

# Smarter Consumer Protection Manual

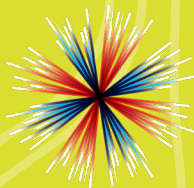


This is an interactive toolkit

Elements have roll over and clickable content to add more detail or help navigate to further information. You can use the arrow buttons to click through page by page or hover over graphics to see the link. You can use the navigation bar on the top of pages to move to each section.



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# Context

This manual has been prepared by the **Energy Systems Catapult's Consumer Insight team**, on behalf of the **Energy Revolution Integration Service**.

The purpose is to provide energy innovators with some structured techniques to help consider consumer protection as part of the design process for innovations in the energy sector.

The manual has been designed to be used either by an individual, or in a workshop setting, and if you would like support to facilitate a group session then please get in touch with the ERIS team using [eris@es.catapult.org.uk](mailto:eris@es.catapult.org.uk) and the Consumer Insight team using [peoplelab@es.catapult.org.uk](mailto:peoplelab@es.catapult.org.uk)

Other pages

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# About this manual

**This is a manual on how to design energy innovation** that has considered how to protect consumers, a vital aspect for developing successful business models, policies and products in a low carbon transition. The manual will introduce you to structured techniques that strengthen your ability to identify and address consumer protection concerns related to your energy innovation.

Its quick and simple to use and is intended to help people designing and delivering smart energy innovation in the UK. You do not have to be an expert in energy, your consumers or design thinking to use it.

It draws on expertise from the Energy Systems Catapult on how consumers use energy at home, and how they respond when energy innovation is designed, tested and used by them. In this manual we draw on we have learnt about consumer protection when we have trialled new ways of using and buying energy in a digitalised, decarbonised energy future.

The exercises are tried and tested methods, but the sequence and the purpose is new. The manual is about creating order from the intricate

and interrelated insights you may already have. This is best carried out in a group but all the exercises can also be done individually. It may also be about shining light on things you hadn't fully noticed but have always been there.

OFGEM have mentioned the importance of 'positive, inclusive innovation for all' and yet considerations about who can benefit from innovation is often overlooked or considered only in the final steps of implementation. To realise OFGEM's aspiration we need to consider consumer protection from initial design through to implementation. This manual will help you be ahead of that, making better energy innovation and a better experience for consumers.

## Other pages

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# Why consumer protection is essential to energy innovation

Decarbonisation will see new tech and services introduced to the energy system but the exact selection and combination of technologies and services isn't yet clear. We need to make sure that changes to the consumer experience does not put consumers at risk as a result.

Designing consumer protection can avoid a significant number of risks from ever materialising. There will be some changes in the consumer experience that we can be safe to assume: for instance consumers will need to switch to new providers and consumers will need to be able to compare between complex offers. Unintended consequences will still be a possibility so when designing complex systems we must build in ways that we can act quickly if new risks arise.

Other pages

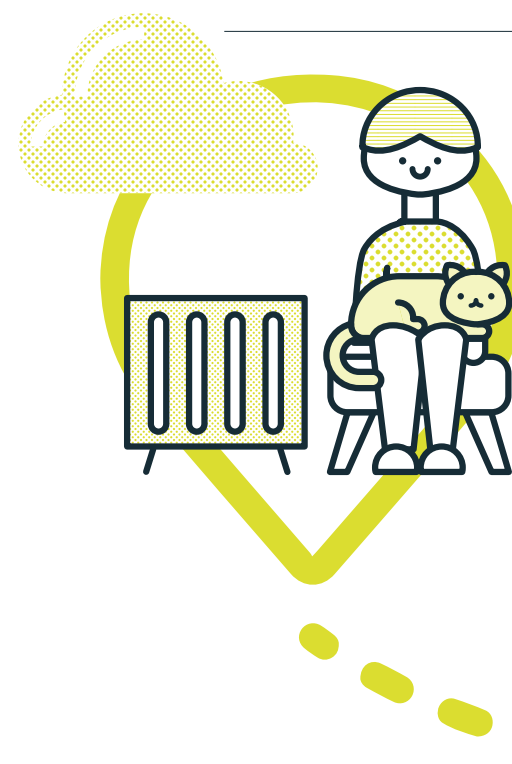
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Designing better protection for the future is challenging but domestic energy has some key characteristics that we need to bear in mind. For instance:

