

Energy for healthy development

Renewable Energy Economy

Panelists

Alfredo Bermúdez

Moderador

Professor-Researcher of
Engineering in Renewable
Energy Sources

Alberto Marín

Mobility and Urban
Development Specialist
Director of Red Planners

Gloria Zárate

Director of States and
Municipalities, National
Commission for the Efficient
Use of Energy (Conuee)

Ramón Álvarez

Deputy Director of Network
Business, Federal Electricity
Commission.

October 6, 2022



Energy and the City of La Paz **Alfredo Bermúdez**

In his presentation, Alfredo highlighted the importance of the long-term impact that energy decisions will have on the state's development. He stressed that energy is essential for services such as transportation, lighting and air conditioning, and that strategic urban planning can improve efficiency, reduce costs and raise the quality of life for residents.

Using practical examples, Alfredo illustrated how inefficient urban mobility increases travel times, operating costs and polluting emissions. He proposed redesigning the city to optimize travel and integrate green spaces that reduce urban temperatures and air conditioning use. He also emphasized that in the region, the main consumers of energy are not industries but residential and service buildings, which makes it urgent to promote more efficient construction and a more conscious use of energy resources.

Finally, he invited us to reflect on the energy future of La Paz and highlighted the opportunities offered by renewable sources, asking fundamental questions: do we really need more energy, where will it come from and how will we obtain it?

Mobility, Territory and Energy Efficiency

Alberto Marín

Alberto explained how the urban structure directly impacts the costs and externalities of cities, highlighting the importance of aligning mobility with territorial development to achieve sustainable growth. He highlighted the creation of the National Mobility and Road Safety System as a coordinated effort to promote efficient and safe mobility, focused on integrating adequate infrastructure for pedestrians and cyclists, as well as promoting public transportation subsidies.

Mexico, with 79% of its population concentrated in urban areas, faces growing challenges due to urban sprawl and increasing car dependency. In places like La Paz, sprawl generates high energy consumption and higher pollutant emissions. Alberto emphasized the importance of updating urban development plans to avoid disconnection between areas and to promote infrastructure that reduces the demand for private transportation, minimizing congestion.

He concluded that coherent urban planning must incorporate environmental, social and energy dimensions to optimize land use and improve quality of life. Citizen participation is essential for these projects to be effective and aligned with community aspirations.



Energy for a healthy development: Renewable Energy Economy Gloria Zárate

Gloria Isabel Zárate Gutiérrez highlighted the importance of energy efficiency for sustainable development, stressing that, although its benefits are not always immediate, it is crucial to educate both citizens and decision makers to ensure its adoption. He emphasized that the construction sector, responsible for 40% of CO₂ emissions in Mexico, must incorporate efficiency criteria, especially in Baja California Sur, where electricity consumption is high despite its low population density. She explained that municipalities such as La Paz and Los Cabos present high energy use, not by industry, but by the residential sector, services and tourism, which makes it even more urgent to implement energy saving measures.



The construction sector is responsible for 40% of CO₂ emissions; we need more ambitious energy regulations.

Gloria Zárate

Gloria mentioned that Conuee offers workshops to teach citizens how to interpret their electricity bills and adopt simple changes, such as avoiding dark waterproofing that increases the use of air conditioning. Gloria indicated that the active participation of society is important to guide authorities towards more sustainable decisions, pointing out the role of NGOs and social collaboration platforms to drive an energy transformation.

Local Energy for a Sustainable Future: Challenges and Opportunities in Baja California Sur

Ramón Álvarez

Ramón Álvarez focused his participation on the energy opportunities and challenges of Baja California Sur, highlighting that, being an isolated system, the state has a great opportunity to develop an efficient energy model adapted to its needs. However, he pointed out that progress does not depend only on the government, but also on an active participation of the community, highlighting the fundamental role of NGOs in guiding the authorities' decisions.

Ramón mentioned that currently, due to the high costs of importing fuels, it is crucial to explore renewable energies such as solar, wind and the use of urban waste, which are already being tested in isolated locations such as Isla Natividad and Isla Cedros, where these options are more viable.

Finally, Ramón stressed the importance of adapting energy plans to the particularities of each area of the state, since supplying Los Cabos is not the same as supplying Comondú.



The discussion 20 years ago in La Paz was that it should not be a tourist city but rather a city of knowledge, given that Baja California Sur, and especially La Paz, had the highest per capita rate of researchers.

Ramón Álvarez

Conclusions

The conclusions of the panel highlighted the need to adopt a strategic vision to ensure sustainable energy and urban development in Baja California Sur. It was agreed that it is crucial to integrate renewable energy sources, such as solar, wind and marine, adapting solutions to the particularities of each area of the state. In addition, the importance of efficient urban planning that reduces dependence on automobiles, improves mobility and optimizes energy consumption in buildings and services was stressed.

A city by design, not by patches or quick fixes—a place that improves us all.

Ramón Álvarez



Objective

In this panel you will learn the importance of the efficient use of energy and to promote the use of renewable energies in BCS, considering the future development of our state as well as the power of the richness of our seas and lands in combination with the desert climate of our state to detonate opportunities with positive economic, environmental and health impacts.





The key is to connect the city's vocation with its development model; without this alignment, urban planning loses its purpose.

Alberto Marín



Scan to view the full panel.

