



# Quality Infrastructure for Energy Efficiency and Renewable Energy in Latin America and the Caribbean

# The Physikalisch-Technische Bundesanstalt

The Physikalisch-Technische Bundesanstalt (PTB), ist the **national metrology institute** of Germany. It was founded in 1887.

With 2000 employees located in Braunschweig and Berlin, it is a global player in the world of **metrology** (the science of measurement).



# Technical Cooperation

For nearly 60 years, PTB has shared its core competence in international development cooperation. We support developing and emerging economies in the comprehensive field of **Quality Infrastructure**.



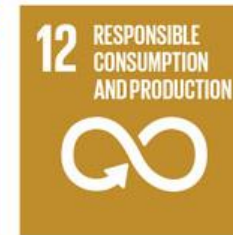
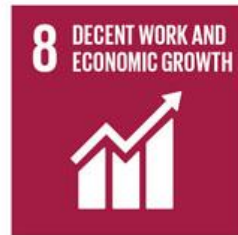


german  
cooperation

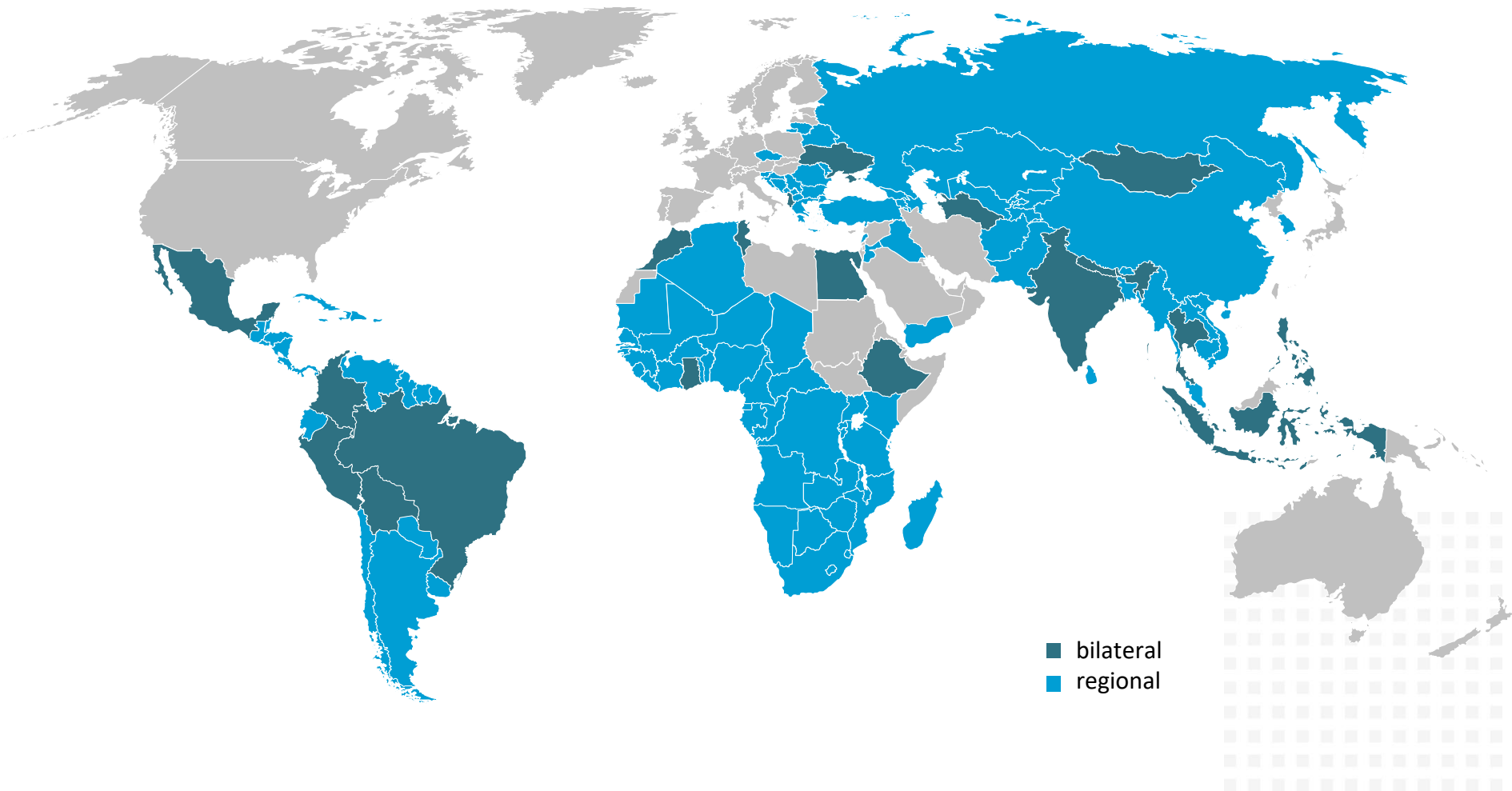
DEUTSCHE ZUSAMMENARBEIT



**SUSTAINABLE  
DEVELOPMENT** **GOALS**

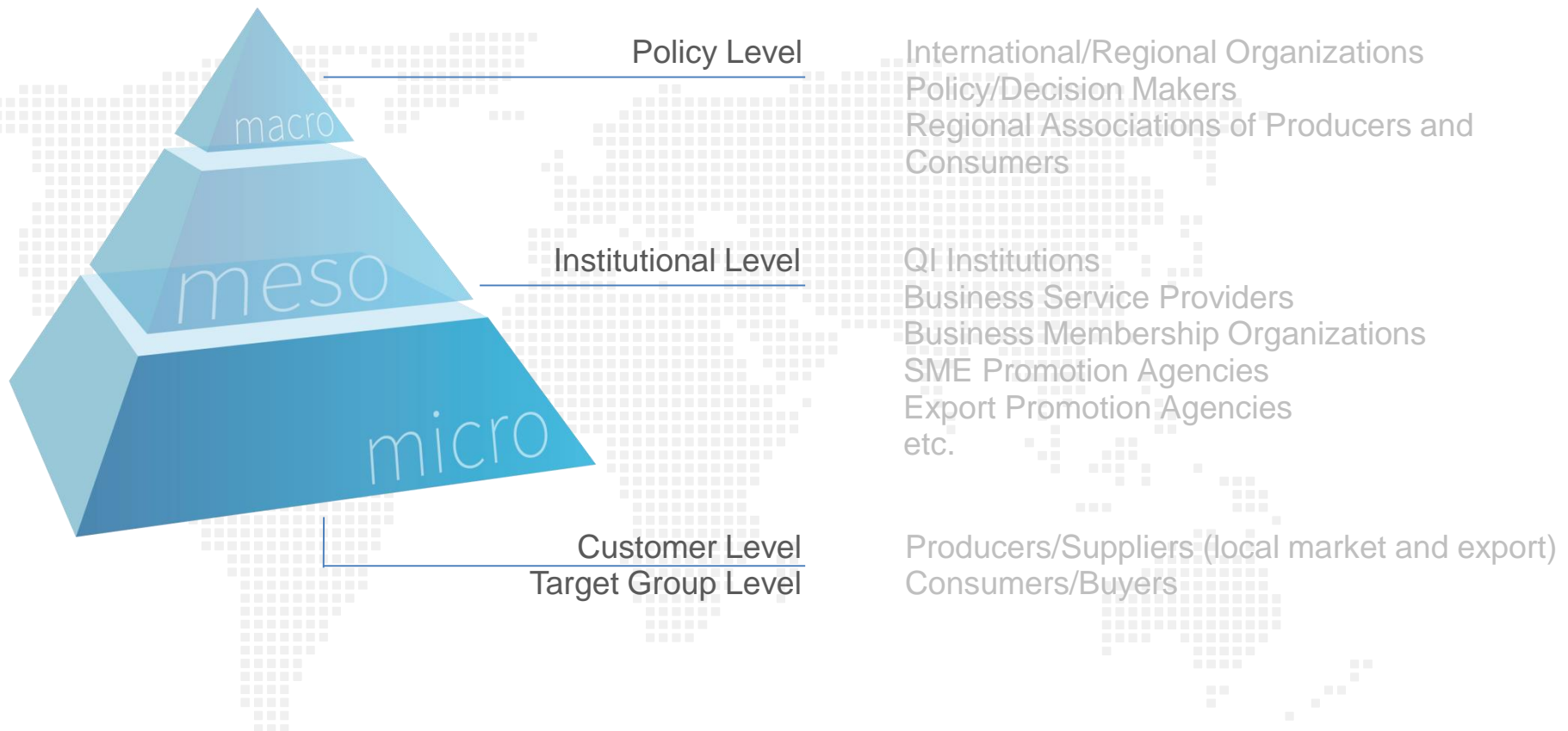


# Our Project Partners. Worldwide.



## Our Profile. Multi-Level Approach.

We advise governments and ministries, promote institutions of quality infrastructure, and support smaller and medium-sized enterprises.



# Topics in Latin America & the Caribbean.

**Trade & Economic  
Development,  
Green Economy**



**Energy**



**South-South  
Cooperation**



**Climate Protection  
& Biodiversity**



**Water & Sanitation**





## Energy projects in Latin America and the Caribbean

Country/Region	Renewables	Efficiency	Grids
Latin America & Caribbean	SWH, PV	Fridges, illumination	yes
Subregional: Caribbean	SWH, PV (Standards only)	Lamps, refrigeration, AC	
Subregional: MERCOSUR		Fridges, AC, illumination	
Mexico	PV, SWH	LEDs, ISO 50.000	yes
Brasil	PV, Wind	LEDs (street lamps)	yes
Colombia		ISO 50.000, Technical Regulation, Household Appliances	
Bolivia		ISO 50.000	
Ecuador		Refrigeration, LEDs, induction stoves	

