BEST PRACTICE SERIES

Renewables brownfield project integration

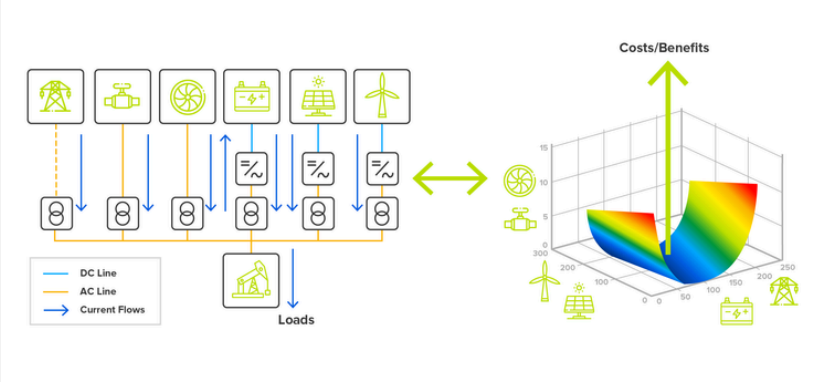
Brownfield Projects integration with renewable energy even coupled with traditional power generation systems can enhance efficiency and reduce GHG emissions. These solutions have been implemented in several Eni upstream and downstream brownfield assets.

Project Highlights

- Installed Capacity: 10 MWp
- Technology: monofacial modules (poly-cri); fixed tilt
- Connection: to 60/5.5 kV O&G plant power distribution system
- Energy Use: self-consumption
- Avoided GHG: 7.9 kt CO2 eq/y
- Design life: 25 y
- Land Use: 20 ha

Project configuration

The general project configuration can implement different energy solutions, PV / Wind / Storage / Fossil Fuel / Grid Hybrid System. It means to reach the best hybridization degree to optimize: Costs/Benefits ratio and GHG Emission reduction.



Benefits

- This project approach can promote **energy savings on every energy carrier**. GHG Emissions reduction can be in the order of several ktons according to location, installed capacity and actual operating conditions.

Implementation

- Implementation of the proper “energy solution” may vary in configuration integrating: PV / Wind / Storage/ Fossil Fuel/ Grid Hybrid Systems.

Key Learnings

- The exploitation of renewable energy generation projects in proximity of assets even coupled with traditional power generation systems has disclosed new opportunities and can help to improve energy performances of upstream and downstream brownfield sites.

This Best Practice Series was conceived by our member companies in order to share practical examples of energy efficiencies that can be used by other organisations