- It's a daily essential service that everyone needs at home
- Domestic use relies upon long-term, high cost multi-owner infrastructure
- There are existing problems with the equality of provision and distribution that make some consumers vulnerable

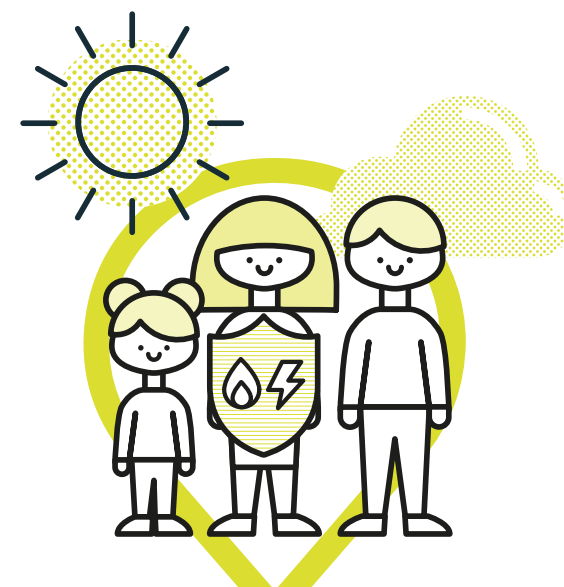
Other sectors, such as hospitality, retail and mobility, have seen rapid digitalisation in recent years with how, and what, consumers buy changing significantly. These sectors have learnt many lessons about how to design consumer protection well, and how to do it badly. There is a risk the energy sector could follow in similar footsteps and struggle with similar issues.

A critical review of the lessons learnt in other sectors and what the energy sector could learn can be found in recent work from ESC as part of the Smart System and Heat programme <https://es.catapult.org.uk/news/smart-energy-services-for-low-carbon-heat/>

However, as the sector has yet to see a significant level of disruption and digitalisation, there are opportunities to design innovation to reduce the consumer protection risks to deliver positive outcomes for consumers, innovators and regulators.

Armed with topics that consumers will need new protections in, innovators can explore where the consumer protection risks may be in their products and services. Through our work with consumers and innovators, we have identified that innovations need to allow consumers to:

- Understand what they are buying, what data they are sharing and how it is being used
- Get the experience that they want and that they have bought
- Understand how to diagnose a problem if they have any and where to go to solve their problems
- Compare different offers available to them and switch between them



Consumers will need to...

