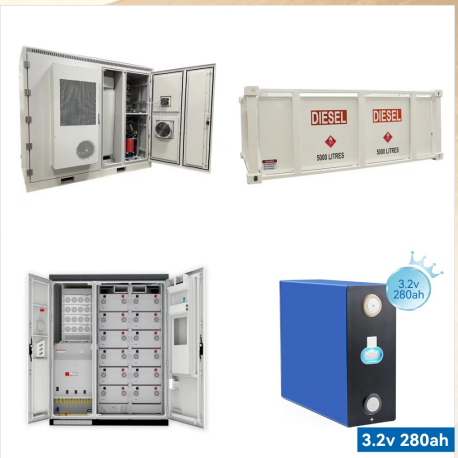
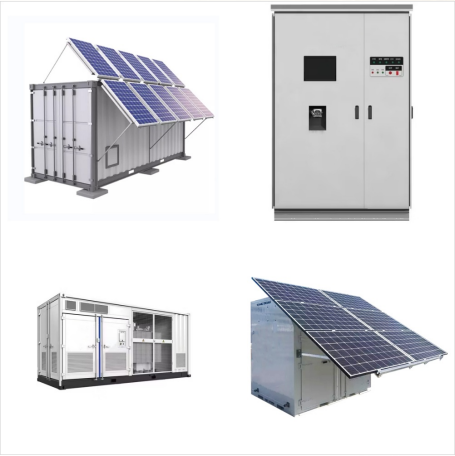
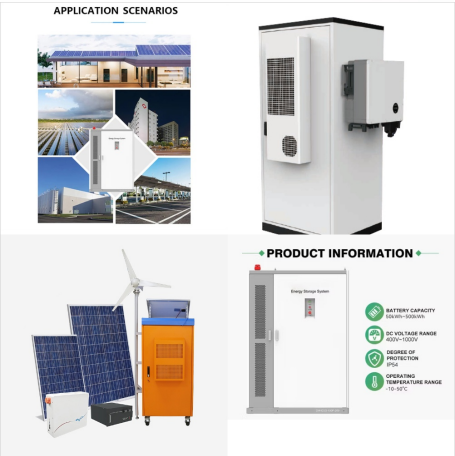


Technical aspects of the smart grids are discussed and reviewed to study the ways to improve the optimization of smart grids and renewable energy sources along with an insight into the technical domains of the smart grids such as demand side management, renewable energy storage systems, communication models, and grid security.

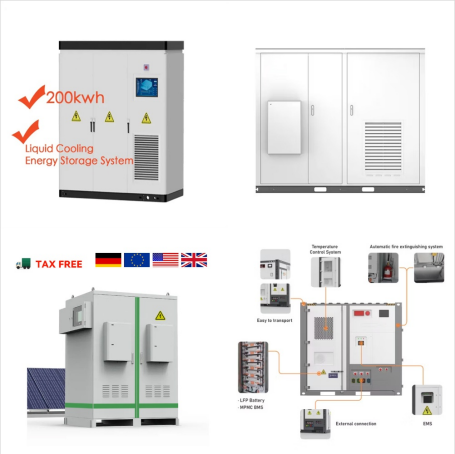


The growing level of distributed generation (DG) integration puts the grid under strain, resulting in perturbations with dynamic responses. This paper discussed a detailed review of current developments in smart grid through the integration of renewable energy resources (RERs) into the grid.

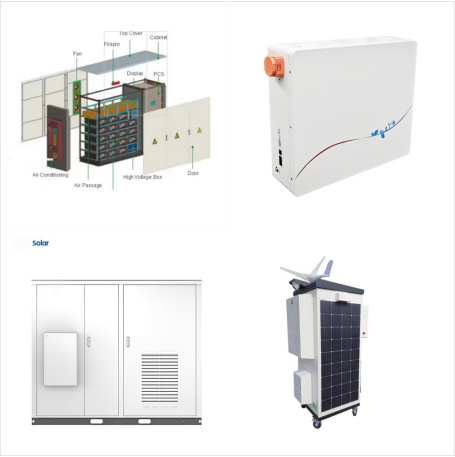


This component will support: (i) the construction of small-scale solar power plants, their connection to the grid as well as the installation of pilot energy storage facilities for variable renewable energy (VRE) integration; and (ii) the

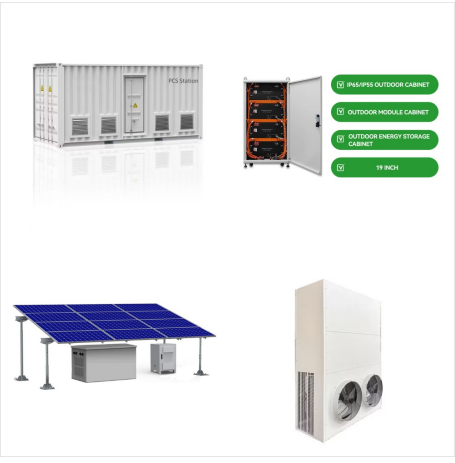
CABO VERDE RENEWABLE ENERGY INTEGRATION IN SMART GRID



The concept of smart grid (SG) was made real to give the power grid the functions and features it needs to make a smooth transition towards renewable energy integration and sustainability. This was done by automating and digitizing the grid to give it the right amount of flexibility and reliability, while also giving it the ability to easily



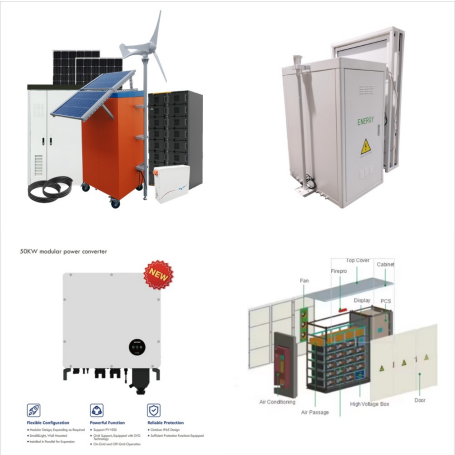
a quarter of the electricity generated in Cabo Verde came from renewable energy sources and the Government's intention is to increase this to over 50% by 2030. The Government of Cabo Verde had established in its Strategic



Praia, December 5, 2023 ??? The ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) and the Foundation Smart City Cabo Verde have signed a memorandum of understanding aimed at spurring innovation in the field of ???

CABO VERDE RENEWABLE ENERGY INTEGRATION IN SMART GRID

RENEWABLE ENERGY HIGH PENETRATION Source: Cape Verde 50%Renewable - Energy Master Plan 2010-2020 (GESTO Energy 2010) Cape Verde Renewable Energy Masterplan establishes a target of 50% Renewables penetration until 2020!!



Currently, renewables in Cape Verde reach 24% of the energy produced: 20% wind and 4% solar. However, the perspective is the solar energy to have more weight in the future. By 2025, renewables are expected to reach 30% of the energy produced in Cape Verde and 50% by 2030.