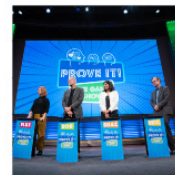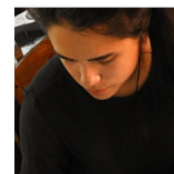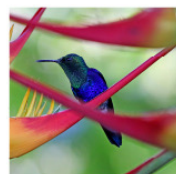# Evaluating Behavior Change Programs
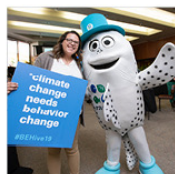
December 8, 2022

Behavior change & climate philanthropy series

December 7

- 10:00-11:30am ET: Behavior-Centered Design & climate philanthropy
- 2:00-3:30pm ET: Framing the challenge: Systems thinking & behavior change

December 8

- 10:00-11:30am ET: Evaluating behavior change programs
- 2:00-3:00pm ET: Making the case for behavior change

March 2023

- Funders' roundtable

Training Objectives

- Understand the importance of incorporating behavior change into your theory of change

- Practice assembling a psycho-social theory of change

- Describe different types of indicators for measuring behavior change programs

- Connect with other funders about using behavior change principles in their climate programs

Agenda

1. Welcome and introduction
2. Evaluating behavior change
3. Program logic: Psycho-social theories of change
   ~Quick break~
4. Developing indicators
5. Tool spotlight: Evaluating behavior change programs
6. Closing

Rare inspires change so people and nature thrive.
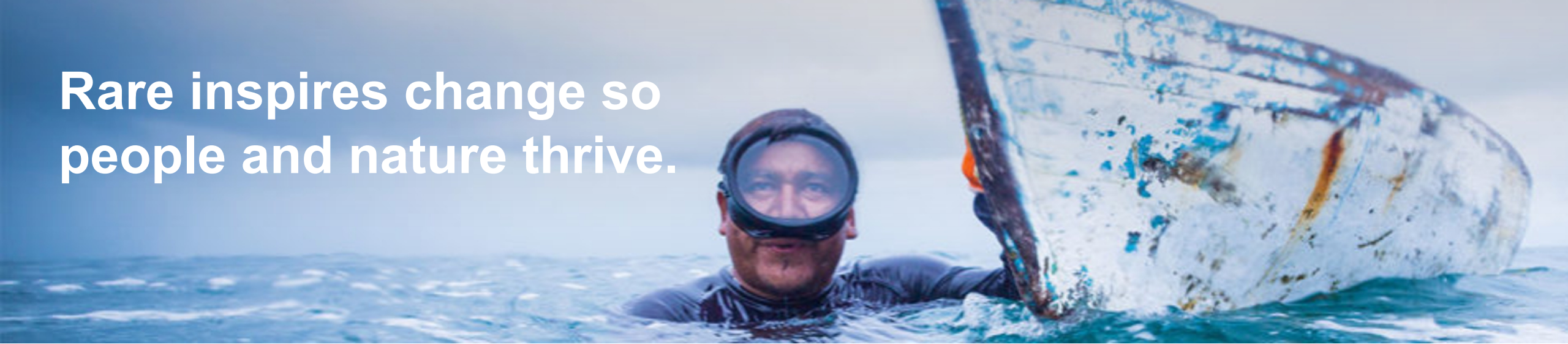
Rare has run nearly **500** behavior change campaigns in more than **60** countries

Rare's behavior change campaigns, on average, increase adoption by **18 percentage points**

