

A group of diverse people in a meeting. A woman in the foreground is pointing at a whiteboard with a pen. In the background, a man with glasses and a beard is looking at the whiteboard, and another man is smiling. The scene is brightly lit with colorful sticky notes on the wall.

CIFAR

AI FUTURES

Policy Lab Facilitator Guide



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TABLE OF CONTENTS

INTRODUCTION	1
GUIDING PRINCIPLES AND TIPS	2
MATERIALS	2
SET UP AND AGENDA	3
SUPPLEMENTARY MATERIALS	3
CANVAS 1: The Big Picture (~45 min)	4
ACTIVITY: Examining AI Tomorrow (~30 min)	8
CANVAS 2: Taking Action Today (~45 min)	11
DISCUSSION: Shuffle and Share (~30 min)	15

Introduction

In 2018, CIFAR's AI & Society Program, in partnership with the Brookfield Institute for Innovation + Entrepreneurship (BII+E), launched a series of five AI Futures Policy Lab workshops to engage policy innovators in conversations about the public policy implications of artificial intelligence (AI). This series brought together over 125 policymakers from across Canada to learn about existing and potential AI capabilities and applications, explore the policy implications of AI, and develop policy responses.

This guide is designed to help facilitators host AI Futures Policy Labs. It provides you with step-by-step instructions for guiding participants through each of the workshop activities. The workshop activities focus on case studies of real-life AI applications. Participants, in small breakout groups, will analyze their case study through a series of questions and facilitated discussion. The discussions will be aided by informational videos featuring leading Canadian AI experts who will showcase the key facts and issues in AI technology and public policy.

Through this workshop, participants will learn to think about how AI and emerging technologies are affecting society, how public policy can be used to respond to AI-enabled technologies, and what public policy actions can be used to maximize the benefits of AI for society. This guide draws on past AI Futures Policy Labs, structured as full-day workshops, but is designed to be flexible. Participants are encouraged to tailor these activities to suit their needs and time restrictions, making activities longer or shorter as needed.

Facilitation Guiding Principles and Tips

- Create an engaging and participatory environment: acknowledge that everyone has important and relevant insights to share, and that the level of familiarity with the topic will vary. Encourage everyone to be an active participant.
- Ensure there are 5-7 people per breakout group to enable participation and diversity of perspectives.
- Guide participants through the materials rather than actively participating in the conversations. Facilitate active and deep conversations.
- Keep time to ensure all material can be covered in the time allotted.
- Maintain an open and relaxed atmosphere. Encourage participants to be open-minded and think creatively about the opportunities and challenges, and to accept new perspectives.

Materials

For these activities you will need:

- Pens and markers
(at least one of each per person)
- Sticky notes
(at least one block per person)
- Masking tape and/or sticky tack
- A timer/stopwatch



- ↓ [Canvas 1: The Big Picture](#)
(one per group)
- ↓ [Canvas 2: Taking Action Today](#)
(one per group)
- ↓ [Shuffle and Share templates](#)
(one per person)

Set Up and Agenda

To facilitate the Policy Lab activities, real-life AI applications will be used as case studies. You may choose to use one of the case studies outlined in the [Case Study Bank](#), or use one of your own. Using real-life examples is important to share what AI technologies are being used for, and to facilitate a conversation that is grounded in facts.

The activities that are part of the AI Futures Policy Lab require sufficient space to facilitate breakout groups and enable the groups to work independently. To start, post the first canvas, [The Big Picture](#), on the wall, one for

each planned breakout group. Ensure they are posted in an area that is visible and accessible to all group members. It is recommended that the first canvas still be visible throughout the following activities to serve as a visual aid and prompt discussion.

Our agenda template will provide you with an overview of how an AI Futures Policy Lab can be structured, and suggested time allotment for each activity. This agenda is based on the full-day workshop model, but facilitators are free to tailor the activities according to their needs and resources.



[↓ Case Study Bank](#)



[↓ BII+E AI for Policymakers Primer](#)

[↓ Algorithmic Impact Assessment](#)

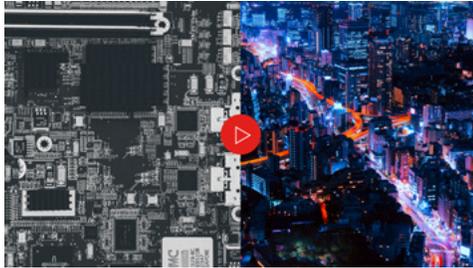


canvas 1

THE BIG PICTURE
[~45 MIN]

Primer Video (~15 minutes)

Familiarize participants with AI-enabled technology, its applications, and relevance to policy by playing the following videos for the group:



WHAT IS AI?