Know what they're buying

Get the experience they want

Get their problems fixed

Compare offers and switch

# How to use the Smarter Consumer Protection Manual

Other pages

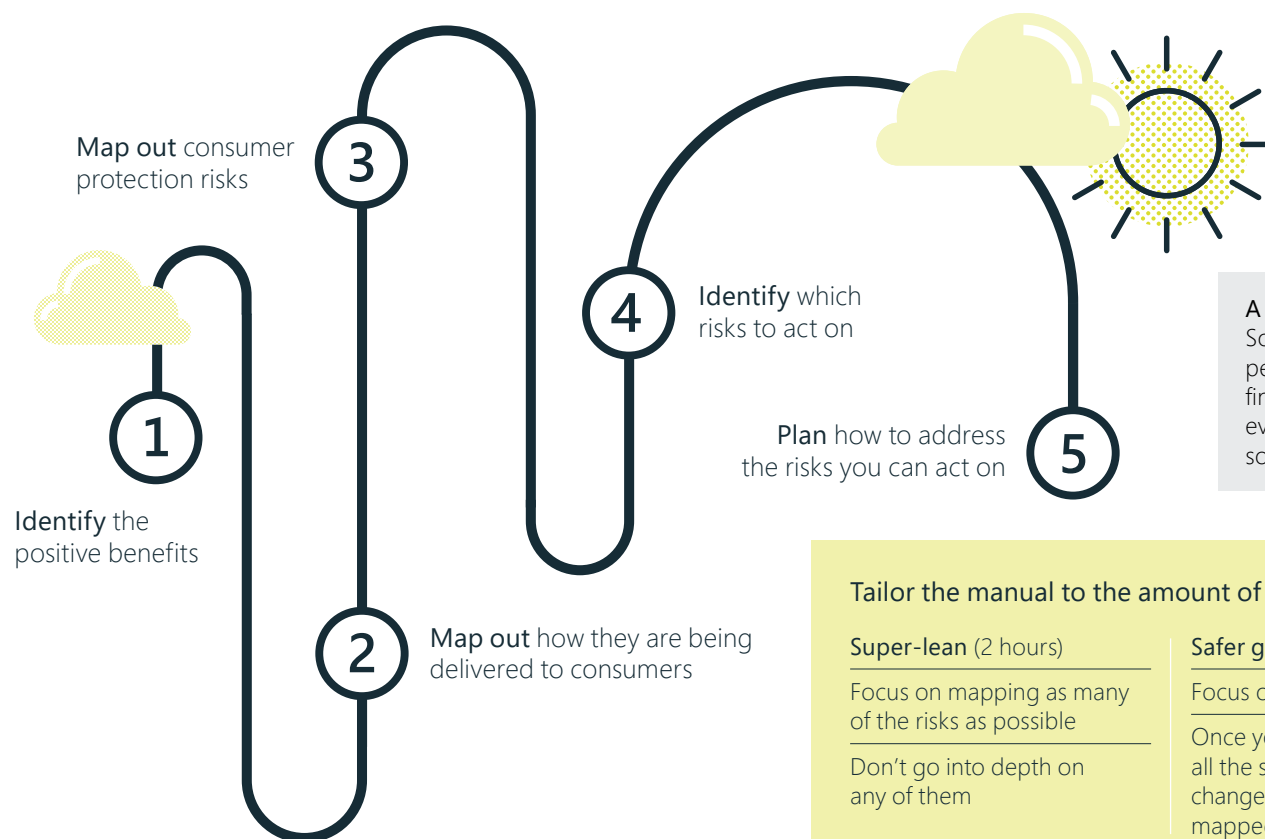
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## A problem shared is a problem halved!

So this manual is best tackled with a few other people on the journey with you. If you can't find any friends at the right time, don't worry everything can be done alone. Just try to get some feedback from others at a later date.



## Tailor the manual to the amount of time you have available...

### Super-lean (2 hours)

Focus on mapping as many of the risks as possible

Don't go into depth on any of them

### Safer ground (1 day)

Focus on steps 2 and 3

Once you've gone through all the steps, revisit and change or refine those you've mapped out in steps 3

### Best in class (2 days or more)

Document the results to share and discuss with others

Plan to pilot and test the solutions you have designed with real consumers



①

How will what you are doing benefit consumers?

①

# How will what you are doing benefit consumers?

This first step is designed to draw out what change you are trying to make and what impact the project is intending on having on consumers. You may have thought about this before, you may not have. You can start here whatever amount of thinking you've done before.

## What to do



- Individually write down the positive changes your energy innovation is intending on having on consumers or users.
- If you're working as a group, share your ideas with others in the group at this point.
- Consolidate your ideas into the top five positive impacts, for you or your group. From now on these are your most important or central impacts on your energy innovation.

**If you want to know more** about how you can learn about what your consumers want and the experiences they'll enjoy, Energy Systems Catapult's *Consumer Insight Method Map* has guidance on the methods you could use.

