

# Transportation Behavior Change

## Breakout Session

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*Co-Chair of Behavior, Energy and Climate Change (BECC) conference*

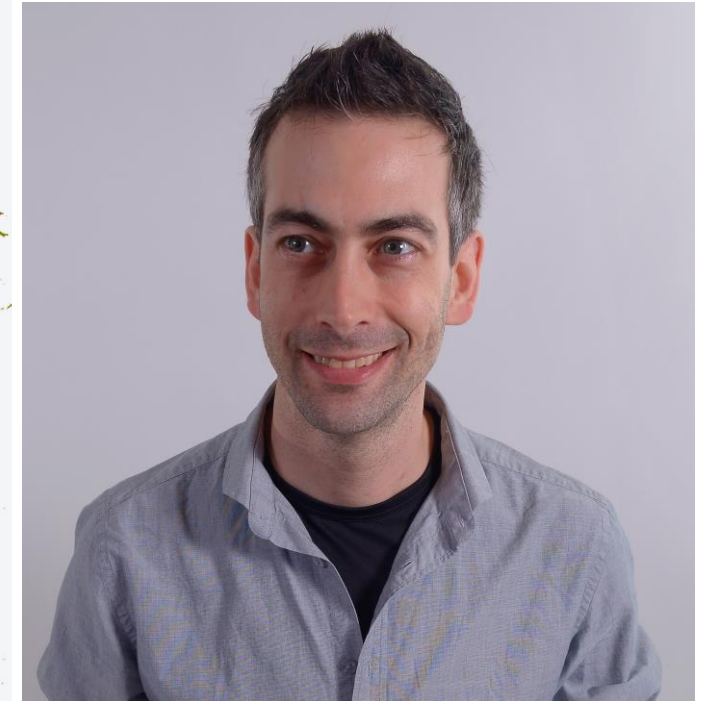
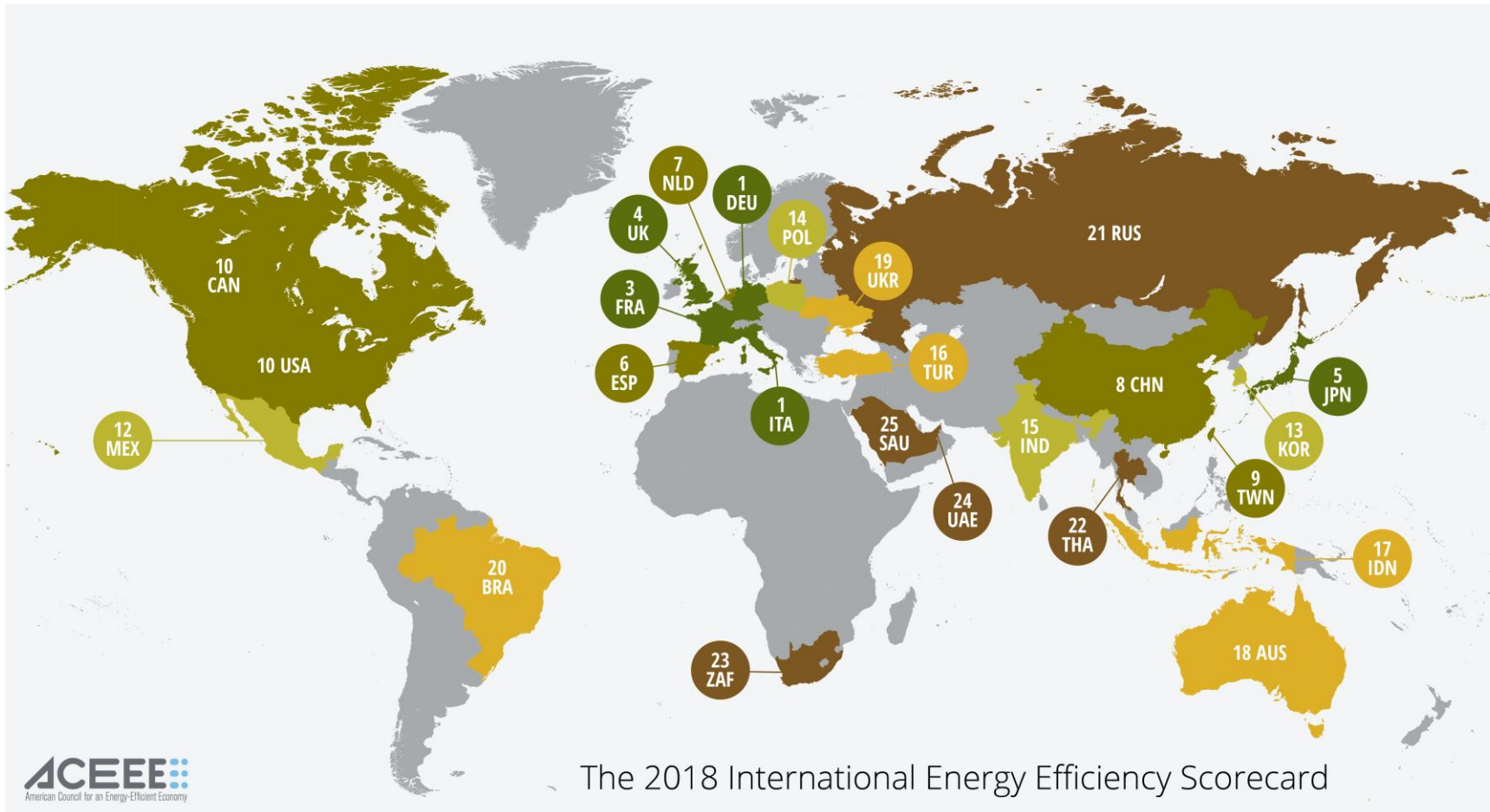
Scoping workshop Sept 12, 2018:

