



UK ENERGY - UTILITIES RESPONSE TO COVID-19

Challenges and Opportunities

Anna Cheong, Business Consultant

Context

COVID-19 is without a doubt the single largest global crisis we have seen in over a century. It is impacting every part of our personal and professional lives, while affecting organisations across all industries.

The crisis has put many countries in lockdown and has paused a wide range of industrial and commercial activities. Leaders must now make rapid decisions and act immediately to support stakeholders and ensure that critical business operations continue.

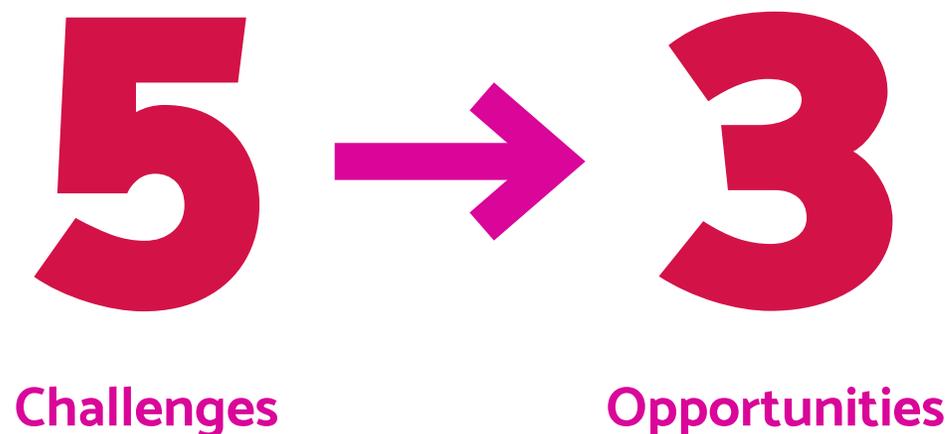
BJSS believes that the global economy will now have to navigate three distinct phases:

- **Recover** – Organisations deal with the current situation, managing crisis and continuity plans
- **Regroup** – Organisations learn and emerge stronger
- **Renew** – Organise prepare and manoeuvre for the “next normal”

The energy industry is renowned for its safety and has responded well to COVID-19. It quickly implemented remote working and measures to continue business-critical operations. Additionally, the industry has worked with governments to devise plans to maintain stable supplies and provide emergency financial support to people during this pandemic.

But with the industry suffering from a substantial drop in demand and reduced revenues from lingering oil prices, many organisations are implementing broad capital, discretionary spending, and people cuts.

This report explains the impact that the current operating environment has had on the energy industry, and explores key areas of opportunity.



Recover

Understanding the
Current Challenges
in Energy

Challenges

Recover

Understanding the Current Challenges in Energy

Challenges

Characteristics - Increased instability in Oil demand:

- Since Jan 2019 the oversupply of oil & gas has led to the collapse of oil, gas and coal prices.
- Reduction in demand for oil within the Asia markets as they were first hit by COVID-19 earlier in the year.
- The most important influence on global oil consumption growth comes from China and India, which are large and fast-growing consumers. A combined 19% of all oil consumption worldwide 2018 and 58% of all consumption growth over the last decade.
(Source: BP Statistical Review of Energy 2019)

Recover

Understanding the Current Challenges in Energy

Challenges

Characteristics - Reduced mobility for workforce:

- Increased health risks for the energy workforce has resulted in reduced mobility and stability.
- Essential workforce struggles to maintain vital assets.
- Reduced energy demand puts pressure on viability of jobs across all industries.

Recover

Understanding the Current Challenges in Energy

Challenges

Characteristics - Increased Government Regulations:

- Daily UK Government COVID-19 response announcements that affect all aspects of country e.g. Social, Political, Economic.
- New frameworks published - Energy Government Framework for Regulatory Flexibility. (Source: OFGEM – Impact of COVID-19 on energy network companies – an enabling framework for regulatory flexibility. Publication Date: 8th April 2020)
- Introduction of emergency measures for vulnerable customers who may fall into debt remain supplied with energy while in self-isolation.

Recover

Understanding the Current Challenges in Energy

Challenges

Characteristics - Reduced Energy Consumption:

- UK Government lockdown announcement (on Monday 23 March 2020) caused an immediate 5-10% reduction in electrical demand. (Source: N. Godfrey - EDAG; Data: Elexon & National Grid)
- Reduced consumption as industrial and commercial businesses close. (Where 45% of energy consumption is made up from aviation, offices and factories.)
- Consumption patterns have skewed the peak and off-peaks household usage.
- Possible increase in electricity bills for customers.

Recover

Understanding the Current Challenges in Energy

Challenges

Characteristics - Disrupted Global Supply Chain:

- Delays and cancellations in raw materials (e.g. solar panels – inverters, batteries).
- Closure of trusted suppliers and partners.
- High levels of uncertainty in supply chains as prices, commercial agreements and predicted cash flows are changing.

Recover

Understanding the
Short-Term Impacts of
the Current Situation
and Managing Crisis
and Continuity Plans

Challenges

Recover

Understanding the
Short-Term Impacts of
the Current Situation
and Managing Crisis
and Continuity Plans

Challenges

Short-Term Impact - Increased instability in Oil demand:

- Protecting cash flows and liquidity of capital investments.
- Government inability to provide direct support financially to renewable energy supply chains.

Recover

Understanding the
Short-Term Impacts of
the Current Situation
and Managing Crisis
and Continuity Plans

Challenges

Short-Term Impact - Reduced mobility for workforce:

- Pre-cautionary measures in place can reduce the effectiveness to maintain a safe grid network.