HOW DO WE USE AI?

Activity Goal

This activity is designed to help participants understand the larger public policy context in the present. **Part one** asks participants to think about stakeholders who will be affected at the local, regional, and global levels. **Part two** asks participants to identify the broader effects of the case study by thinking about the social, technological, economic, environment, and political implications.

By the end of the activity, participants should have a more holistic understanding of how the world would be affected by this technology.

Facilitator Instructions

- 1 Organize participants into small groups (5-7 participants is recommended).
- 2 Provide a case study of an AI application to each group and ask one participant to read it aloud.
- 3 For this activity, you will need [The Big Picture canvas](#). Write the name of the case study at the top of the canvas.

Discussion prompts:

1. What excites you about this topic?
 - The technology?
 - The application domain?
 - The potential?
2. What concerns you about this topic?
 - Who is affected, and how?
 - What aspects of their lives are being affected?
3. Is there anyone explicitly named in this case study who would also be affected?
4. What are some positive and/or negative effects for each of these groups?

PART 1:

How is this affecting people?

1 Have the groups answer the first canvas question: **How is this affecting people?** The goal of this activity is to identify what stakeholders will be affected by AI applications presented in this case study, and in what ways.

2 Ask participants to write out the names of all stakeholder groups individually on sticky notes (one stakeholder per sticky) and place them on the canvas in the **Stakeholders** section.

3 Engage the group in a discussion about the findings by reading out each stakeholder group.

Discussion prompts:

1. Are these groups new, growing, shrinking or extinct?
2. What other groups have we missed?
3. Are there groups you hadn't thought about before?

Some examples:

- Businesses: Multinational, local, supply chains
- Labour groups: highly skilled, low skilled
- Socioeconomic status: wealthy, middle and working class, and/or impoverished communities
- Non-profits and charities (what "causes" are new or extinct)
- Advocacy groups: unions, associations
- Cities, regions, or countries
- Public institutions: agencies, governments, universities
- Common interests and hobbies
- Faith and cultural communities

4 Ask the participants: What are the positive and/or negative effects of AI applications in this situation? At this stage, participants should think about how each of the stakeholders would be affected by this case study, both positively and negatively.

Repeat the same process above by having participants provide individual responses on sticky notes (one effect per sticky), adding them to the canvas to the "Positive" or "Negative" section, and then engaging them in a group discussion

Discussion prompts:

1. If this technology continues to advance, what might it look like a year from now?
2. Are there different ways that the technology could evolve (both positive and negative)?
3. Are there any stakeholders on the canvas that were not captured in these positive/negative effects?

PART 2: How is this affecting the world?

1 Move participants to the next question: **How is this affecting the world?**

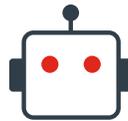
At this stage, participants should think about how this case study would impact the world more broadly, at a higher-level. The goal of this activity is to identify broader societal effects and implications that this case study will have.

Participants should use the **STEEP**V prompts to guide their thinking:



S > SOCIAL

What social effects will this have on society? How will this affect people?



T > TECHNOLOGICAL

What implications will this have on technology?



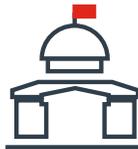
E > ENVIRONMENTAL

What effects will this have on the environment? Are there implications for climate change?



E > ECONOMIC

How will this affect the economy, at the regional, national or global scales?



