

Energy resilience in the broader University environment

CampusEnergy2019
DRAFT Outline

centrica
Business Solutions

What is energy resilience?

Energy is more than keeping the lights on

Resilience includes the ability to withstand and recover from deliberate attacks, accidents, or naturally occurring threats or incidents¹

It means keeping Universities online while keeping students, faculty and administration safe

36% of energy-decision makers say their organization is not prepared for a disruption to their energy supply from a temporary grid failure²

Source:

1: USGov PPD-21: Critical Infrastructure Security and Resilience)

2: Centrica Business Solutions Resilience Report)

Energy resilience is business resilience



Improved site resilience



Assured continuity of operations



Reduced downtime



Greater control



Reduced commercial risk



Strengthened energy compliance



Future-proofing your business

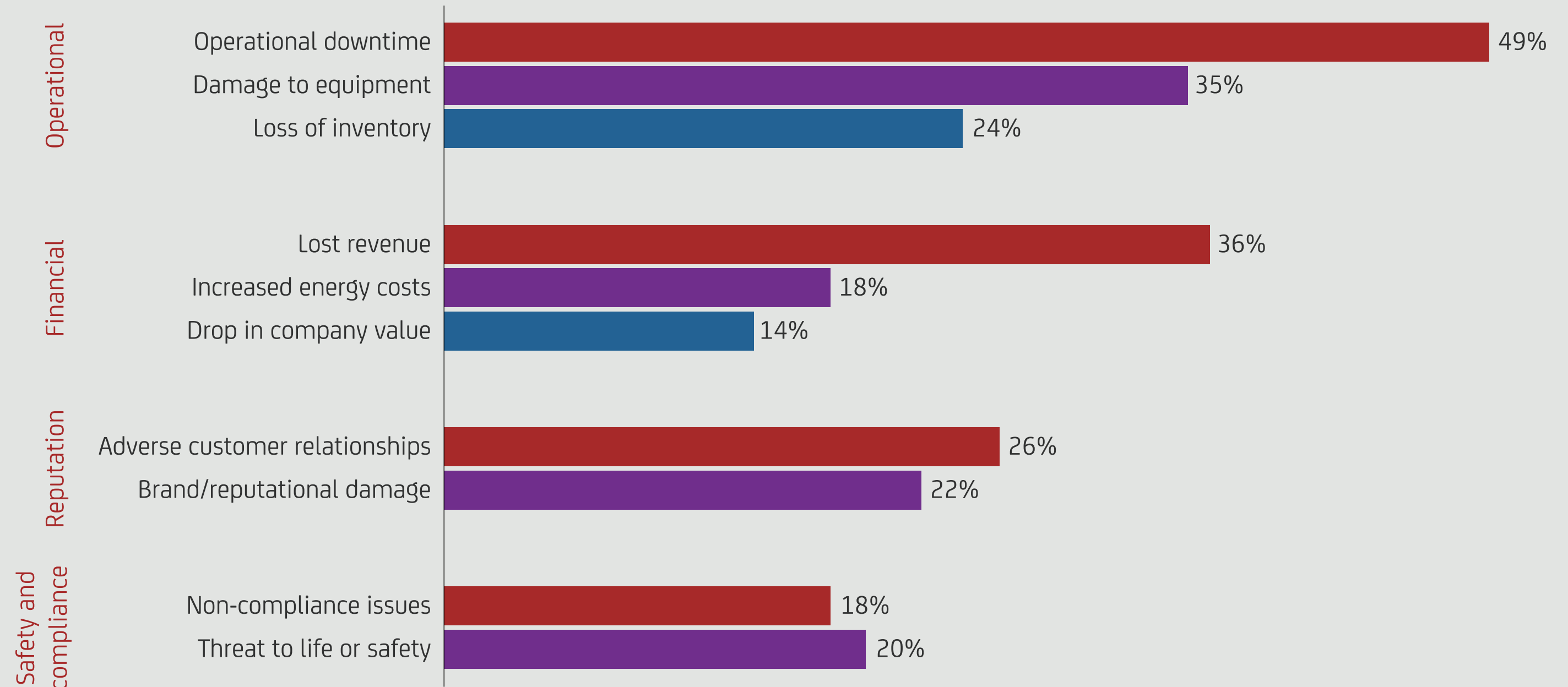
The huge impact of a power failure

Businesses estimate that, when both direct and indirect costs are taken into consideration, the cost of an energy-related failure can total as much as 26% of their annual revenues.¹

A power failure in a University environment can result in total disruption – from elevators and electronic dorm keys not working to wi-fi outages, data losses, equipment damage, and can even impact critical medical or lab facilities; impacting safety and productivity and could have long term brand impact.

1: (Source: Centrica Business Solutions Resilience Report)

The impact of energy-related failures



Base: all respondents experiencing an energy failure (335)

Q: Which of the following problems has your business experienced as a result of an energy-related failure?

Why every University needs an Energy resilience strategy

A comprehensive Energy Resilience strategy can protect businesses, including universities, from outages and market fluctuations

Our research shows a clear correlation between businesses that have a mature Energy Resilience strategy and positive business outcomes

A business with an energy strategy is:

24

percentage points more likely to report a strong financial performance

15

percentage points more likely to report a good brand reputation

27

percentage points more likely to consider themselves in a good position for future success

“

We have solar panels on four buildings, but are considering expanding this. We have to start generating our own energy and reduce dependency on the grid.”

