

Energy is core and is needed anywhere. PUM experts possess extensive knowledge of energy generation and conversion technologies including sustainable energy. Through their projects, our Energy experts contribute to Sustainable Development Goal 7, Energy for a sustainable society.



Energy

Affordable and reliable energy is often essential for further development and improving living conditions. At the same time, the impact of fossil fuels on global warming drives the urgent need to transition to renewable sources. In the coming decades, fossil fuels will increasingly be replaced by sustainable energy such as solar, hydropower, wind, biomass and geothermal energy.

Our goal is to accompany SMEs and organisations in having access to affordable and reliable energy, and in replacing fossil energy with sustainable energy.

PUM experts support businesses and organisations in identifying opportunities across the energy sector, from renewable energy solutions to implementing energy-saving measures. These measures account for around 60 percent of our activities and contribute to both economic resilience and environmental protection, paving the way for a more sustainable energy future.

With deep expertise in energy generation, conversion technologies, and efficiency improvements, PUM experts address needs in industrial, commercial, and consumer applications. They stay informed on the latest developments and maintain strong connections within Dutch and European energy companies. Through training and seminars, they actively transfer their knowledge and experience to strengthen local capacity.

The PUM expert will look at your specific situation and give recommendations that provide you with the best result at the lowest possible costs.



Roméo Gobou

Director CFPP-IRETI N'LA, Benin

"As a result of the improved solar panel course, we are confident that more students will register, providing us with more income to invest in our own building in the future. Last but not least, a larger number of educated solar specialists will have an impact on the entire population of Benin, in social, economic, and ecological fields."



Areas of expertise

Distributed energy generation from renewable sources

- Solar electricity generation and storage, both in off-grid systems and grid connected systems.
- Thermal solar systems, including hot water systems (hotels, hospitals) and solar dryers for drying fruit/vegetables/fish/spices
- Solar driven pumping systems for fresh water and irrigation.
- Hydropower generation.
- Biomass conversion into gas, fertiliser or biological coal
- Biofuels (e.g. conversion of waste oils).
- Geothermal energy generation.
- · Wind-turbines.
- · Clean cooking
- Co-generation of heat & power (CHP-systems)

Training

- Solar systems or solar drying (training online, or at site, or hybrid format
- Training on installation and maintenance of mid voltage electrical infrastructure (at site).

Energy and water saving

In sectors where energy costs form a large part of operational expenses, even modest energy-saving measures can reduce consumption by 20% or more. This not only cuts emissions but also significantly boosts profitability.

Our energy projects can involve many companies to have a large impact:

- **Solar training:** Installing companies, educational institutes and solar components sellers
- Irrigation: solar pump installer, irrigation company, endclient in agriculture
- **Solar drying:** dryer manufacturer, food expertise, end-client in agriculture
- Biomass: agriculture providing the material, company building the biomass installation, productor of gas or fertiliser, company to sell/distribute, end client agriculture or PME

