Environment, energy and climate

Renewable Energy in Industry

One day to assess what renewable energy can bring to your site: self-consumption solar photovoltaic, solar thermal for process hot water, biomass, purchase of renewable electricity. You learn to read your consumption profile, to put the right questions to suppliers and to measure a project's effect on your bill and on the scope 2 of your carbon inventory.

Duration : 1 day

Objectives

1. Explain the renewable solutions suited to an industrial site and their limits
2. Analyse a site's electrical and thermal consumption profile to size a project
3. Place a project within the Moroccan framework for renewable energy and self-generation
4. Assess a project: expected output, investment, payback time, risks
5. Measure a project's effect on scope 2 and on answers to customers and funders

Programme

Day 1 — morning

• Why manufacturers are interested: bill, security of supply, European customer expectations, carbon inventory

• Self-consumption solar photovoltaic: roofs, carports, load profile, storage

• Renewable heat: solar thermal, biomass, and heat recovery as a complement

• Moroccan framework: Law 13-09 on renewable energy and Law 82-21 on self-generation, points to check for your site

Day 1 — afternoon (workshop)

• Reading an offer: output assumptions, guarantees, maintenance, end of life of equipment

• Effect on the GHG inventory: scope 2 location-based and market-based, evidence to keep

• Workshop: pre-study of a solar project on your site from your invoices

• Renewables roadmap and its place in the decarbonisation plan; knowledge test

Teaching methods

• Analysis of your load curves or monthly invoices

• Comparison of two fictitious solar supplier offers

• Simplified calculation of output and payback time on a supplied spreadsheet

• Exchanges between technical, purchasing and finance functions on decision criteria

• Final test on renewable solutions, the Moroccan framework and scope 2

Assessment and documents

Knowledge test at the end of the day, feedback survey at D+1. Numbered training certificate, verifiable online, for each participant; the company receives the training report and the solar pre-study carried out in the workshop.

Bilingual materials for every participant; each classroom course comes with its digital twin on OmniLearn.

Good to know

The regulatory side of self-generation is explored further in the half-day “Law 82-21: Electricity Self-Generation for Industry”. To place the project in an overall pathway, see “Decarbonisation Strategy and SBTi Pathway”.

Practical information

Duration	1 day
Audience	Industrial management, energy and maintenance, purchasing, finance, CSR
Prerequisites	No prerequisites
Group size	Groups of 6 to 12 participants, in-company
Format	In-company, face to face on your site
Language	French, Darija or English; bilingual materials
Funding	OFPPT special training contracts (TFP), GIAC, Maroc PME: we prepare the applications with you, at no extra cost.
Programme customisation	Programme adapted to your procedures, your equipment and your audience

Frequently asked questions

Does the course size our installation?

It leads to a pre-study: order of magnitude of capacity, output and payback time, and a list of questions to settle. Detailed sizing remains an engineering task, which you will be better placed to commission and check.

Can we feed in or sell surplus electricity?

Possibilities depend on the applicable self-generation regime, the voltage level and the implementing texts in force at the time of the project. The course presents the questions to ask; the answer is checked for your site, with the texts in hand.

How does solar electricity count in the carbon inventory?

Electricity self-generated and consumed on site reduces purchases from the grid, hence scope 2. For purchased renewable electricity, the result depends on the method, location-based or market-based, and on the contractual evidence kept.

Who should attend?

The energy or maintenance manager, a representative of the finance department and the buyer who will consult suppliers. The decision combines technical, financial and contractual criteria.