18pp

CENTER FOR BEHAVIOR & THE ENVIRONMENT

Transform the environmental field by equipping environmentalists everywhere with **the science of human behavior**
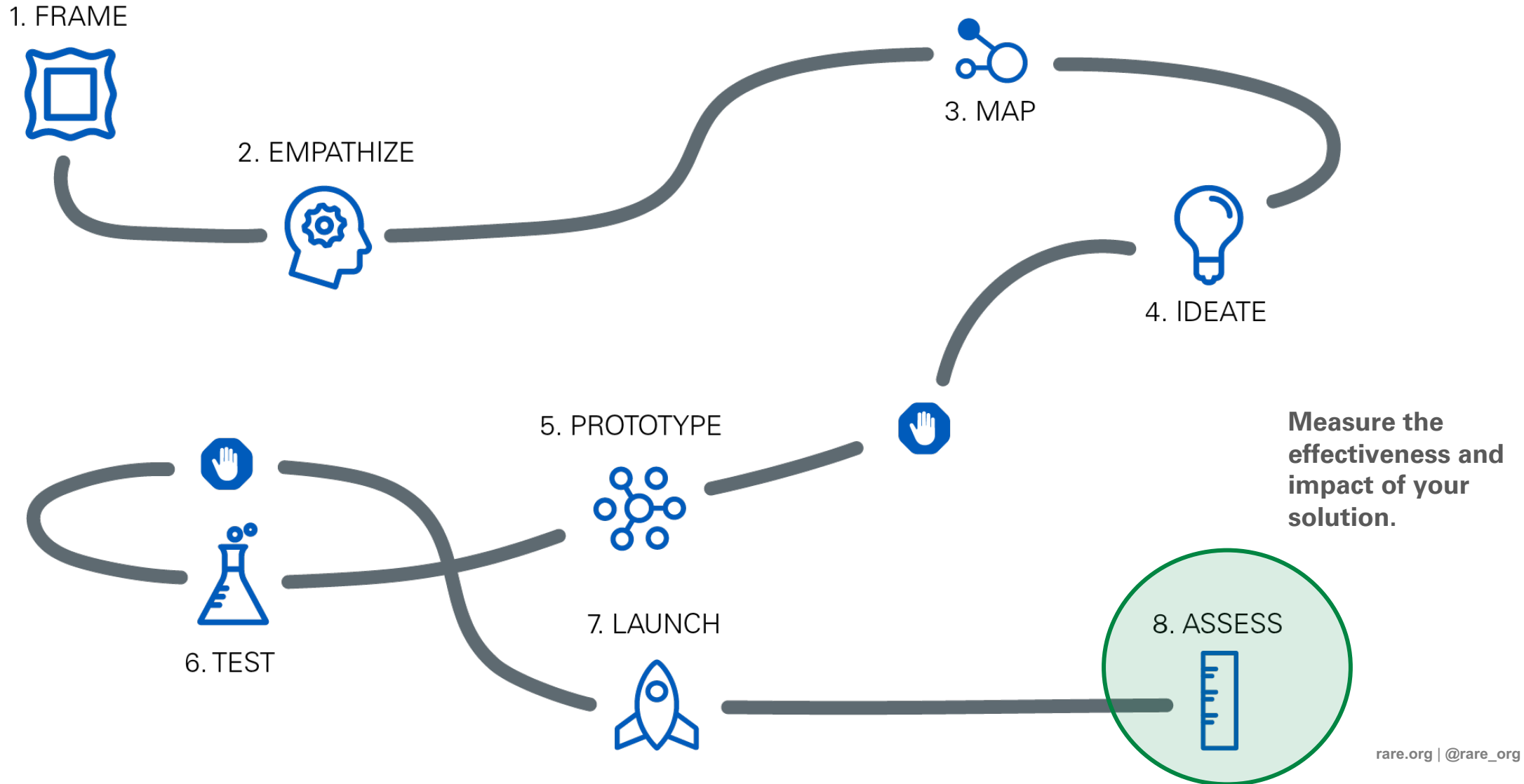
"Today you would never find a conservation organization that doesn't have a deep bench around ecological or biological sciences, **but you really don't see the same thing when it comes to behavioral and social science.**"

– **Aileen Lee**, Chief Program Officer
The Gordon and Betty Moore Foundation

Evaluating behavior change

The Behavior-Centered Design Journey

1. FRAME
2. EMPATHIZE
3. MAP
4. IDEATE
5. PROTOTYPE
6. TEST
7. LAUNCH
8. ASSESS

Measure the effectiveness and impact of your solution.

Introduction to Assess

What? Measure the impact of your solution and monitor change over time.

How? Conducting post-intervention surveys and interviews, running experiments, identifying indicators, reflecting on and sharing what you learned

Key Principles:
- Reflect on what worked and didn't work
- Look for observable change in behavior due to your solution

DEI Considerations:
- Report all outcomes with diverse actors
- Monitor for long term and unintended effects

Components of Program Evaluation

- **Goals and objectives:** What are the outcomes you want to achieve?

- **Program logic**: What is your hypothesis or theory of change? How do you plan to achieve your objectives?

- **Indicators:** How do you know you achieved your objectives? What is the behavior you want to change? What beliefs, attitudes, social norms, or knowledge need to change?

- **Evaluation approach:** What is the measurement strategy (e.g., survey, experiment) you will use to show the change through your indicators?

- **Monitoring:** What is your process to monitor results and change over time?

