



Smart Energy, Sustainable Future



Towards a Sustainable Energy Future

Against the backdrop of rising climate change concerns, Singapore is committed to playing our part to combat climate change and achieve a sustainable energy future. As the energy sector decarbonises, this presents fresh and exciting career opportunities in areas such as solar, energy storage systems, smart grids and electricity trading.

Key Insight 1

As the sector pushes ahead with the Singapore Energy Transition, Engineering and Operations job roles now require additional skills, on top of existing skills, to perform green functions.



Examples of Engineering Jobs

- System Engineer
- Software Engineer
- Electrical Engineer
- Product Engineer



New Green Areas of Work

- Data analysis & software development for clean energy systems
- Process design for clean energy
- Compliance to government regulations, sustainability knowledge



New Skills to Level Up

- Data analytics, software design
- Process design management
- Sustainability management

Key Insight 2

New job roles have emerged in areas of Strategy & Compliance and Energy & the Environment, which require green skills.



Examples of New Green Jobs

- Strategy & Compliance**
- Sustainability Manager
 - Carbon Offset Business Development Manager



New Green Areas of Work

- Review green targets including carbon emissions
- Ensure business activities meet regulatory standards and green targets
- Devise green business strategies and advise stakeholders on green initiatives



New Skills to Level Up

- Sustainability Management
- Carbon Footprint Management
- Regulatory Compliance
- Sustainability Reporting
- Carbon Markets and Decarbonisation Strategies Management

Key Insight 3

Digital and Industry 4.0 (I4.0) skills will also be in demand, as Energy & Power companies intensify their digitalisation and automation efforts.



Rise of Digital and I4.0 Skills to Support the Singapore Energy Transition

Top Growing Skills

- Technical Service Process Management
- Programming & Coding
- Process Improvement and Optimisation
- Data Analysis & Interpretation
- Process Operations Troubleshooting

- Process Operations
- Data Analytics
- Machine Learning Application
- Supply Chain Management
- Programming & Coding
- Software Design
- Automated Process Control

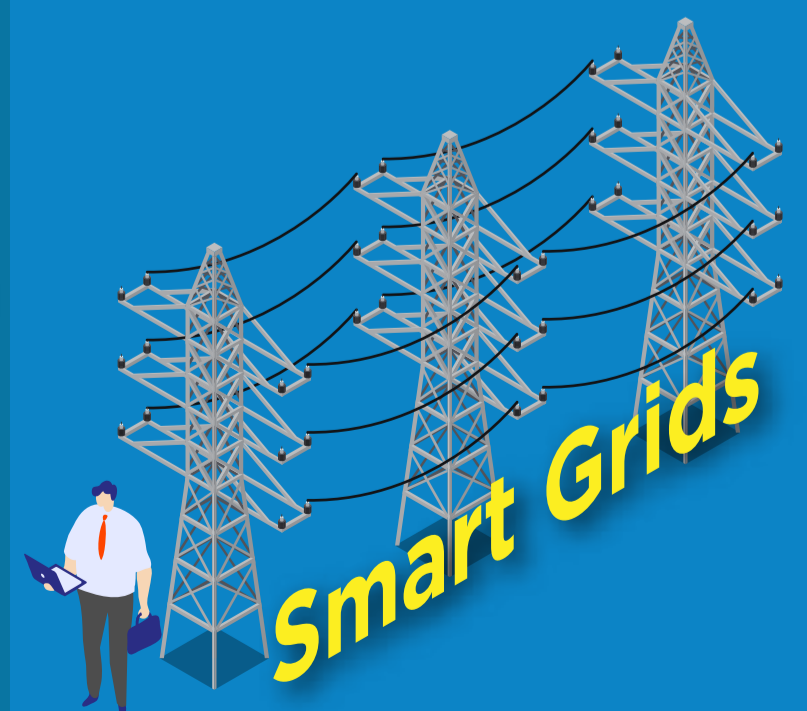
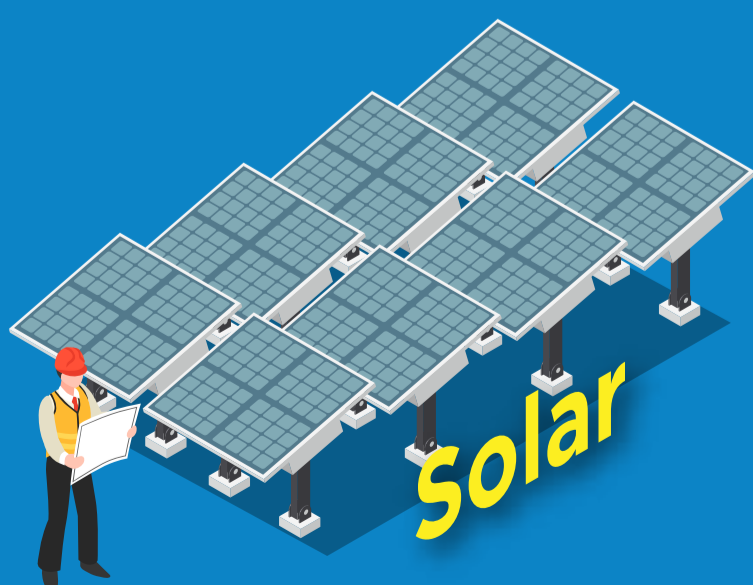
- Programming & Coding
- Data Analysis & Interpretation
- Automated Operation Monitoring
- Software Design
- Cloud Computing Application
- Automated Process Design

Examples of Job Roles Requiring These Skills

- Power Generation Engineer
- Software Engineer
- System Engineer
- Process Integration Engineer
- Solar Engineer

- Power Generation Engineer
- Software Engineer
- System Engineer
- Process Integration Engineer

- System Engineer
- Solutions Architect
- Software Engineer
- Technical Lead
- Optimisation Engineer



“ Youths play an important role in the energy transition and they can kickstart an impactful career in this sector. The energy sector offers opportunities to solve real-life problems and drive sustainability to mitigate impacts from climate change, and youths will be at the forefront driving developments in the clean energy sector. There will be exciting career opportunities in emerging areas such as solar, energy storage systems, smart grids and electricity imports. ”

MS JEANETTE LIM

Director, Industry Development Department,
Energy Market Authority

“ The greening and digitalisation of the energy sector will change the nature of work and deliver many new and exciting opportunities to those already in the sector or looking to join the sector. As more companies speed up their energy transition and sustainability efforts, the skills that our youths can pick up will be highly sought after not only in the energy sector but also provide the leg up to access regional and global opportunities across many other sectors. ”

MS CHELVIN LOH

Director, Jobs-Skills Insights Division,
SkillsFuture Singapore

“ ESS is a promising industry requiring talents from engineering fields. An example of a new role created would be the System Design Engineer, who will be tasked with the design and commissioning of energy storage solutions for off- and on- grid solutions. ”

MR AZRIN ABDULLAH

Project Manager,
Durapower

“ At Sembcorp, we believe in reskilling our existing talent pool and exporting our capabilities beyond Singapore. We have created jobs in our renewable space, including positions in wind, solar and energy storage to support the global energy transition. Our employees are deployed across the region in various functions like project management, engineering and commercial. We are also looking at adding roles that can augment our renewable energy value chain, to support the global energy transition. ”

MS COLLEEN CHUA

Head of Human Resources for Singapore & Southeast Asia,
Sembcorp Industries

“ Renewables is a high-growth sector with good career prospects. Young jobseekers can look forward to interesting jobs, with Growth, Exposure and Impact. ”

MR GUNTHER VON GOH

Executive, Business Development,
EDPR Sunseap