “Women Energize Women” conference in Munich, Germany.**

On May 12th, 2022, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the German Renewable Energy Federation (BEE) through “Women Energize Women” (WEW), communication initiative of the Federal Ministry of Economy and Climate Protection (BMWK); organized the first conference: “Women Energize Women” in Munich, Germany; with the aim of promoting and encouraging the inclusion, participation and incorporation of women in the energy sector and decision-making through leadership positions.

The conference was attended by women energy experts from more than 20 countries. From the German-Mexican Energy Partnership (EP), the Global Women’s Network for the Energy Transition (GWNENT) and the Women’s Network in Renewable Energy and Energy Efficiency (REDMERE) a delegation of five professional Mexican women attended the conference and participated in a study tour that same week.

### **Third meeting of the Technical Commission for Economic, Energy, Trade, Investment and Tourism (TCEE)**

On May 31st, 2022, the third meeting of the Technical Commission for Economy, Energy, Trade, Investment and Tourism (TCEE) was held to strengthen cooperation and dialogue between Mexico and Germany, as well as to discuss economic relations.

The meeting was attended by the Head of the International Negotiations Unit of the Ministry of Economy in Mexico (SE) and was attended by both embassies,

representatives of government agencies, such as GIZ Resident Director in Mexico: Marita Brömmelmeier and private sector stakeholders such as the Mexican-German Chamber of Commerce and Industry (CAMEXA).

Led by Dr. Berend Diekmann, Director of the Division for the United States, Canada and Mexico of the Federal Ministry of Economy and Climate Protection of Germany (BMWK), the German delegation highlighted the desire to intensify trade relations in different areas such as: innovation, dual education and energy.

The EP accentuated the commitment to continue collaborating with the SE to face the challenges and promote new opportunities in energy.

## July

### Participation in the fourth edition of Solar Power Mexico 2022

From July 12th to 14th, the largest solar fair in Mexico was held, organized by the Deutsche Messe. The German-Mexican Energy Partnership (EP) participated with the moderation and presentation in two panels on successful public policies that Germany has recently implemented to foster the energy transition and on the need to promote and mainstream a gender perspective in the energy sector.

This participation enhanced dialogue and the exchange of best practices to transform the energy sector and boost a just and inclusive energy transition.



## August

### First Regional Encounter of Green Hydrogen in Latin America and the Caribbean.

From August 22nd to 24th, 2022, the German-Mexican Energy Partnership (EP) and the H2-Uppp program facilitated and accompanied the participation of a Mexican delegation to Costa Rica in the 1st Regional Green Hydrogen Encounter for Latin America and the Caribbean.

The delegation was made up of representatives of the National Institute of Electricity and Clean Energy (INEEL), the Ministry of Economy of the State of Nuevo León and the Ministry of Environment, Biodiversity, Climate Change and Energy of the State of Campeche (SEMABICCE).

The purpose of the event was to exchange best practices among the countries of the region to promote the use of green hydrogen in various sectors, training on value chains and economic factors of production and a visit to a pilot plant of the Ad Astra company that produces and stores green hydrogen.

## October

### Participation in the Jalisco Energy Congress 2022

From October 10th to 12th, 2022, the Jalisco Energy Congress was organized by the Energy Agency of the State of Jalisco with the aim of creating an space to

exchange and make strategic alliances to strengthen the development of the energy sector in Mexico.

One of the central topics, where the EP actively participated, was in the roundtable: “Digitalization, AI and other technological solutions for the energy sector”, discussing the opportunities and challenges of implementing Blockchain technology for the Mexican energy sector.

### Event: “Promoting synergies for a diverse and equitable energy sector”

On October 18th, 2022 the German-Mexican Energy Partnership (EP), successfully organized the event: “Promoting Synergies for a Diverse and Equitable Energy Sector” with the aim of facilitating and promoting dialogue and synergies among women leaders and professionals within the Mexican energy sector; from the public, private, civil society and academia.

In the event there were fruitful dialogues and working tables where the efforts, actions and strategies carried out in each institution to promote greater inclusion of women in energy decision-making were presented. Synergies were also discussed to strengthen this topic.

With this event, the EP highlighted the importance of generating strategic alliances to mainstream the gender perspective in the energy sector, following the objective of the “Women Energize Women” initiative.

## November

### Challenge Blockchain on Sustainable Energy of the Inter-American Development Bank (IDB)

Within the months of October and November 2022, the German-Mexican Energy Partnership supported the Inter-American Development Bank (IDB) and BIDLab in the organization, diffusion and execution of the “Sustainable Energy Blockchain Challenge” to promote innovative solutions, based on Blockchain technology, that help transform the energy sector in Latin America.

To choose the winners, three categories were designated. In the category of traceability the initiative GTIME from the Chilean company phiNet won; in the category of financial transactions the winner was the company Agrotoken from Argentina with its initiative Enertoken; and finally in the category of flexibility of the electricity network, DREX S.A.S. from Ecuador was crowned winner.

### Participation in the World Solar Energy Forum 2022

On November 16th and 17th 2022, the World Solar Energy Forum was held in Hermosillo, Sonora; organized by the City of Hermosillo and the Sonora Energy Cluster.

The German-Mexican Energy Partnership (EP) participated with a presentation on green hydrogen for the strategic development of the industry to highlight the potential of green hydrogen production in Sonora, since it is the third state with the greatest potential to install electrolysis capacity at competitive prices, due to its solar and wind power capacity.

The forum was a space for a great exchange of experiences, knowledge and different presentations focused on the use of solar energy in different sectors.