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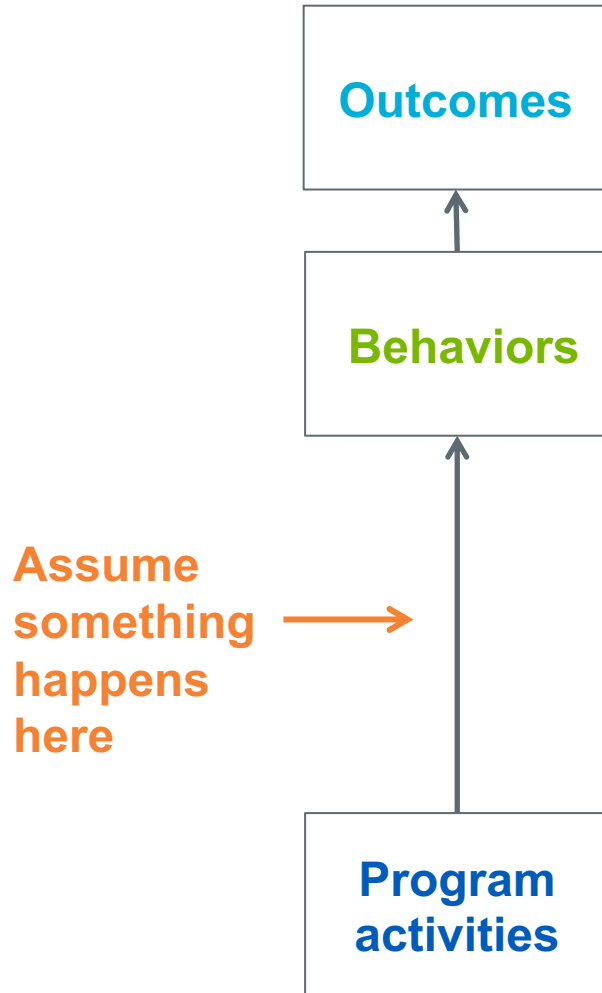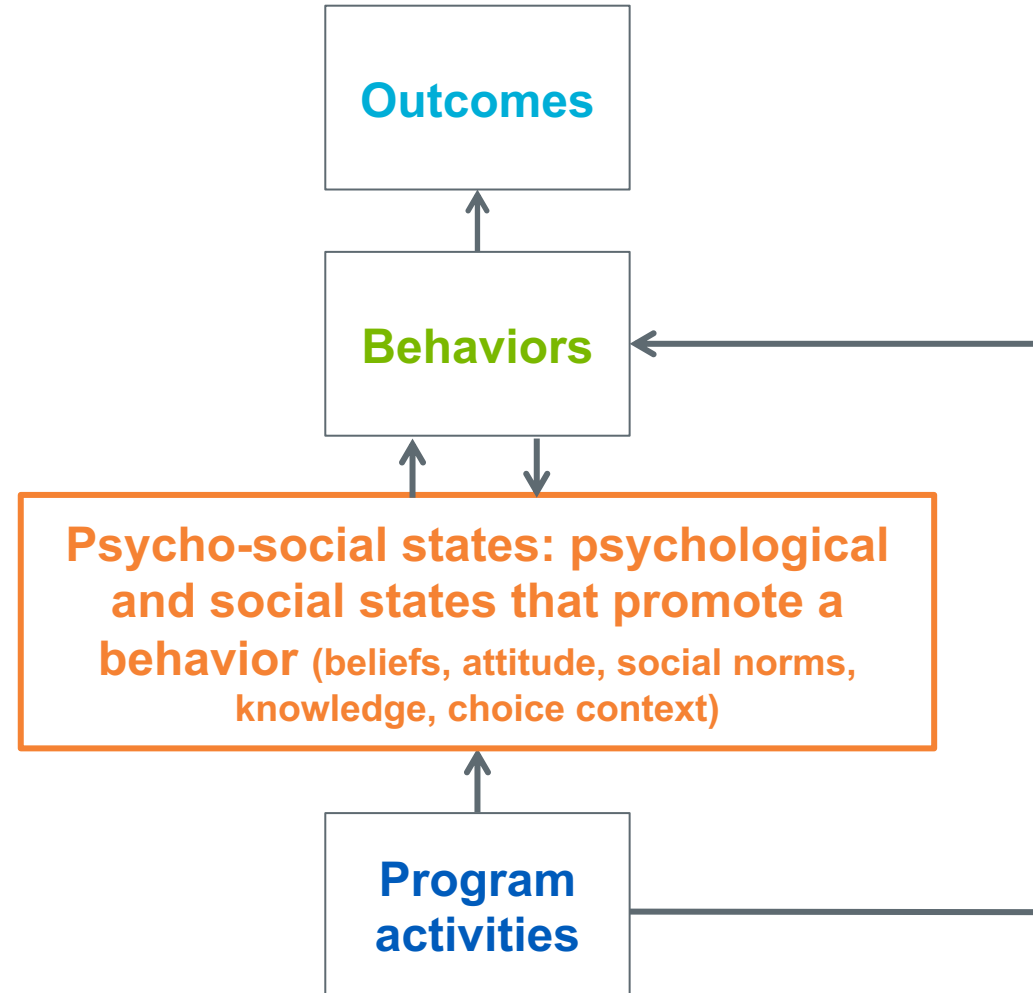- **Monitoring:** What