P > POLITICAL

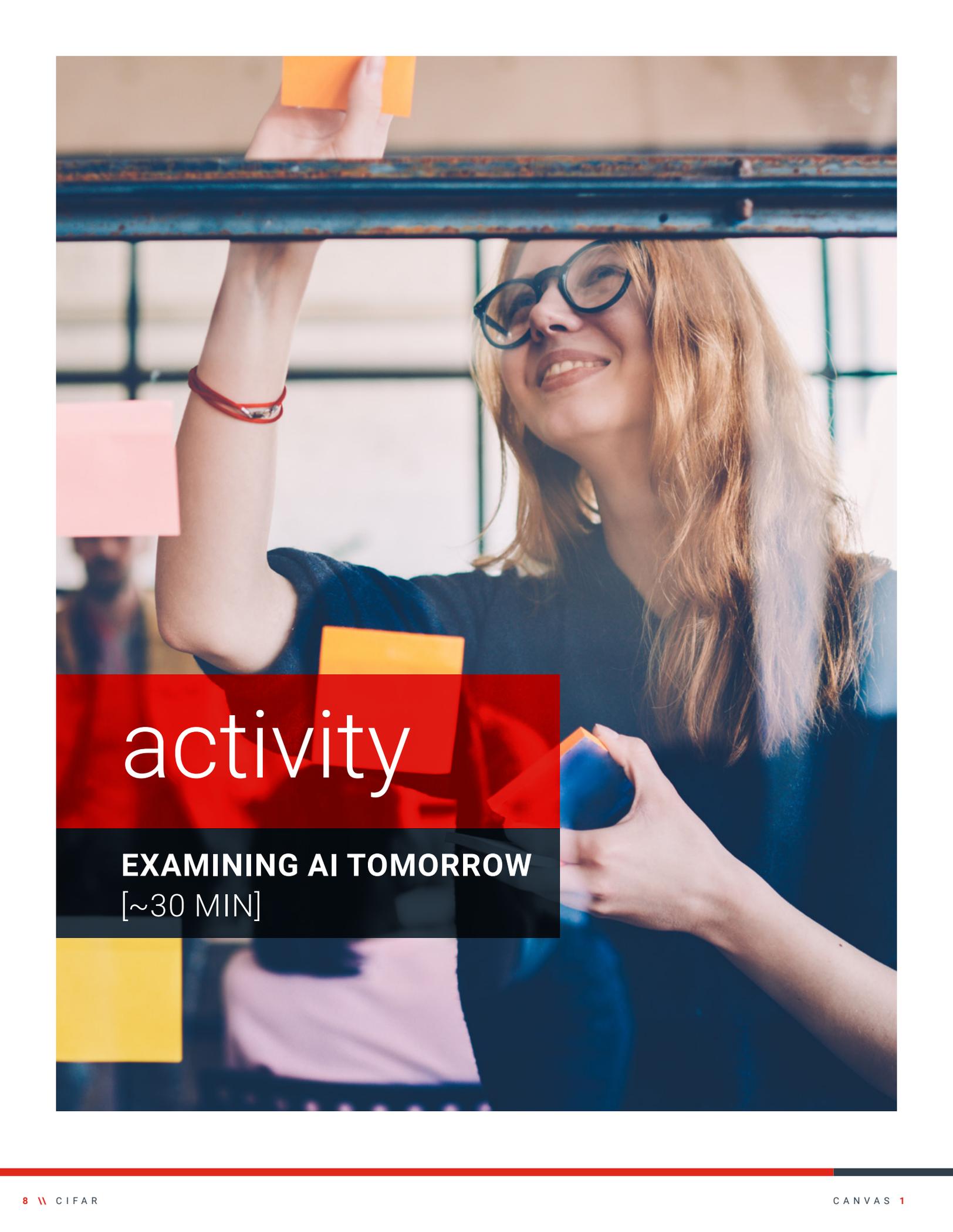
What are some political considerations?



V > VALUES

What implications does this have for our values as a society?

2 Engage participants in a discussion about the findings.



activity

EXAMINING AI TOMORROW
[~30 MIN]

Primer Video (~ 12 minutes)

Before the next activity, familiarize participants with the societal issues surrounding AI by playing the following video:



POLICY CHALLENGES

Activity Goal

This activity is designed to build on the insights gained in the first activity and to facilitate thinking about future scenarios. It asks participants to expand their thinking from the first activity to think about how the effects they have already identified might develop in the near future. They should think about both the positive and negative future implications.

Facilitator Instructions

- 1 Ask groups to reflect back on the first activity. What was most striking? What was most concerning? What major benefits and opportunities exist? The goal of this process is to brainstorm possible future scenarios and their impacts as a group, using the case study AI application as a foundation.
- 2 Ask the group: In approximately five years' time, how do you imagine this AI application could develop? What about ten years?
- 3 Give the group a few minutes to write down their thoughts on sticky notes (one idea per sticky note). First, the best-case scenario for this AI application in five years, then the worst-case scenario for this technology in five years. Ask participants to place their sticky notes up in a central location, such as the centre of a table or up on the wall.
- 4 Read answers out to the group, clustering the best and worst scenarios together as you go. Engage the group in a discussion about the suggestions. Use the facilitator prompts to frame and direct discussion. (see next page)

Discussion prompts for participants:

- 1 How could this AI application develop in the future? What seems too out there? What's too conservative? What else could you imagine happening in this area in the future?
- 2 Is this future exciting?
 - The technology?
 - The application domain?
 - The potential benefits this technology affords?
- 3 What concerns you about this possible development? Who would be affected, how?
 - What aspects of their lives are being impacted?
 - How will society be impacted? What will change?
- 4 What are the positive and/or negative effects experienced by different groups and individuals?
 - How would this affect stakeholders? Are we seeing the emergence of new types of groups? Would groups which exist today grow in size, shrink, or become extinct?
 - *Some prompts:*
 - Businesses: Multinational, local, supply chains
 - Labour groups: highly skilled, low skilled
 - Socioeconomic status: wealthy and/or impoverished communities
 - Non-profit organizations and charities (what "causes" are new or extinct)
 - Advocacy groups: unions, associations
 - Cities, regions, or countries
 - Public institutions: agencies, governments, universities
 - Common interests and hobbies
 - Faith and cultural communities
 - What other groups have we missed?
- 5 What other effects does this scenario have on the local and global levels?
 - These can be both positive or negative.
 - *Some prompts:*
 - Legislation
 - Infrastructure
 - Democracy
 - Trust
 - Public Investment
 - Public discourse
 - Taxation and revenue
 - Social mobility
 - Civil service
 - Service delivery
 - Healthcare
 - Health promotion
 - Urban/regional planning
 - Defence
 - Education
- 6 What policy domains could be affected? How are they different from the current AI application?
- 7 What new opportunities and/or challenges are presented by this technology's growth?
- 8 What would a future look like without this AI application? Is this future better or worse than a future without AI?



canvas 2

TAKING ACTION TODAY

[~45 MIN]

Primer Video (~9 minutes)

Familiarize participants with some of the major considerations in developing public policy on AI applications by playing the following video:



POLICY OPTIONS

Activity Goal

This activity is designed to facilitate thinking about actions that actors can take today to respond proactively to these future implications. **Part one** asks participants to identify the key positive opportunities and key negative consequences that would result from this technology. **Part two** asks participants to determine what public policy mechanisms could enable the positive opportunities and mitigate the negative consequences identified in part one. *By the end of this activity, participants should develop a list of actions and public policy options that can be put into practice.*

Facilitator Instructions

PART 1: What are the major opportunities and challenges?

- 1 For this activity, you will need the [Taking Action Today](#) canvas. Write the name of the case study at the top of the canvas.
- 2 The goal of this process is to identify the key opportunities and challenges that this case study presents for society and for policymakers.
- 3 Prompt the group to start answering the first question on the canvas: What are the major opportunities and challenges?
 - Have each participant answer the question on their own first, using sticky notes and putting them up on the canvas as they go. Encourage participants to think both about the short-term (within the next few months to years) and longer-term goals (within the next few years to decades) and place their sticky notes accordingly along the line on the canvas.
 - Engage participants in a group discussion about the findings.

Facilitator Instructions

PART 2: What policy actions could help?

4 Using the ideas from part one as their prompts, ask each participant to come up with policy options (interventions) that could help achieve the key opportunities and respond to the key challenges identified in the first part of the activity. The goal of this process is to identify potential actions that governments or other actors could take in order to achieve the listed opportunities or to mitigate the listed risks.

You may wish to have participants generate as many options as they can, then prioritize and select, or have each participant come up with a single idea. Each idea should be written on a sticky note and placed in the **Options** area under the **What policy actions could help?** section

5 Read each idea aloud, enabling the group to reflect on the benefits and concerns about each idea. Encourage them to ask questions and build off of one another's ideas.

6 After 30 minutes or so, or when the group has reached consensus/run out of ideas, have each participant fill out the **Shuffle and Share** template to use as the basis for the Shuffle and Share discussions at the end of the day.

Discussion prompts for participants:

1. What are the most important positive and negative implications of this AI application today?
 2. What interventions are already in place? How well are they working?
 3. What interventions are missing?
 4. How might government...
 - Provide stewardship?
 - Lead, influence and/or inform?
 - Procure, purchase and/or use its buying powers?
 - Provide and commission services?
 - Fund, tax, tariff and/or subsidize?
 - Regulate?
 - Implement laws?
 - Launch programs?
 - Partner with other organizations from other sectors?
- If the group gets stuck, refer to the **Styles of Government Intervention** on the *next page* to prompt thinking.

