

Energy Security Forum Colombia 2026

April 29 · Enel, Bogotá | Organized by: WEC Colombia

On April 29, 2026, the World Energy Council Colombia (WEC Colombia) brought together more than 230 sector leaders at Enel's facilities in Bogotá for a high-level debate on energy security — one of the most pressing issues on the national agenda.

The event gathered industry associations, companies, academia, regulators and government representatives in a single space, structured around four thematic blocks spanning from the global geopolitical context to the investment roadmap toward 2035.

OPENING · INSTITUTIONAL VISION

José Antonio Vargas Lleras

President — WEC Colombia

In his opening remarks, Dr. Vargas Lleras framed the event within the World Energy Council's Energy Trilemma: the permanent tension between security, equity and environmental sustainability.

Drawing on data from XM and Acolgen, he demonstrated that Colombia faces a real firm energy deficit today, and that this gap could escalate significantly toward 2029-2030 if the entry of new projects is not accelerated.

"We cannot afford to turn away a single megawatt."

— José Antonio Vargas Lleras, President WEC Colombia

AGENDA · Wednesday, April 29

BLOCK 1 — Geopolitical Context & Regional Opportunities

- ▶ **08:00** José Antonio Vargas Lleras — *Welcome*
- ▶ **08:15** ANDESCO — *Public utilities sector vision on Energy Security*
- ▶ **08:30** Ruben Perez · Director, ChemStrategy — *Natural Gas in Venezuela: Integration Potential and Opportunities for Colombia's Energy Security*

BY THE NUMBERS

+230

active participants from the energy sector

4

high-level thematic blocks

+20

speakers and panel experts

KEY CONCLUSIONS

01

Energy security is today the top priority of governments worldwide. The fragmented global geopolitical context — wars, supply chain disruptions and price volatility — confirms this with urgency.

02

Colombia faces a structural firm energy deficit that no sector actor can ignore. The solution will not come from a single source or a single institution.

03

Project entry barriers — environmental permits, social conflict, prior consultation, transmission — are the core bottleneck and require urgent regulatory solutions.

04

Natural gas remains an irreplaceable pillar of the power system during the transition. Securing its availability and replenishing reserves is a short-term priority.

- ▶ **09:00** **Carolina Arbeláez** · House of Representatives of Colombia — *"Energy Security" Bill*
 - ▶ **09:30** **Xavier Genis** · Managing Director & Partner, BCG — *Strategic presentation*
 - ▶ **09:40** **Panel** — *Energy security in a fragmented world: geopolitical risks, competitiveness and global uncertainty*
 - Xavier Genis — Managing Director & Partner, BCG
 - Daniel Vicente Romero — Executive Director, Chamber of Large Energy & Gas Consumers, ANDI
 - Felipe Bernal Guarín — Columbia University
 - Lyndon Winston — Universidad Externado de Colombia
- Moderator:** Rodolfo Guzmán — Managing Partner, ADL

BLOCK 2 — Supply, Demand & Electricity Market Challenges

- ▶ **10:30** **Lightning Talks** — *Sector diagnosis and needs / Energy analysis and long-term price formation under critical scenarios*
 - Freddy Zuleta — CEO, Enlaza
 - Wilmar Zapata — Director of Specialized Engineering, IEB
 - Natalia García — CEO, Enermant
- ▶ **11:10** **Panel** — *Enabling renewable MW · Firm Energy Auction 2026: Supply gaps, firm energy and the role of thermal generation*
 - Edwin Cruz — VP, ANDEG
 - Manuel Gómez — Director of Energy & Regulated Industries, Cuatrecasas
 - Wilmar Zapata — Director of Specialized Engineering, IEB
 - Jorge Cadena — Head of Asset Optimization, ENEL Colombia
 - Alejandro Piñeros — Deputy Director of Regulation & Markets, Optima Consultores
- ▶ **12:00** **Lunch break** —