is your process to monitor results and change over time?

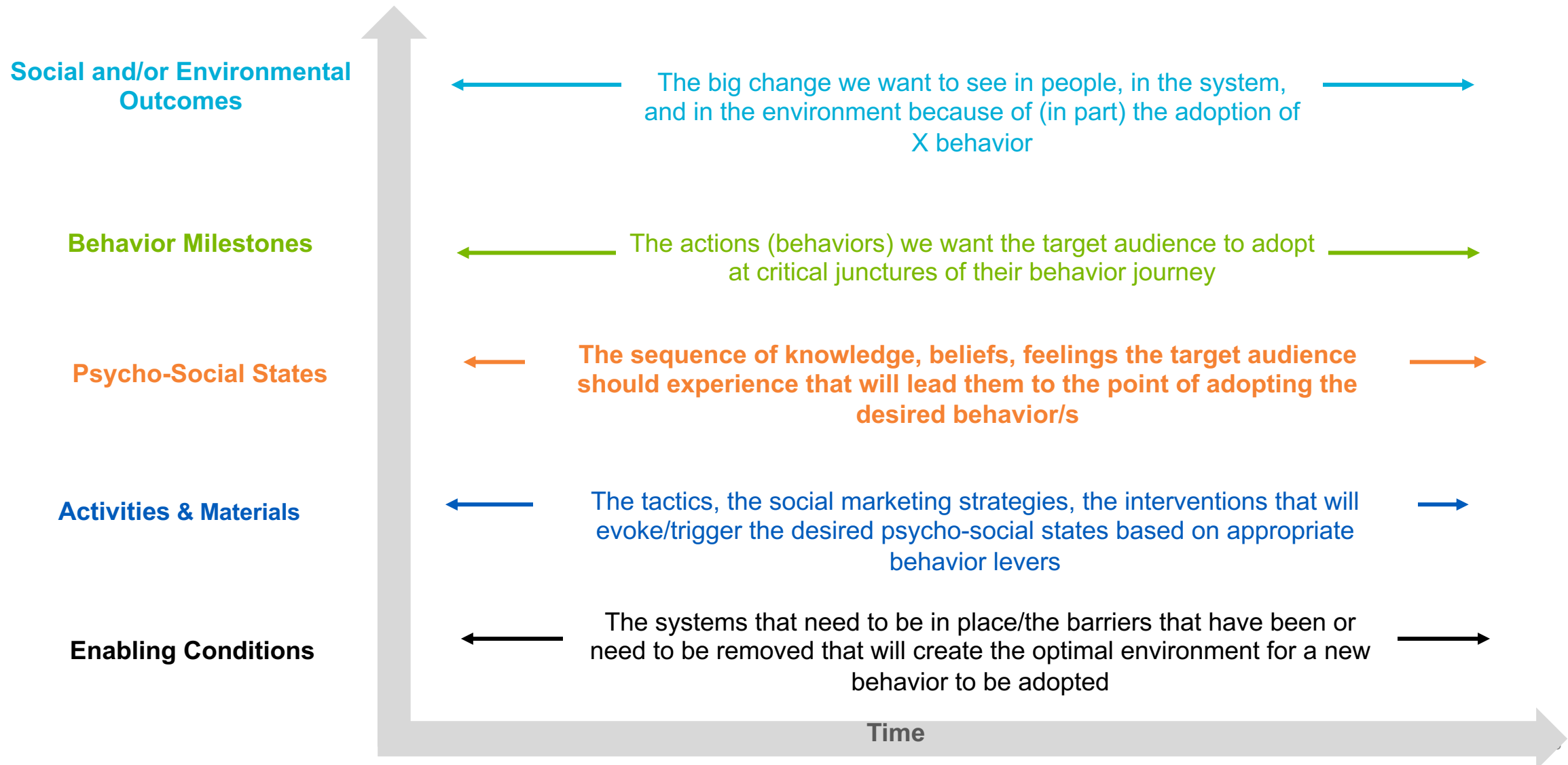# Program Logic: Psycho-Social Theories of Change