Styles of government intervention

Examples of different formal and informal powers and levers for government policy-makers

		EARLY STAGE INTERVENTION	FRAMING, PILOTING AND MARKET FORMING	SCALING, MAINSTREAMING AND MARKET BUILDING	ACTING IN MATURE MARKETS AND POLICY ECOSYSTEMS
GOVERNMENT AS A...	STEWARD	CHAMPION Build a case for change and alliances for action.	CONVENING POWER Applying government's convening power to draw together expertise.	CONNECTING NETWORKS Fostering a nexus where government, experts and citizens can co-create change.	CO-PRODUCING Co-deliver by steering different actors from across the system to deliver outcomes.
	LEADER	AGENDA SETTING Build awareness and confidence in new opportunities by providing thought leadership	STRATEGY AND SKILLS PLANNING Prepare for changing workforce demands and consequences of change.	EDUCATING AND INFORMING Ensure regulation is sufficiently agile and permissive to enable innovation.	COLLABORATING Providing platforms for citizens to protect vested rights and interests.
	CUSTOMER	CATALYST Review, identify and prioritise key opportunities with strategic value.	STANDARD SETTING Develop standards for data collection and presentation.	INTELLIGENT CUSTOMER Utilise public procurement to encourage investment and innovation	CONSUMER AND SUPPLY-CHAIN PROTECTION Protection of consumer rights and upholding of standards.
	PROVIDER	INNOVATOR Create test beds, sandboxes and trials in real world settings.	REFORMER Establish legitimacy, harnessing political will for change.	SERVICE PROVIDER Provide services directly or indirectly through funding and target setting.	CHOICE ARCHITECT 'Nudging' behaviour so that the default is both attractive and easy.
	FUNDER	EARLY ADOPTER Explore, experiment and trial new opportunities with strategic value.	FISCAL INCENTIVES Direct finance to stimulate new thinking that can drive future opportunities.	GRANTS AND SUBSIDIES Incentivise behaviour change through grants or other incentives	PLATFORM PROVISION Scale up proven ideas through existing infrastructure and public services.
	REGULATOR	ENCOURAGE VOLUNTARY CODES Self-regulation, without legislating, allowing for greater flexibility.	GOVERNANCE Ensure regulation supports the conditions for change and delivers the policy intent.	BUILDING REGULATORY ENVIRONMENT Ensure regulation enables the intended policy outcomes.	COMPLIANCE Support enforcement and harmonise regulatory compliance environment.
	LEGISLATOR	GREEN PAPERS Publish proposals for discussion with stakeholders and the public.	WHITE PAPERS & DRAFT BILLS Publish proposals for consultation and pre-legislative scrutiny.	PRIMARY AND SECONDARY LAW Support a bill through parliament and enact legislation	AMEND RULES Statutory Instruments: rules, orders, created by delegated authorities (e.g. Secretary of State).

Source: <https://openpolicy.blog.gov.uk/2017/09/22/designing-policy/>

Optional Extension Activity

Following the [Taking Action Today](#) activity, have participants work through the [Government of Canada's Algorithmic Impact Assessment tool](#) to help them assess the societal impact of their recommendations and discuss options for risk management.

A woman with short curly hair, wearing glasses and a yellow turtleneck, is looking at a tablet. She is in a meeting room with other people and sticky notes on the wall. The background is slightly blurred, showing a modern office environment with large windows and indoor plants.

discussion

SHUFFLE AND SHARE
[~30 MIN]



Facilitator Instructions

- 1 Have participants take their **Shuffle and Share** recommendation template from the last activity and join another group. Each new group should include at least one representative from each of the other groups. The goal of this activity is for participants to learn about other case studies from other participants, and to learn from their insights.
- 2 At the table, participants should each take 2-3 minutes to introduce themselves to the table and, using the recommendation template as a guide, share:
 - The case study their group worked on
 - Some of the key challenges and opportunities
 - Their top three policy recommendations from the last activities

Questions from the other participants are encouraged.

- 3 Facilitate an open discussion amongst the table members (if time allows) around some of the common themes that emerged across tables, such as common interventions, challenges and opportunities

Optional Extension Activity

Red Teaming: This technique works best when the workshop consists of multiple discussion groups. Following the **Taking Action Today** activity, instead of the **Shuffling and Sharing** activity, each group nominates one representative to share their case study and recommendations with another group. The representative shares the group's recommendations and solicits constructive feedback from the new group members (gets "red teamed"), who identify potential risks or areas of weakness in the policy recommendations. The goal here is that the participants from another group can bring their own perspectives to improve policy recommendations.

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