### Sixth Local Business Council

On November 28th, 2022, the German-Mexican Energy Partnership (EP) together with the Mexican-German Chamber of Commerce and Industry (CAMEXA) organized the 6th session of the Local Business Council to dialogue with representatives of various German energy companies in Mexico about the advantages and opportunities. In this session, the focus was innovation, so the EP shared successful experiences promoting innovation and entrepreneurship together with the private sector.

This format promotes and strengthens dialogue with the German private sector in Mexico and Mexican authorities.

### First high-level political roundtable

On November 30th, 2022, the first-round table was held between Ambassador Wolfgang Dold and representatives of German companies from various sectors with Foreign Minister, Marcelo Ebrard and senior representatives of the Mexican Government and state institutions. Business stakeholders were able to present their needs in order to expand their investments and contribute to Mexico's competitiveness. The format of the round table was agreed by the two presidents Andrés Manuel López Obrador and Frank-Walter Steinmeier during the visit of the German president in September.



## Workshop on Energy Transition at subnational level for 16 States

On November 30th, 2022, the German–Mexican Energy Partnership in collaboration with the Mexican–German Chamber of Commerce and Industry (CAMEXA) organized the workshop: “Energy Transition at the subnational level!” with government institutions from 16 states of Mexico such as: Nuevo León, Jalisco, Tamaulipas, Baja California, Sonora, Coahuila, Guanajuato, Querétaro, Tabasco, Mexico City, Veracruz, Yucatán, Chihuahua, Quintana Roo, Hidalgo and Campeche, to foster dialogue, facilitate the exchange of best practices and experiences among agencies, institutions and governments of the North, Central and South of the country.

Since subnational states are key in the energy transition, an energy roadmap was defined for 2023. In addition, regional working groups and areas of opportunity were identified where the EP and CAMEXA can technically accompany the implementation of a successful energy transition in Mexico.

## December

### Event: “Energy Day 2022: Energy Transition at subnational level”

On December 1st, 2022, the “Energy Day: Energy Transition at subnational level” was organized by the German–Mexican Energy Partnership (EP) together with the Embassy of the Federal Republic of Germany in Mexico and the Mexican–German Chamber of Commerce and Industry (CAMEXA), with the aim of promoting and fostering a fruitful dialogue between relevant actors of the energy sector at subnational level in Mexico.

The event featured successful discussion roundtables with subnational governments to present their experiences, goals and lessons learned in the energy sector.

With this activity, the EP encourages dialogue and emphasizes the proactive and active role of subnational governments in energy matters to achieve climate commitments and challenges at the global level.

### **Moderation and organization of the panel: “How to boost the sustainable economy through new entrepreneurial ecosystems?”**

On December 7th, in the conference: “Climate action from the business perspective” organized by the German Embassy in Mexico in conjunction with the Mexican-German Chamber of Commerce and Industry (CAMEXA) and GIZ in Mexico, the German-Mexican Energy Partnership (EP) moderated and organized the session: “How to boost the sustainable economy through new ecosystems of empowerment?”. In the panel, founders of Mexican startups presented their respective business proposals and discussed the challenges and opportunities they face.

## **2023**

### **February**

#### **Successful dialogues and cooperation with Nuevo León**

To further promote and strengthen cooperation in the energy sector at the subnational level, on February 7th and 8th the EP attended the second edition of the Hydrogen Expo “Energy Storage” in Monterrey, Nuevo León; pioneering event to learn about business opportunities and possibilities in the production and use of green hydrogen in Mexico.

The Energy Partnership together with the government of Nuevo León announced the development of the study on the potential of green hydrogen for the state. This study is of great importance, as it underpins the



signing of the NL|H2:30 Initiative, a milestone in the framework of the Expo, which aims to encourage the development of green hydrogen in Nuevo León through a public-private partnership plan over the next 7 years.

These events highlight the development of a green hydrogen economy in Mexico; as well as reaffirming the commitment of the EP to promote the use of this sustainable energy vector.

## March

### Berlin Energy Transition Dialogue (BETD) 2023

At a great moment of opportunity and to ensure a green future, this year the ninth edition of the Berlin Energy Transition Dialogue 2023 (BETD) was held on March 28th and 29th, 2023 in Berlin, Germany.

Within the international forum for dialogue between decision-makers from more than 30 countries on global energy transition, Mexico was present with a delegation of representatives of five governmental institutions from the states of Tamaulipas, Nuevo León, Baja California, Campeche and Guanajuato. This participation was notable given that the German-Mexican Energy Partnership has promoted collaboration at the subnational level in recent years, positioning itself as the platform for dialogue between subnational states and key actors in the German energy sector. Also, representing Mexico at the BETD, Undersecretary Heriberto Barrios Castillo from the Ministry of Energy attended.

On one hand, prior to the event and to have the largest subnational presence, the Energy Partnership held a virtual meeting in which representatives of 17 Mexican states were presented with general characteristics and online events of interest in the Berlin Energy Transition Dialogue 2023.

On the other hand, in the parallel events the days after the BETD, the EP accompanied Natalia de La Fuente, representative of the Energy Commission of Nuevo León, to successfully present its strategy H2:30 to build a green hydrogen economy in Mexico in the panel “Regional Perspectives: Trends and Challenges in Latin America” with representatives from Argentina, Colombia, Peru and Paraguay.

In addition to the previous participation, Mexico participated on gender issues through the Women in Renewable Energy and Energy Efficiency Network (REDMERE) in the panel “Women Empowerment in Global Energy Cooperation” where they highlighted the importance of building capacities to mainstream gender and empowerment in the energy sector.

### Second roundtable Mexico-Germany

On March 29th the second meeting of the Mexico - Germany working group on energy and electromobility was held. The objective was to identify immediate actions and next steps of the federal public administration and German companies involved, to give certainty to their investments.

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