Theory of Change Structure
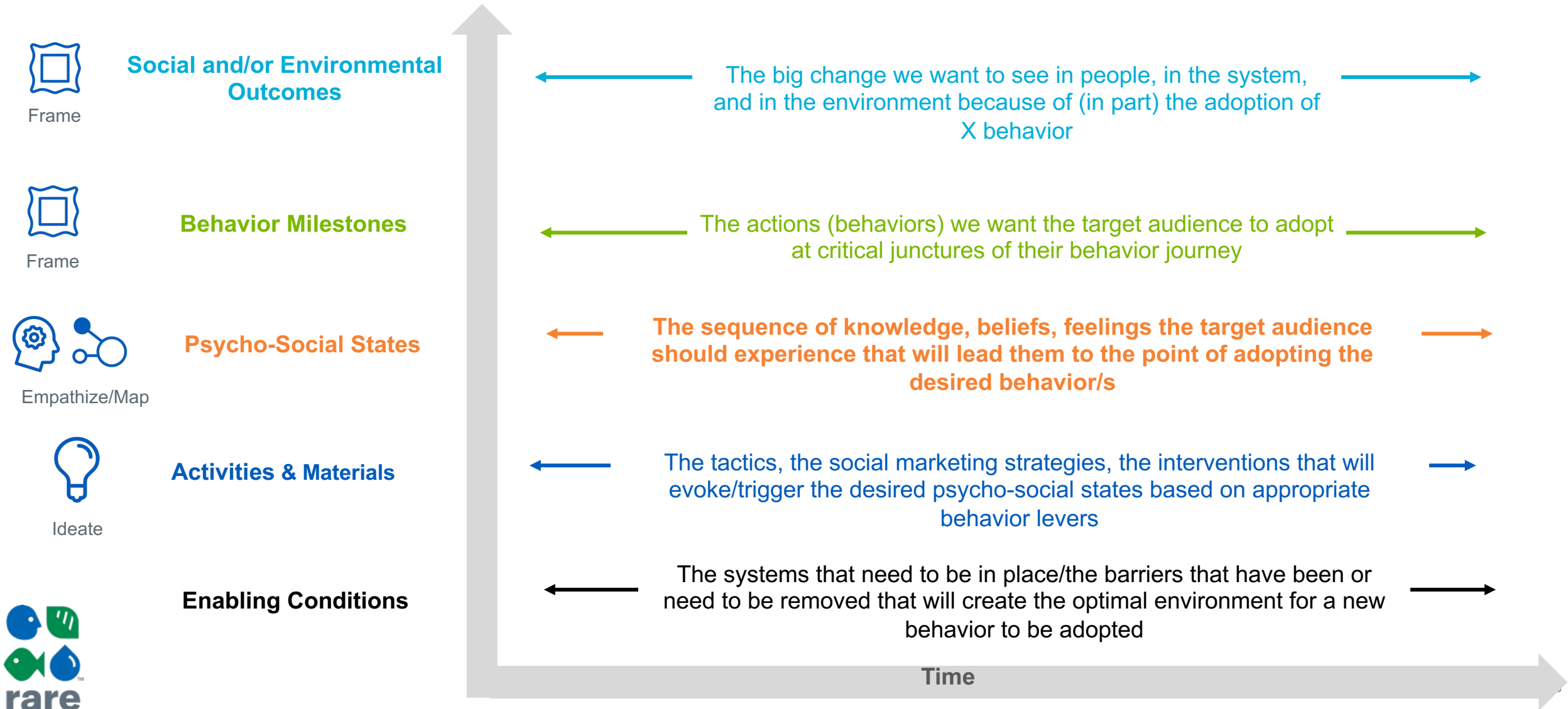
Social and/or Environmental Outcomes
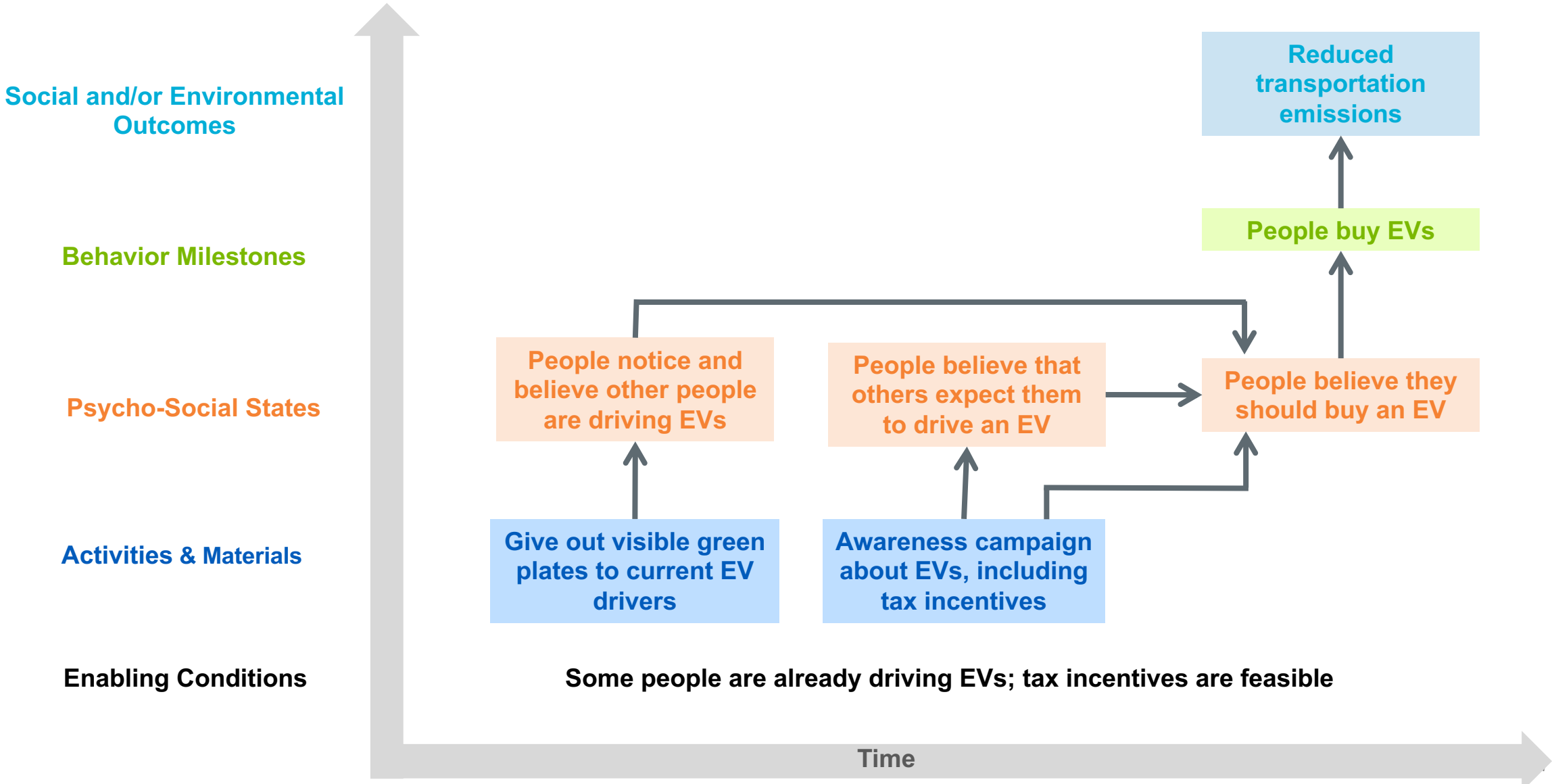
The big change we want to see in people, in the system, and in the environment because of (in part) the adoption of X behavior