Education, Campus Manager

69%

of businesses agree that the cost of building an Energy Resilience strategy is far less than the cost of an energy-related failure

Key Components to an Energy Resilience strategy

1

Understand energy usage environment

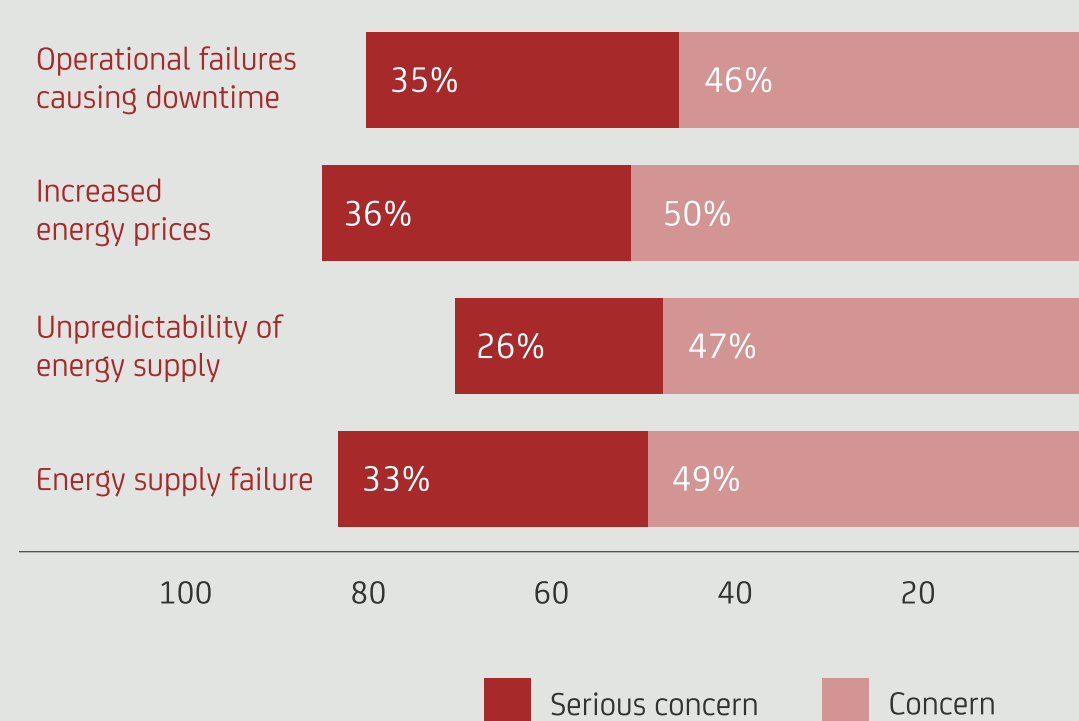
2

Access how the business reacts to power loss

3

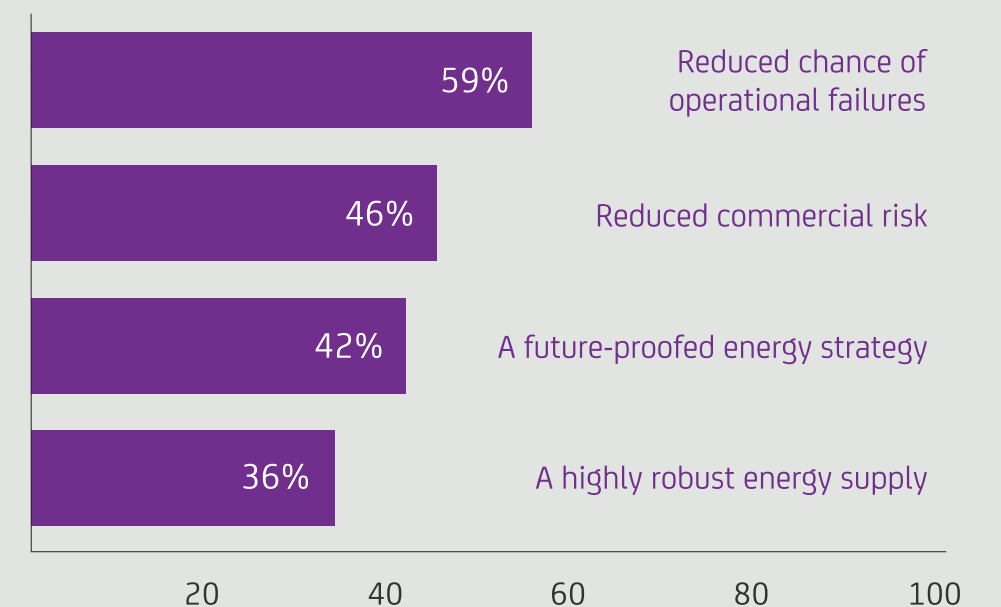
Design the Energy Resilience strategy accordingly

Business concern



Base: all respondents (365)
Q: To what extent are the following concerns for your business?

Energy Resilience strategy benefits



Base: all respondents (365)
Q: What do you think are the benefits of having a strong resilience strategy?

Powering Resilience

Ensure continuity
of supply

2nd
Largest battery
storage project
globally

Energy audits
On-site generation On-
site storage
Demand side response

Reduce
operational failure

50%
Reduction in
production faults
achieved by a
manufacturer

Panoramic Power alerts
Pro-active support
Operations &
maintenance

Minimise
commercial risks

Fixed
Payment
guarantees reduce
exposure to market
volatility

Account management
Commercial options
Neas platform

Strengthen
compliance with
regulations

Experts
in regulation,
compliance and
health & safety

Knowledge of regulation
Account management
Aggregation expertise
Insight solutions

Protect against
market change

£700
minvestment in
Distributed Energy
business

Breadth of expert
resources
Broad market insight
Deep enterprise expertise
Investment in new
technologies

New technologies for energy resilience

New energy technologies can help universities meet the challenging demands of growth and cost control by improving operational performance and strengthening resilience.



Combined Heat and Power



Energy Insights



Power Generation