BLOCK 3 — Natural Gas & Thermal Generation: Pillars of Firm Supply

- ▶ **02:00** **Keynote** — *Electricity transmission: critical infrastructure for national energy security*
 - ▶ **02:20** **Luz Stella Murgas** · President, Naturgas — *Natural Gas: A Pillar of Energy Security*
 - ▶ **02:35** **Panel** — *Natural Gas Overview January 2019 / March 2026 and outlook to 2036*
 - María Claudia Alzate — Director, Gas Market Manager, BMC
 - Camilo Prieto — Director, Red Nuclear Colombiana
 - Andrés David Ospina — Acolgen
 - Dany Mauricio — PTI S.A.S
 - Juan Carlos Morales — CND Manager, XM
 - Álvaro Pérez — Manager, AFRY
- Moderator:** Juanita Hernández — Managing Partner, ELH

BLOCK 4 — Strategic Vision & Roadmap to 2035

- ▶ **03:20** **Panel** — *How to strengthen Colombia's energy security: new technologies, public policy and investment toward 2035*
 - María Claudia Alzate — BMC
 - Camilo Prieto — Red Nuclear Colombiana
 - Andrés David Ospina — Acolgen
 - Dany Mauricio — PTI S.A.S
 - Juan Carlos Morales — XM
 - Álvaro Pérez — AFRY
- Moderator:** Juanita Hernández — Managing Partner, ELH
- ▶ **04:40** **Closing** — *Final messages: roadmap and call to action*

05

Renewables are a strategic security asset — not just a climate tool — thanks to their deployment speed and cost competitiveness against any fossil alternative.

06

Transmission and storage are critical infrastructure. Without their accelerated development, no grid diversification strategy can materialize.

07

The response must be inclusive and coordinated: enabling regulation, clear investment signals and a shared vision across private sector, government and academia.

"Energy security is built today —with data, with dialogue and with collective decision-making."

WHY THESE SPACES MATTER

Energy security is not a single-actor challenge. Forums like this one build collective vision: they align priorities, surface urgencies and generate the consensus that public policy needs to move forward.

WEC Colombia will continue promoting these spaces so that technical debate translates into concrete decisions — regulatory, investment and energy policy decisions.

DAY 2 · APRIL 30

Energy Security Workshop

Limited capacity | Designed and facilitated by **Kearney** — with the gratitude of WEC Colombia

On April 30, as part of the Energy Security Forum, WEC Colombia held an exclusive high-level workshop bringing together more than 70 executives and leaders from the Colombian energy sector.

Using a structured conversation methodology designed and facilitated by Kearney, the session allowed participants to delve deeper into the critical challenges Colombia faces in terms of supply, demand and energy independence.

The workshop centered on a group discussion about the real costs of neglecting energy security — what is lost when action is delayed, when planning comes too late and when investment signals are not clear enough.

SPECIAL ACKNOWLEDGEMENT

WEC Colombia extends its sincere gratitude to **Kearney** for designing, developing and facilitating this workshop. Their methodological leadership was key to structuring a rigorous and actionable space for reflection, fully aligned with the challenges facing the sector.

CLOSING REMARKS

Two days of intensive work, more than 300 participants in total and an agenda built with technical rigor confirm that energy

+70

executives and leaders in the exclusive workshop

KEY TOPICS ADDRESSED

- ▶ Structural imbalance between demand growth and the effective entry of new firm supply
- ▶ High exposure of the power system to hydrological shocks due to heavy dependence on hydropower
- ▶ Growing reliance on imported gas as backup for the national system
- ▶ Bottlenecks in energy transportation and transmission infrastructure
- ▶ Insufficient replenishment of gas reserves relative to future needs
- ▶ Vulnerability to international price shocks and LNG market conditions

2030 OUTLOOK

By the end of the decade, Colombia must move toward a more diversified energy mix: greater solar and wind participation, reduced hydro dependence,

security is today the sector's number one priority. WEC Colombia will continue promoting these spaces so that collective knowledge translates into action.

and new storage and operational flexibility capabilities.