Behavior Milestones

The actions (behaviors) we want the target audience to adopt at critical junctures of their behavior journey

Psycho-Social States

The sequence of knowledge, beliefs, feelings the target audience should experience that will lead them to the point of adopting the desired behavior/s

Activities & Materials

The tactics, the social marketing strategies, the interventions that will evoke/trigger the desired psycho-social states based on appropriate behavior levers

Enabling Conditions

The systems that need to be in place/the barriers that have been or need to be removed that will create the optimal environment for a new behavior to be adopted

Time

rare

Theory of Change Structure

Frame
Social and/or Environmental Outcomes
The big change we want to see in people, in the system, and in the environment because of (in part) the adoption of X behavior

Frame
Behavior Milestones
The actions (behaviors) we want the target audience to adopt at critical junctures of their behavior journey

Empathize/Map
Psycho-Social States
The sequence of knowledge, beliefs, feelings the target audience should experience that will lead them to the point of adopting the desired behavior/s

Ideate
Activities & Materials
The tactics, the social marketing strategies, the interventions that will evoke/trigger the desired psycho-social states based on appropriate behavior levers

Enabling Conditions
The systems that need to be in place/the barriers that have been or need to be removed that will create the optimal environment for a new behavior to be adopted
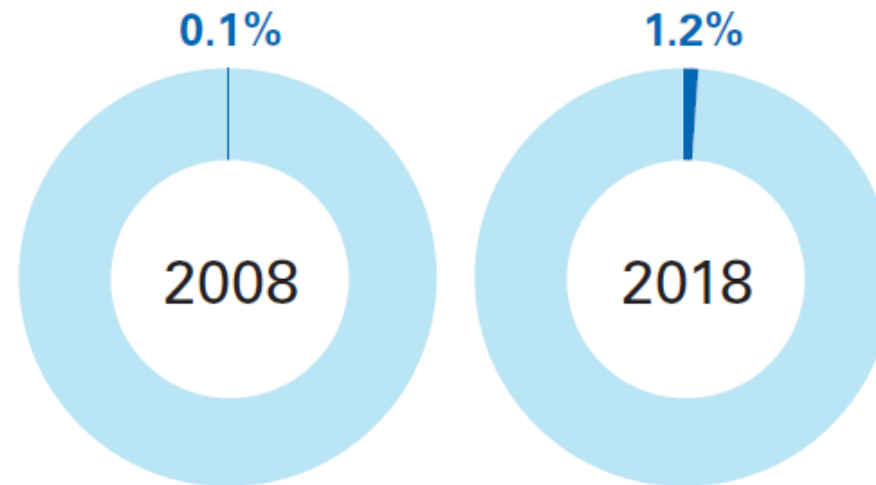
Time

rare

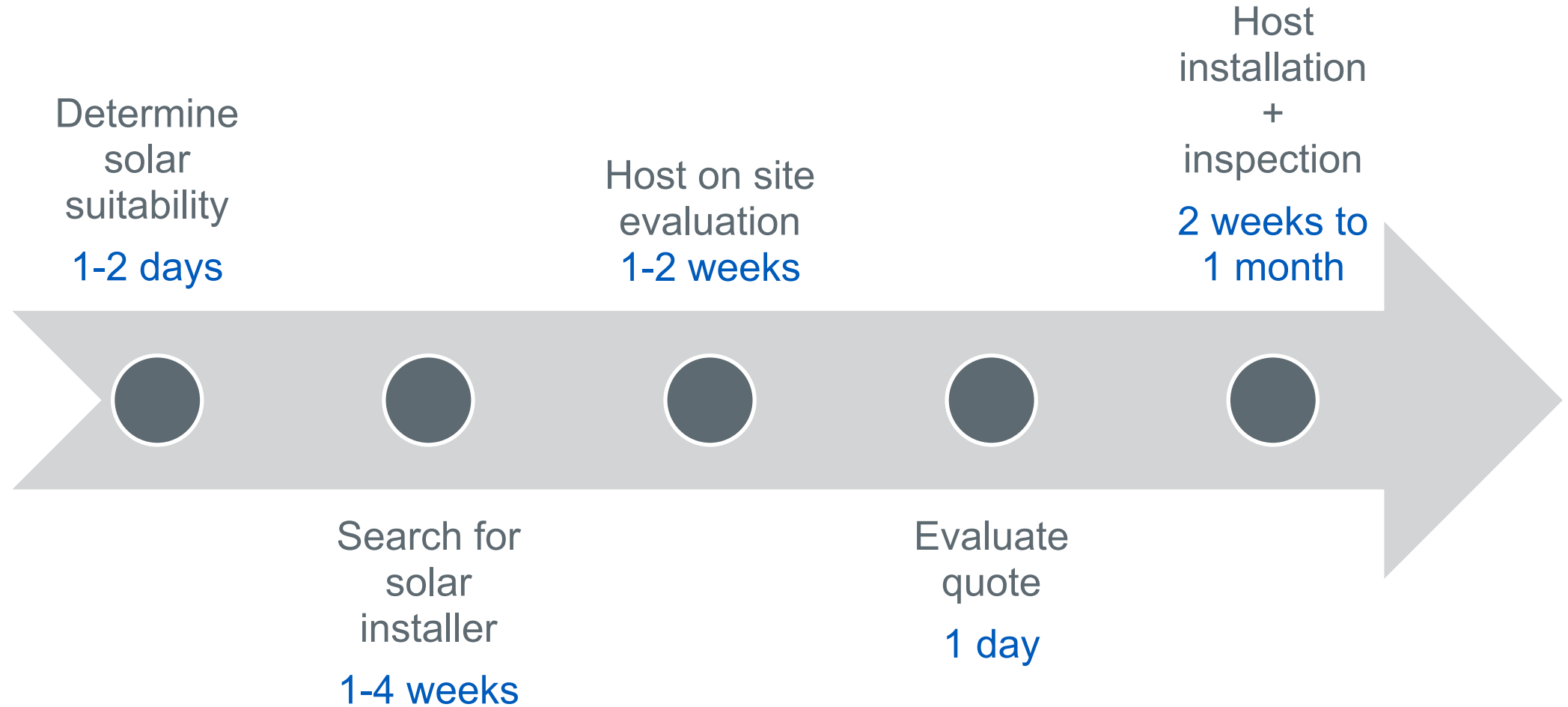# Case Study: Solar Adoption

Photo credit: Jason Houston for Rare

Case Study: Solar Adoption

- Most people **know about the environmental benefits** of solar
- And the **cost of rooftop solar fell by more than 70%** in the last decade
- But, the **number of homes with solar remained largely unchanged**
- Because most programs do not target relevant **psycho-social states**

0.1%

1.2%

2008

2018

% of U.S. households
with solar panels

SEIA, 2020; EIA, 2019
Yu, J., Wang, Z., Majumdar, A., Rajagopal, R., 2018

Case Study: Solar Adoption

Determine solar suitability
1-2 days

Search for solar installer
1-4 weeks

Host on site evaluation
1-2 weeks

Evaluate quote
1 day

Host installation + inspection
2 weeks to 1 month

Activity: Build a PS-ToC for Solar Adoption

Steps:

1) Review our list of actor-behavior pairs, psycho-social states, activities, and enabling factors related to household solar adoption.