***Behaviour Change for Energy Efficiency: Opportunities for International Cooperation in the G20 and beyond***



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# A little about me...



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# A little about you...

- How familiar are you with behavioral science?
- How many of you have worked on some type of behavior change program or campaign?
- How familiar are you with transportation behavior change programs specifically?



# Behavior Change Programs in Transportation

- **Three Domains**

- **Frequent personal ground transportation** (cars, motorcycles, buses, walking, etc.)
- **Infrequent personal transportation** (airplane travel, boats, trains, etc.)
- **Freight transportation** (moving things, not people)



- **Three Types of Behavior**

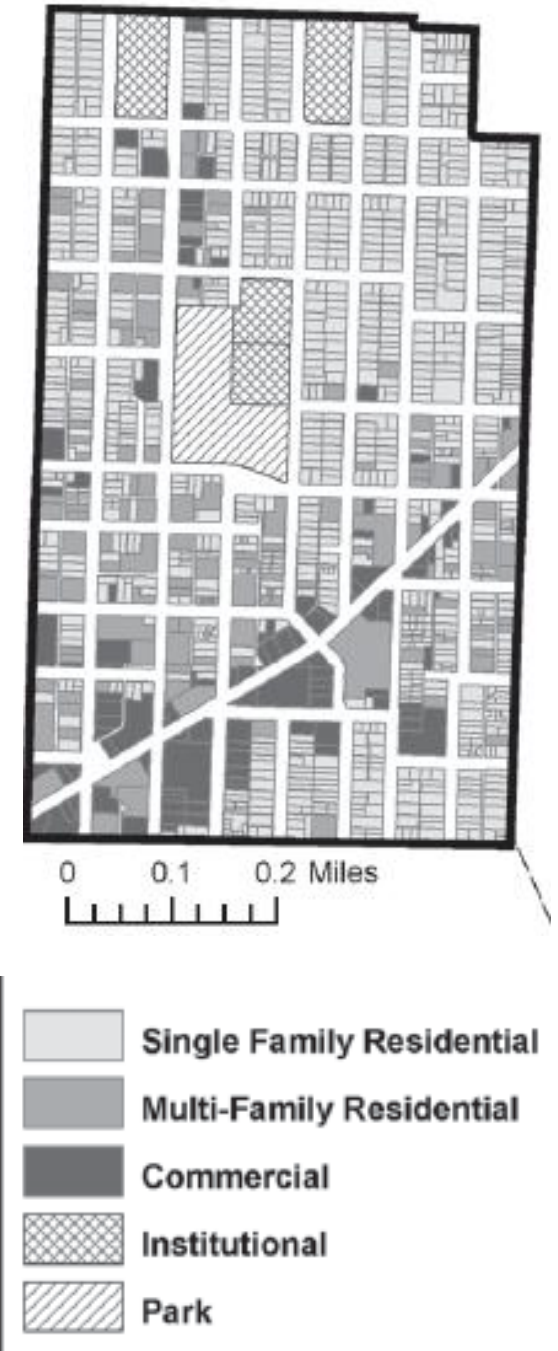
- **Using transportation more efficiently** (less idling, maintaining tire pressure, etc.)
- **Buying efficient vehicles** (buying an efficient car, truck, boat, etc.)
- **Choosing more efficient modes, or choosing to travel less** (less single-person driving, less airplane travel, etc.)