Whilst doing this exercise, think about the following questions



- Why would a consumer want this?
- How is this a benefit to the consumer specifically?
- What does it allow the consumer to do that they couldn't do before?
- What assumptions have you made about the consumers and the size or shape of their problem?
- How are these impacts likely to change as the future energy system changes? Will these benefits only be realised in the future?
- What evidence do you have that consumers want this?

**Think about how much the consumer needs to understand in order to see the value.**

②

How will consumers know about these positive impacts?

②

## How will consumers know about these positive impacts?

It can be hard to see through the eyes of people who aren't familiar with your innovation and how the energy system works. In this second step you are going to breakdown how you are trying to have a positive impact on your consumers.

### What to do



- Take each of the five positive impacts and answer the following questions about each of them.
- Initially do this for what you are planning to do and then, taking a different colour pen or post-it note, do this for what you conceivably could do.

**Positive Impacts Chart**

○ Take each of the five positive impacts and write them into the impact column on the chart.

○ Answer the respective questions on the chart with regards to what you are planning to do and what you conceivably could do.

○ Taking a different coloured pen or post-it note, answer the questions again with a view to what you conceivably could do.

Impact	When	How	Who

This is a blank version for post-it notes, as well.

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### Questions to think about in each section



- **HOW will they know about this impact?** Through the initial terms and conditions, through the initial contract, through each bill, they receive?  
How will consumers be able to contact someone regarding the benefits — phone, etc? Will it be easily available to them if they need to refer to it again?
- **WHEN will you tell consumers about these benefits?** At the start of the offer? During their experience? Regularly? When they ask/request it? Before they've used it?
- **WHO will it come from?**  
The organisation providing the bill, a support agency, a third party?
- **WHERE will they get this information from?** In person, through a smart phone app, in an email, on their monthly bill, by post?



# Positive Impacts Chart

- Take each of the five positive impacts and write them into the Impact column on the chart.
- Answer the respective questions on the chart with regards to When? How? and Who? and your plans for each impact.
- Taking a different coloured pen or post-it note, answer the questions again with a view to what you conceivably could do.

Impact	When	How	Who

This is a blank version for you! Write on me!

③

What are the consumer protection risks?

③

## What are the consumer protection risks?

Now that you have identified what you would like to see happen, you are going to identify what risks consumers might need protecting from. The structure of this exercise is designed to support thinking about risks across the range of consumer interactions.



### What to do



- Spend a short amount of time individually writing down what you think are risks to consumers. Include those you are well aware of and those that are on the fringes of possibility. This is your only opportunity to be as negative as you can be! Worst case scenarios are welcome (a post-it note or four might come in handy here!).
- Share your risks in turn with the rest of your group and refine until you have one set of risks written clearly. You don't all have to agree to each one. This is about mapping out as large a potential range as possible.

③

What are the  
consumer  
protection risks?

## Use the questions below as prompts at any point in the discussion

- What could this innovation mean for community organisations and partnerships in the area?
- What could this innovation mean for the consumer's experience of buying and using energy?
- What could this innovation mean for identification of vulnerable households?
- What could this innovation mean for the data that a consumer is sharing?
- What could this innovation mean for the amount of personal and sensitive data held about the consumers?

- What could this innovation mean for the data that a consumer is sharing? How could this be a positive, easy process for the consumer?
- What would this innovation mean for the amount of personal and sensitive data held about the consumers? How could you minimise the risk to the consumer of misuse?
- What would happen if a consumer misunderstood the service that they had signed up for at the start and realised as they began to use it?



4

How do these risks affect the consumer experience?

4

# How do these risks affect the consumer experience?

Making sense from a lot of ideas can be hard, so this step is intended to help you to categorise your consumer protection risks into different areas.