2) Determine the sequencing: what goes first, second, last? We put a few items in place to get you started.

3) Assemble your PS-ToC

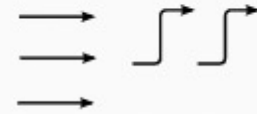Each group will have a Mural board to complete these steps.

Program outcomes	Actor-behavior pairs	Psycho-social states	Program activities	Enabling conditions
Increased solar adoption	Homeowner searches for solar installer	Believes that installing solar is the *right* thing to do	Solar open house (solar tours) at a solar ambassador's house	Solar contractors in the area
Reduced fossil fuel use	Homeowner evaluates quote from solar installer	Believes that people in their *reference network* are installing solar	Live solar installations	Viability of solar in geography
Decreased energy costs for households	Homeowner hosts installation and inspection	Believes that they can afford to install solar	Solar workshops & Q&A sessions	Housing type allows for solar
	Homeowner assesses home for solar suitability			

Review the following table of behaviors, psycho-social states (beliefs, attitudes, etc), and activities.

Actor-behavior pairs (who is doing what behavior)

- Homeowner hosts installation and inspection
- Homeowner evaluates quote
- Homeowner assesses home for solar suitability
- Homeowner searches for solar installer

Psycho-social states (key beliefs, attitudes that enable behaviors)

- Believes that people in their reference network are installing solar
- Believes that they can afford to install solar
- Believes that installing solar is the right thing to do

Program activities (what you do to create the psycho-social states)

- Solar workshops & Q&A sessions
- Solar open house (solar tours) at a solar ambassador's house
- Live solar installations

Enabling conditions

- Housing allows for solar
- Viability of solar (amount of sunshine)
- Solar contractors in the area

② **Determine the sequencing of the elements, and assemble your PS-ToC.**

You can use these arrows to connect parts of your PS-ToC if you like.

Program outcomes

Increased solar adoption → Reducing fossil fuel consumption

Actor-behavior pairs

Psycho-social states

Program activities

Enabling conditions

Time

Match your team # on the Mural to your room # on Zoom! You may need to scroll to find it.

You can zoom in on your team's area in the bottom right of the Mural window.
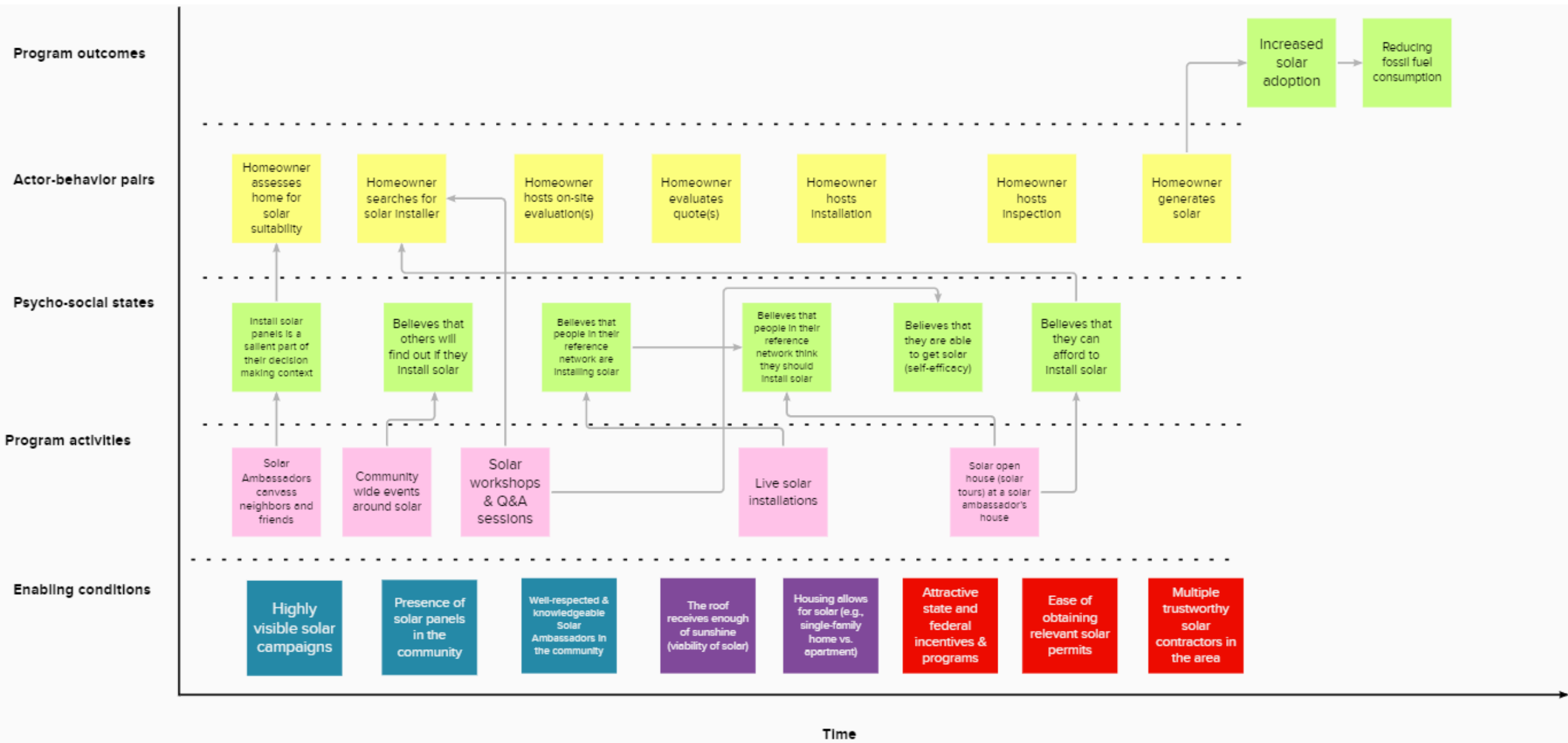
Break outs: Build a PS-ToC for Solar Adoption

Steps:

1) Review our list of actor-behavior pairs, psycho-social states, activities, and enabling factors related to household solar adoption.