Recover

Understanding the Short-Term Impacts of the Current Situation and Managing Crisis and Continuity Plans

Challenges

Short-Term Impact - Increased Government Regulations:

- Continue to stay up to date with 'essential' energy services e.g. connections, maintenance & renewable projects.
- Protecting vulnerable customers financially and prioritising maintenance.

Recover

Understanding the Short-Term Impacts of the Current Situation and Managing Crisis and Continuity Plans

Challenges

Short-Term Impact - Reduced Energy Consumption:

- Understand new energy demand profiles to effectively manage load and usage.
- Manage unpredictable cash flow and credit risk due to dropping wholesale prices, low demand and surge in production from renewable energy.

Recover

Understanding the Short-Term Impacts of the Current Situation and Managing Crisis and Continuity Plans

Challenges

Short-Term Impact - Disrupted Global Supply Chain:

- Limited maintenance supplies in local warehouses.
- Capital projects may be delayed and/or cancelled leading to lower demand for materials in Asia impacts supply chain.

Regroup

Understanding the
Long-Term Impacts
of the Current Situation
so that Organisations
can Learn and
Grow Stronger

Challenges

Regroup

Understanding the Long-Term Impacts of the Current Situation so that Organisations can Learn and Grow Stronger

Challenges

Long-Term Impact - Increased instability in Oil demand:

- Energy Suppliers are owned by diversified portfolios – dropping investments limit capex spending.

Regroup

Understanding the Long-Term Impacts of the Current Situation so that Organisations can Learn and Grow Stronger

Challenges

Long-Term Impact - Reduced mobility for workforce:

- Continue to adhere to social distancing when delivering services.
- Influx of Low Priority Service Requests (post COVID-19) delayed during the lockdown.

Regroup

Understanding the Long-Term Impacts of the Current Situation so that Organisations can Learn and Grow Stronger

Challenges

Long-Term Impact - Increased Government Regulations:

- Slow down of Electric Vehicle (EV) grid network roll out and EV car adoption.

Regroup

Understanding the Long-Term Impacts of the Current Situation so that Organisations can Learn and Grow Stronger

Challenges

Long-Term Impact - Reduced Energy Consumption:

- Different energy demand profiles within UK in the long run.
- Increased percentage of UK power sourced from renewables.

Regroup

Understanding the Long-Term Impacts of the Current Situation so that Organisations can Learn and Grow Stronger

Challenges

Long-Term Impact - Disrupted Global Supply Chain:

- Increased price for materials (inverters and modules) – due to shortages.
- Energy storage and Electric Vehicle (EV) on-going production disruptions & labour restriction movement in Asia impacts supply chain.

Renew

Preparing for the
New 'Normal'

Themes

Renew

Preparing for the
New 'Normal'

Themes

Description - Sustainability Agenda:

While all businesses have been impacted by the COVID-19 lockdown, many are seeing profound positive impacts and benefits. An example of this is the emission reduction and cost saving resulting from less commuting to the office and corporate global travel. These enforced behaviours have opened the eyes of many global leaders and may continue to do so even after the lockdowns are lifted.

Renew

Preparing for the
New 'Normal'

Themes

Description - Evolving Energy Demand:

Given the continuing oil trade wars, investors are turning elsewhere such as clean energy, which may prove to be more stable with higher returns. Coupled with the slow down in the UK economy, weakened energy consumption has reduced the pressures on energy providers to meet demands.

Renew

Preparing for the New 'Normal'

Themes

Description - Clean Energy Investments:

Due to government COVID-19 lockdown measures, unpredictable energy demand profiles will remain for at least the remaining year. In addition there is significant changes to social behaviour, large closures of businesses/retail and reduction in travel via plane, cars, public transport. If these changes remain after the government eases their lockdown measures, this could potentially lead to new and different energy demand profiles in the long-run.

Renew

What are the
Opportunities?

Themes

Renew

What are the
Opportunities?

Themes

Opportunities - Sustainability Agenda:

- New demand for flexible energy packages for businesses that choose to support 'remote' working in addition to traditional office environments.
- Increased investment in Distributed Energy Resources (DERs) as remote working increases. E.g. Batteries and Solar Panels.

Renew

What are the
Opportunities?

Themes

Opportunities - Evolving Energy Demand:

- Lower electrical consumption provides the catalyst for renewable energy projects as there is reduced need for fossil fuel energy creation.
- Agile Tariffs could be introduced to support the redefined energy peaks and off-peaks based on changed consumer demands.
- Increased acceptance for remote and smart capabilities for households.

Renew

What are the
Opportunities?

Themes

Opportunities - Clean Energy Investments:

- Opportunity for UK Government to boost the economy by creating policies to support renewable energy projects post COVID-19. (Government stimulus spending on clean energy projects support long term growth of the market and job creation.)
- Long-term capital providers have the opportunity to enter into or expand their presence in the clean energy sector.

Renew

What are the
Quick Wins?

Themes

Renew

Themes

What are the Quick Wins?

Quick Wins - Sustainability Agenda:

- Increase offerings for home energy products and energy management solutions for businesses.
- Partnerships with online healthcare platforms to develop tech solutions with socio-economic issues.

Renew

What are the
Quick Wins?

Themes

Quick Wins - Evolving Energy Demand:

- Increase customer data analytics to support the new demand profiles.
- Explore and roll out flexible energy packages for vulnerable customers and businesses.
- Invest in digital capabilities like digital payment and e-commerce solutions.

Renew

Themes

What are the Quick Wins?

Quick Wins - Clean Energy Investments:

- Review the large capital asset investments framework and process.
- Increase customer awareness for clean energy investments during COVID-19.