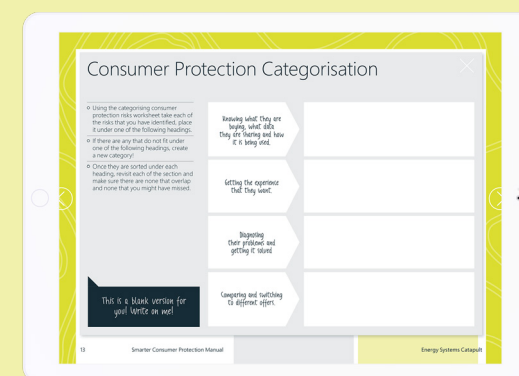
Through our work with consumers and innovators, we have identified the following key things that consumers will need to be able to do in a smart energy future:

- Consumers need to understand what they are buying and how their data is being used to provide that offer.
- Consumers need to know what to do if they are not getting the experience they want.
- Someone will need to know how to diagnose what caused any problems consumers are experiencing.
- Consumers will need to be able to compare different offers and switch between them, for instance if their problem is not solved.

## What to do



- Use the worksheet to categorise each risk you have identified.
- If there are any that do not fit under one of the following headings, create a new category!
- Once they are sorted under each heading, revisit each of the section and make sure there are none that overlap and none that you might have missed.



# Consumer Protection Categorisation

- Using the categorising consumer protection risks worksheet take each of the risks that you have identified, place it under one of the following headings.
- If there are any that do not fit under one of the following headings, create a new category!
- Once they are sorted under each heading, revisit each of the section and make sure there are none that overlap and none that you might have missed.

Consumers need to understand what they are buying and how their data is being used to provide that offer.

Getting the experience that they want.

Diagnosing their problems and getting them solved

Comparing and switching to different offers.

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⑤  
Which consumer  
protection risks  
can you address?

## ⑤ Which consumer protection risks can you address?

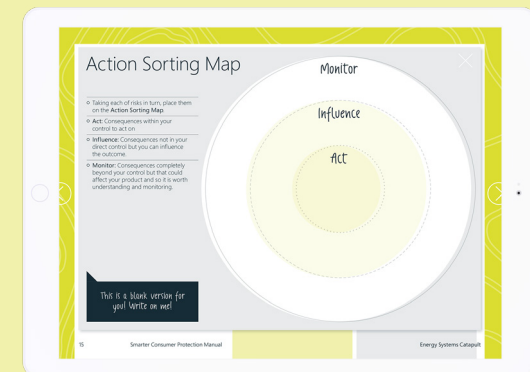
Not all risks will be within your direct power to do something about, and this step is designed to help you to prioritise. Most innovations will be designed and delivered by a diverse range of organisations, from product manufacturers to social housing providers to energy suppliers to heating engineers. This exercise should be approached with as many of your stakeholders in mind as possible.

This activity was inspired by Doteveryone's Consequence Scanning materials found at <https://www.tech-transformed.com/product-design/> — a great place for more information on how to be a responsible tech innovator!