2) Determine the sequencing: what goes first, second, last? We put a few items in place to get you started.

3) Assemble your PS-ToC

Each group will have a Mural board to complete these steps.

Report out

Program outcomes

Increased solar adoption → Reducing fossil fuel consumption

Actor-behavior pairs

Homeowner assesses home for solar suitability | Homeowner searches for solar installer | Homeowner hosts on-site evaluation(s) | Homeowner evaluates quote(s) | Homeowner hosts installation | Homeowner hosts inspection | Homeowner generates solar

Psycho-social states

Install solar panels is a salient part of their decision making context | Believes that others will find out if they install solar | Believes that people in their reference network are installing solar | Believes that people in their reference network think they should install solar | Believes that they are able to get solar (self-efficacy) | Believes that they can afford to install solar

Program activities

Solar Ambassadors canvass neighbors and friends | Community wide events around solar | Solar workshops & Q&A sessions | Live solar installations | Solar open house (solar tours) at a solar ambassador's house

Enabling conditions

Highly visible solar campaigns | Presence of solar panels in the community | Well-respected & knowledgeable Solar Ambassadors in the community | The roof receives enough of sunshine (viability of solar) | Housing allows for solar (e.g., single-family home vs. apartment) | Attractive state and federal incentives & programs | Ease of obtaining relevant solar permits | Multiple trustworthy solar contractors in the area

Time

Movement Break

Developing indicators

Developing Indicators

Types of indicators:

- Behavioral: What is the observable behavior change?

- Social: What social structures, patterns or context can we measure?

- Psychological: What changes in beliefs can we measure?

- Environmental: What environmental changes can we measure?

Ways to measure them:

- Direct: Seeing the behavior in action

- Proxy: Seeing something the represents the behavior

- Self-report: Learning about the behavior from core actors

Developing Indicators: Examples

Behavioral:

Example: # of people who bought an EV

Measured by: # of EV purchases from car dealerships

Psychological:

Example: % of people who believe that others expect them to buy an EV

Measured by: SMS survey sent to sample of city residents

Social:

Example: % people talking about EVs

Measured by: # events on EVs in the city

Environmental:

Example: Tons of carbon emissions reduced

Measured by: Ratio estimate of gasoline-powered cars vs. EV cars on the road

Check Your Understanding: Indicators

Which of the following could be a good **psychological** indicator for the behavior of using less water? Select all that apply.

A) Amount of people who know how much water their household uses
B) Amount of water used each month
C) Amount of people who believe that water reduction is important
D) Amount of water available in local aquifer or reservoir

Check Your Understanding: Indicators

Which of the following could be a good **psychological** indicator for the behavior of using less water? Select all that apply.

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C) **Amount of people who believe that water reduction is important**

D) Amount of water available in local aquifer or reservoir

Check Your Understanding: Indicators

Which of the following could be a good **environmental** indicator for the behavior of using less water? Select all that apply.

A) Amount of people who know how much water their household uses

B) Amount of water used each month

C) Amount of people who believe that water reduction is important

D) Amount of water available in local aquifer or reservoir

Check Your Understanding: Indicators

Which of the following could be a good **environmental** indicator for the behavior of using less water? Select all that apply.

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D) **Amount of water available in local aquifer or reservoir**

Check Your Understanding: Indicators

Which of the following could be a good **behavioral** indicator for the behavior of using less water? Select all that apply.

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Breakout Activity: Developing Indicators

In your group you will work together to:

1) Review the psycho-social theory of change you developed
2) Identify behavioral, psychological, and environmental indicators and ways to measure them.

Use the same Mural board you used before.

Mural page
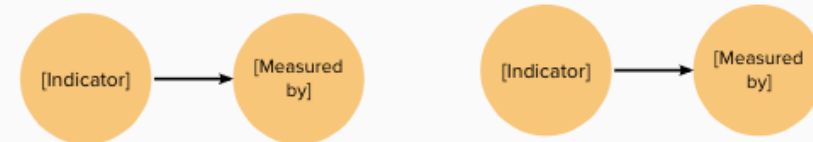
Report out

Tool Spotlight: Evaluating Behavior Change Programs

Tool Spotlight

Closing & Next Steps

Key Points to Remember

A psycho-social theory of change helps us:

1) Design a more targeted program, with activities that address our actors' motivations and barriers.

2) Track the key indicators that signal behavior change.

3) Test and validate assumptions in program logic.

Ideas for Next Steps

- Test our new program evaluation tool and provide feedback
- Ask your grantees to consider psychological and social states in their theories of change
- Ask your grantees to define indicators for their behavior change work
- What other ideas come to mind?

Behavior change & climate philanthropy series

December 8

- 2:00-3:00pm ET: Making the case for behavior change

March 2023

- Funders' roundtable

Behavior Change for the Environment Starts Here

behavior.rare.org

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