# Quality Infrastructure for Renewable Energie Sources and Energy Efficiency (R3E)

- Political partner : Organization of American States
- Regional approach: Focused on Accreditation, Metrology and Standards, (represented by regional organizations COPANT, IAAC and SIM)
- Consulting status: IRENA, OLADE
- Objective: develop and strengthen QI services for Energy Efficiency and Renewable Energy
- Duration: 2016-2020
- German contribution: 3 Mio €



# LACR3E - Thematic components

## Renewable Energies

Solar Water Heaters / PV



## Transmission & Distribution

(Smart) Grids / Meters



## Energy Efficiency

Refrigerators, LEDs for household use. ISO 50000



## Transversal

Awareness Building & Cooperation



# LACR3E - Subregional components

Andean region

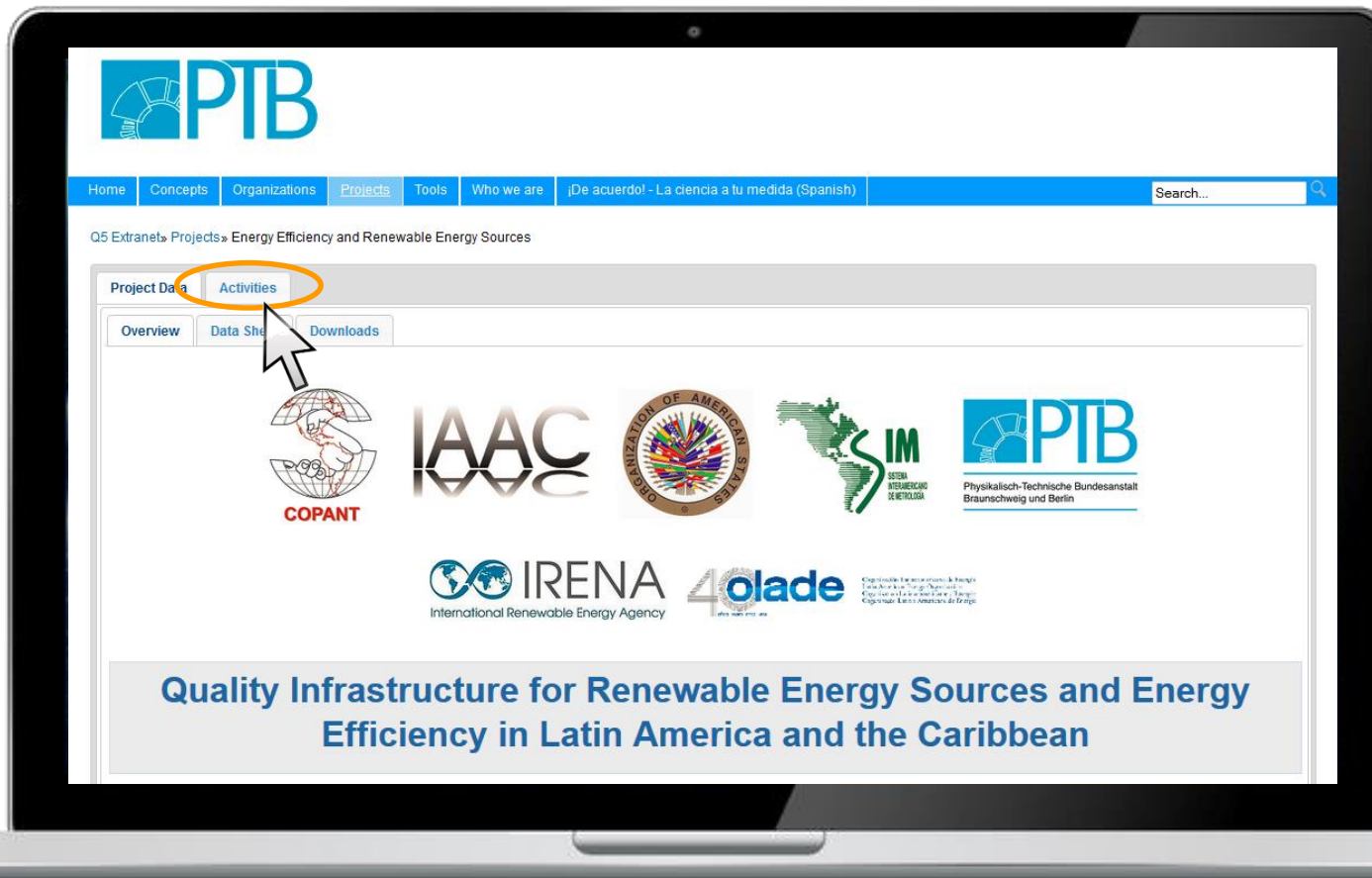


Central America



„Q.5-Extranet“ informs about the projects

<https://www.ptb.de/lac>



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Thank You Very Much For Your Attention.