### What to do



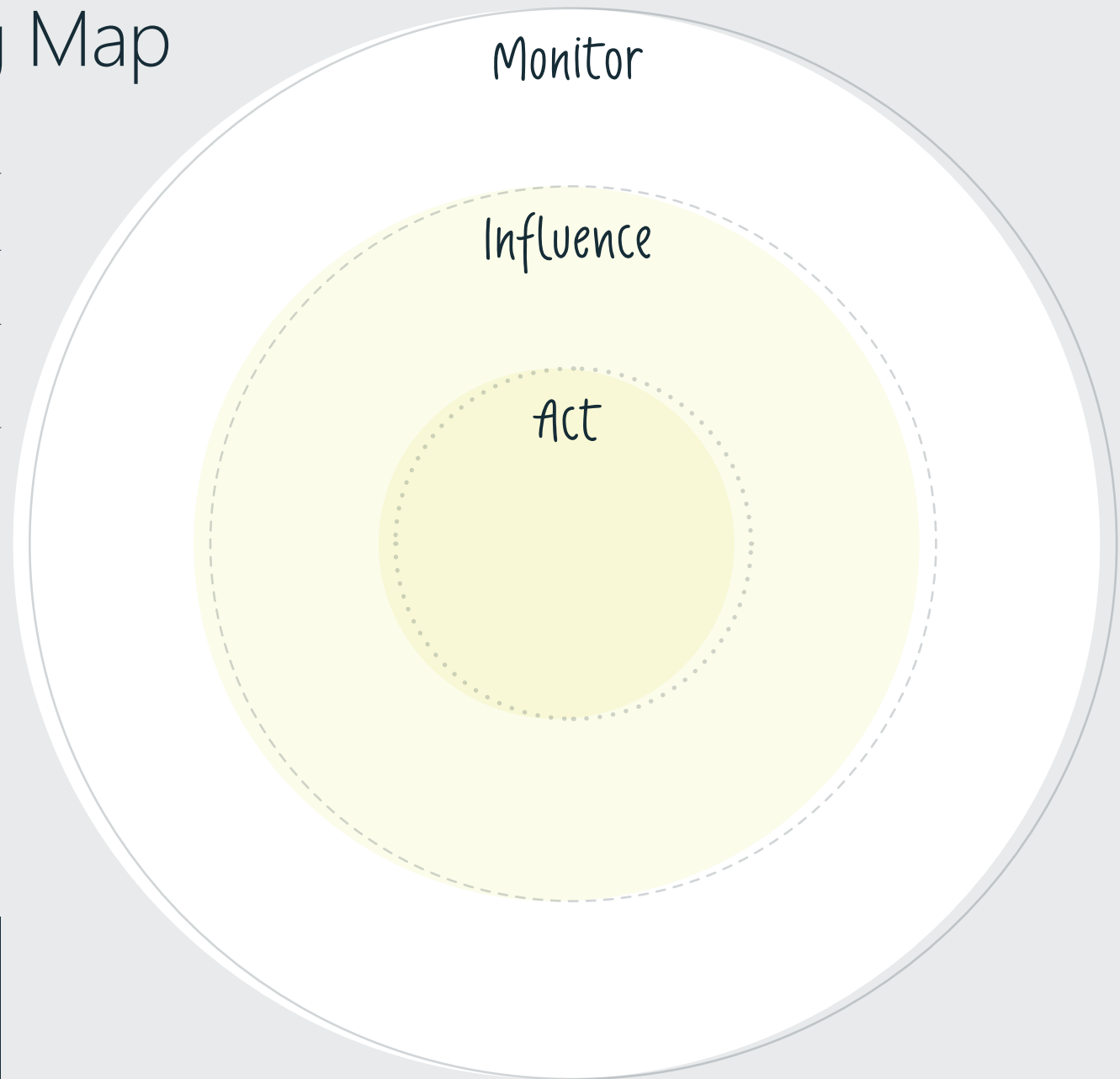
- Taking each of the risks in turn, place them on the **Action Sorting Map**.





# Action Sorting Map

- Taking each of the risks in turn, place them on the **Action Sorting Map**.
- **Act:** Consequences within your control to act on
- **Influence:** Consequences not in your direct control but you can influence the outcome.
- **Monitor:** Consequences completely beyond your control but that could affect your product and so it is worth understanding and monitoring.



