



Overview: Clean Energy

There are many opportunities for SEUS-CP businesses to benefit from the transition to a clean energy future. Growth in the supply and consumption (mainly by transportation, industrial, and residential sectors) of energy fueled by renewable sources such as hydrogen, wind, solar and hydroelectric and their related smart energy technologies offer firms the opportunity to expand market share through sales, innovative technologies, R&D, partnerships, and investments.

Hydrogen – Hydrogen energy can be used to generate electricity through fuel cells or combustion and has the potential to play a significant role in the transition to a more sustainable and low-carbon future. It continues to be used for transportation with commercial trucking, buses, trains, and maritime transports (ships). It is critical for excess storage generated from renewable sources such as wind and solar, which can be later converted back into electricity on demand. In addition, it can be used in the industrial space as hydrogen serves as a feedstock to produce chemicals, including ammonia, methanol, and other synthetic fuels.

Wind – Wind energy, both onshore and especially offshore, is a growing renewable energy source. Opportunities include improving the efficiency of turbine power, floating turbines in deep water areas, innovative technologies, private co-investment, feasibility studies, project development, testing, optimization, and maintenance/asset management services.

Solar – The fastest growing of all renewable energy is solar, which is expected to grow and innovate in 2023. Global solar will more than double to 2.3 TW in 2025. Trends and opportunities range from growth in large-scale solar farms, expansion of rooftop panels, energy storage solutions, smart grid technology, new financing models, feasibility studies, solar PV project development, testing, optimization, maintenance/asset management services, recycling (panels), R&D and solar materials/critical components development and panel manufacturing.

Hydroelectric – Hydropower is used extensively and increasingly for power system flexibility and resilience as the deployment of variable renewables such as wind and solar increases. Opportunities and trends include energy storage, operations flexibility, turbines/parts, electro-mechanical equipment, infrastructure upgrades/retrofits, and innovative technologies for example that couple traditional hydropower and PSH with battery storage and floating solar.