



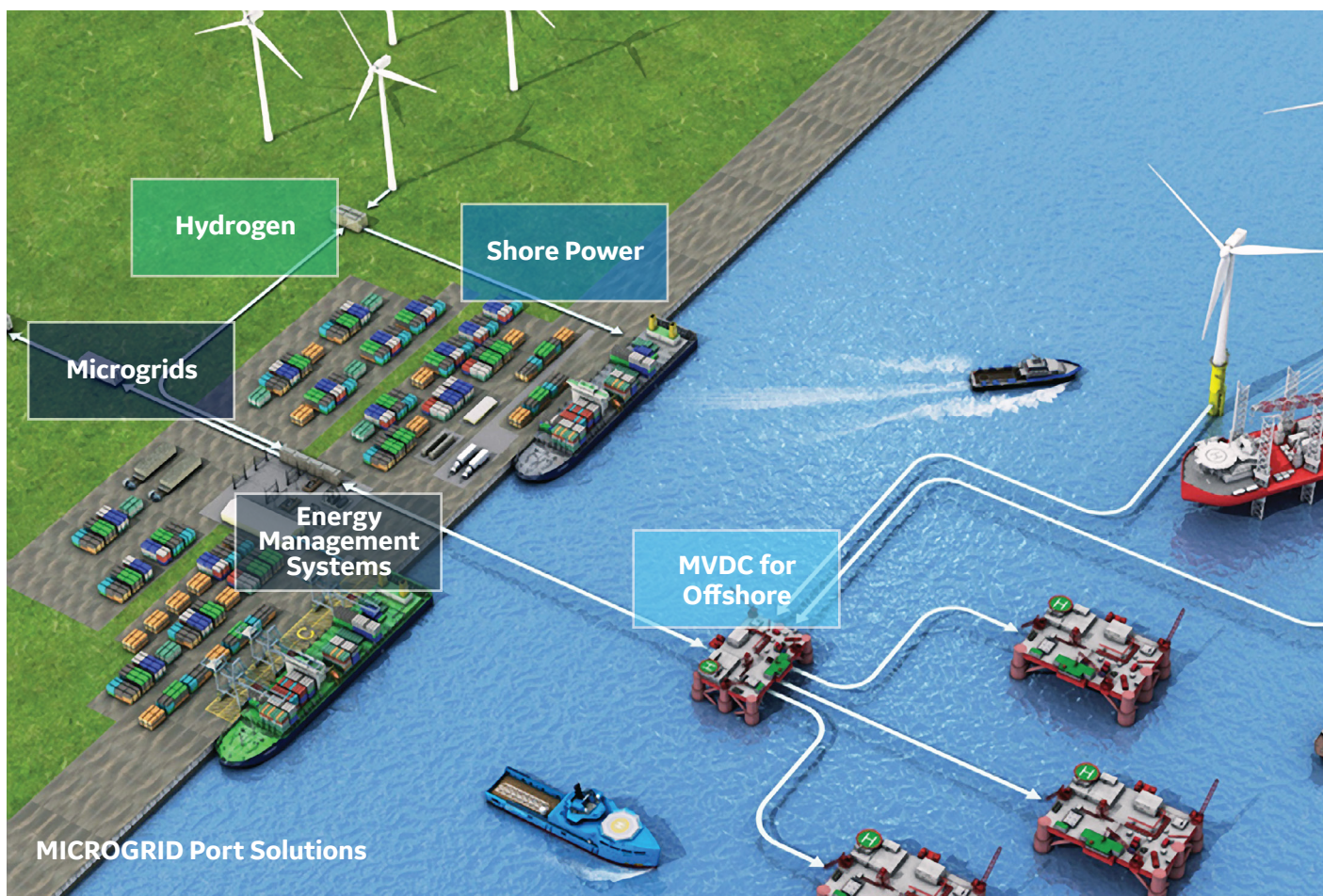
# Port Electrification Solutions

GE solutions are scalable and manageable, growing with you across the phases of your development and investment strategies.

Port Solutions

Regulation on pollution, emissions and noise in ports is becoming more stringent. Add to this increased demand for electrical power, there is more pressure on operators to optimize and update energy infrastructures. We work with customers across their ports' electrification needs, whether helping to improve existing assets or to increase energy efficiency through energy management systems and microgrids, shore power connections and alternative clean energy supplies.

## GE, Supporting Ports' Energy Transition



MICROGRID

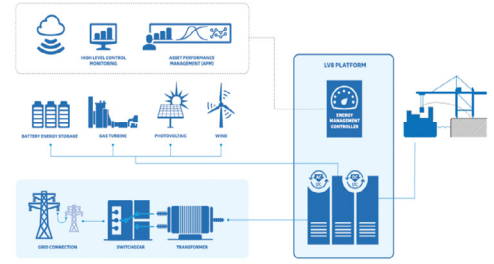
[gemicrogridsolutions.com](http://gemicrogridsolutions.com)



## Microgrids

# The Power of Flexibility

- Independent from, or supplement to central grid
- **Direct connection** DC energy sources, such as solar or storage
- **Lower demands** from grid and provide off-grid charging
- **Opportunity to enhance stability and reliability**
- Enables hybrid of renewable, lower carbon energy sources



## Shore Power

# Helping to Lower Port Emissions

- Shore-to-ship electric power connectivity
- Enabling ships to have engines off during port visits
- Enabling ship battery charging
- **Significant impact on environmental footprint**
- Links GE microgrid and ship systems know-how



## MVDC for Offshore

# Electrification for Offshore Platforms

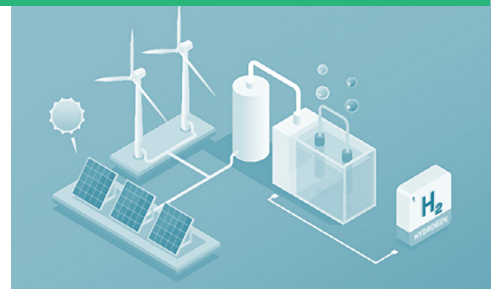
- As we shift to a low carbon economy GE can provide alternatives for **electrifying offshore platforms, facilitating the integration of offshore renewable** resources.
- We provide solutions up to **200 MW** (transmission) through an energy hub to accommodate remote loads and to help improve quality of the electric grid connection and energy efficiency.



## Hydrogen

# Electrifying the Shift to Cleaner Fuel Generation

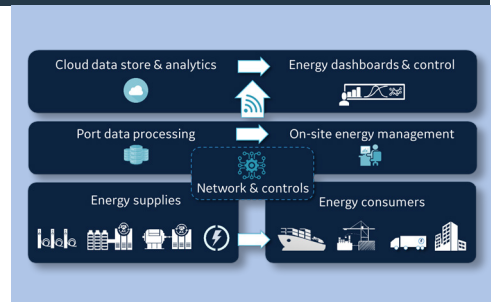
- GE Power Conversion is positioned to address hydrogen (H<sub>2</sub>) processes that support carbon neutrality.
- We provide electrical solutions and eBOP (electrical balance of plant) for H<sub>2</sub> electrolysis and compression process applications.
- **Helping to create energy for port or ship applications.**



## Energy Management Systems

# Managing Energy for Efficiency and Availability

- GE is working on reducing emissions at ports by helping to **manage power and energy more efficiently.**
- GE's cloud-based, integrated digital concept aims to **improve situational awareness on energy supply and demand.**
- Digital energy management is part of GE Power Conversion's range of port electrification solutions.



To find out more:  
[contactus.powerconversion@ge.com](mailto:contactus.powerconversion@ge.com)

MICROGRID