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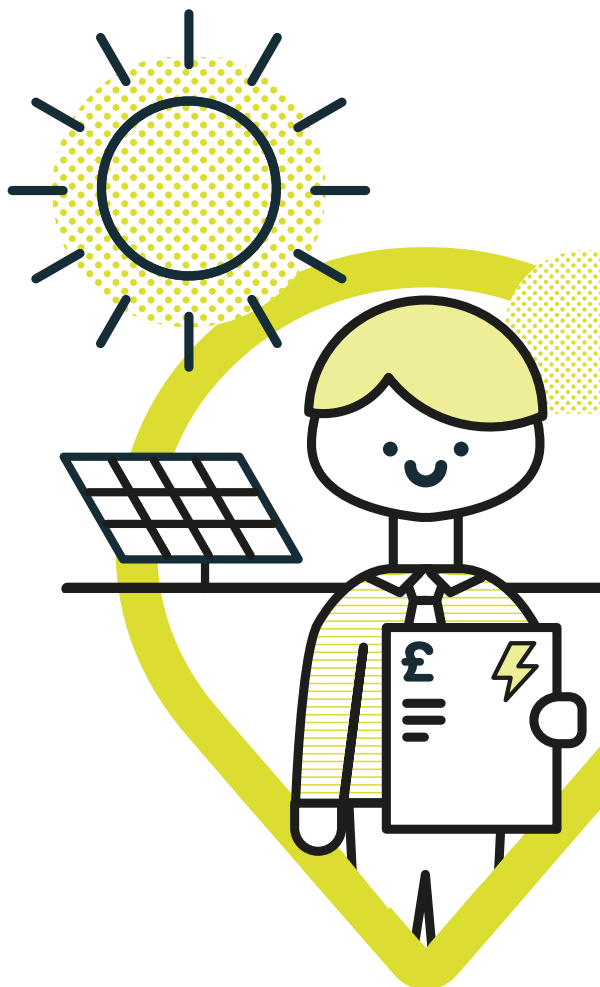
⑥

What are the main components of each risk?

⑥

# What are the main components of each risk?

It is easier to manage risks if you think about what is causing them and who might be affected. This step will break down the risks you identified as ones you can act on in Step 5 into key components: what the risk is, who it affects and how it affects people.



## What to do



- Write your top three risks in the first row of the diagram.
- Taking each question, one risk at a time, answer each of the questions about the effects of the risk.

Risk Breakdown

Write each of your risks into one along the top of the diagram.

Taking each question, one risk at a time, answer each of the questions about the effects of the risk.

Write the top three risks you identified as ones you can take action on at the top of each column.

Question	What is causing it?	Who might that affect the most?	How does it affect them?	Value?	Potential of risk? (Low, medium or high?)

This is a visual version for you to write on.

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# Risk Breakdown

Write the top three risks you identified as ones you can take action on at the top of each column.

- Write each of your risks one by one along the top of the diagram.
- Taking each question, one risk at a time, answer each of the questions about the effect of the risk.

Question			
What is causing it?			
Who might this affect the most?			
How does it affect them?			
When?			
Magnitude of risk? Low, medium or high?			

This is a blank version for you! Write on me!

7

Create solutions for how you can protect consumers from the risks

7

# Create solutions for how you can protect consumers from the risks

There may be many ways to protect consumers. Simple changes could improve your innovation.

## What to do



- Taking each of your answers in the **Consumer Protection Risk Breakdown Worksheet**, ask the question: could I and do I want to change this?
- Individually for each risk and its associated answers, brainstorm as many possible solutions to it as possible. So for instance, could you work with different consumers? Or could you create a bill at a different time?

## When doing this exercise decide whether you are intending to:

- **Lead the change** – do you want to set the direction for how consumers are protected?
- **Follow fast** – do you want to wait for others to find out how to protect consumers then copy what they're doing quickly.
- **Manage for the present** – do you want to do something about this to keep major problems at bay?

## These prompts may help you to think about a solution



- Have you designed processes so you can react to problems that arise quickly?
- What do I need to deliver this solution? (e.g. do consumers need to trust that we are trying to help them?)
- How have you taken account of consumers' opinions?
- Will it affect reliability of supply?
- Who does the business need to provide this (reassurance or proof) to?
- Does this change the responsibilities of any of the organisations/bodies/ stakeholders involved?

Energy Systems Catapult was set up by Government to accelerate the transformation of the UK's energy system and ensure UK businesses and consumers capture the opportunities of clean growth. The Catapult is an independent, not-for-profit centre of excellence that bridges the gap between industry, government, academia and research. We take a whole systems view of the energy sector, helping us to identify and address innovation priorities and market barriers, in order to decarbonise the energy system at the lowest cost.