# Behavior Change Programs in Transportation

	Frequent personal ground transportation	Infrequent personal transportation	Freight transportation
Using transportation more efficiently			
Buying efficient vehicles			
Choosing more efficient modes			

# Puget Sound *In Motion* Program

- Target behaviors: ↑ off-peak transit use; ↓ driving alone
- Intervention:
  - Put up posters and bus route maps in neighborhood
  - Local partners (e.g., schools) and 35 businesses helped
  - Created a website and hotline for information and enrollment
  - Direct mail
  - **Solicit commitment through direct mail, website, etc.**
    - I will change two trips per week from driving alone to other
    - I will put a “count me in” sign on my lawn
  - **Incentives for commitment and participation**
    - E.g., \$5 voucher for alternative transportation
- Participants self report change (24 to >50%)
  - Support from counts at bus stop (9% increase in bus riding)



# Virgin Atlantic Airlines Captains



- Target behavior: Change airplane captain behavior to reduce fuel consumption
- Intervention
  - Feedback about recent fuel efficiency (with targets)
  - A donation to the captain's chosen charity if they reach target
  - The act of measurement itself
- Monitored 335 Captains, across 42,012 flights over 8 months; Saved:
  - 266,000-704,000 kg of fuel
  - \$209,000-\$553,000
  - 838,000-2,220,000 kg of CO<sub>2</sub>

# Customization and Evaluation

1. Start with a target behavior and population
2. Do preliminary research
3. Choose a strategy
4. Implement and evaluate



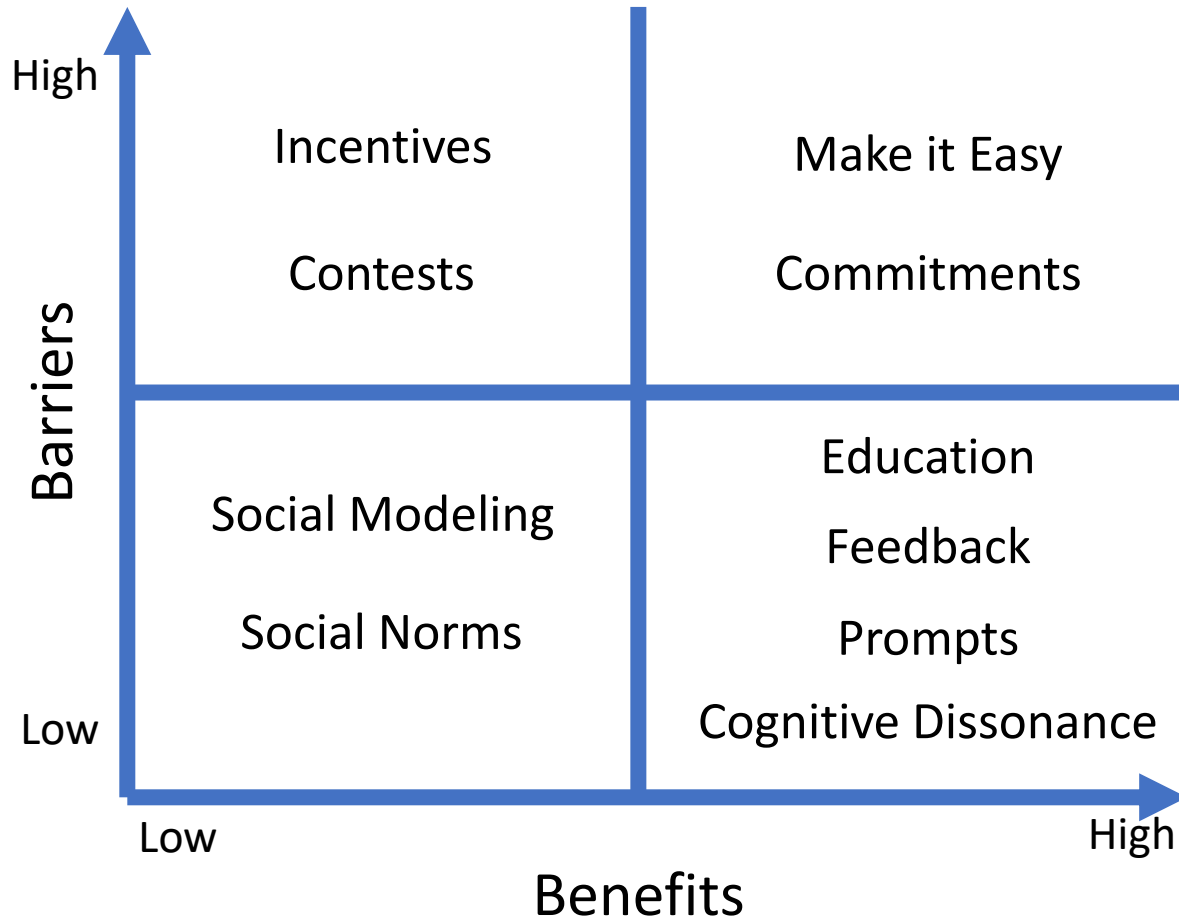


# Special considerations during preliminary research

- Funding sources
- Stakeholder consultations
- Third party evaluators
- **Partners and collaborators**



# Selecting Strategies: Barriers/Benefits



(Schultz, 2014)

## Also:

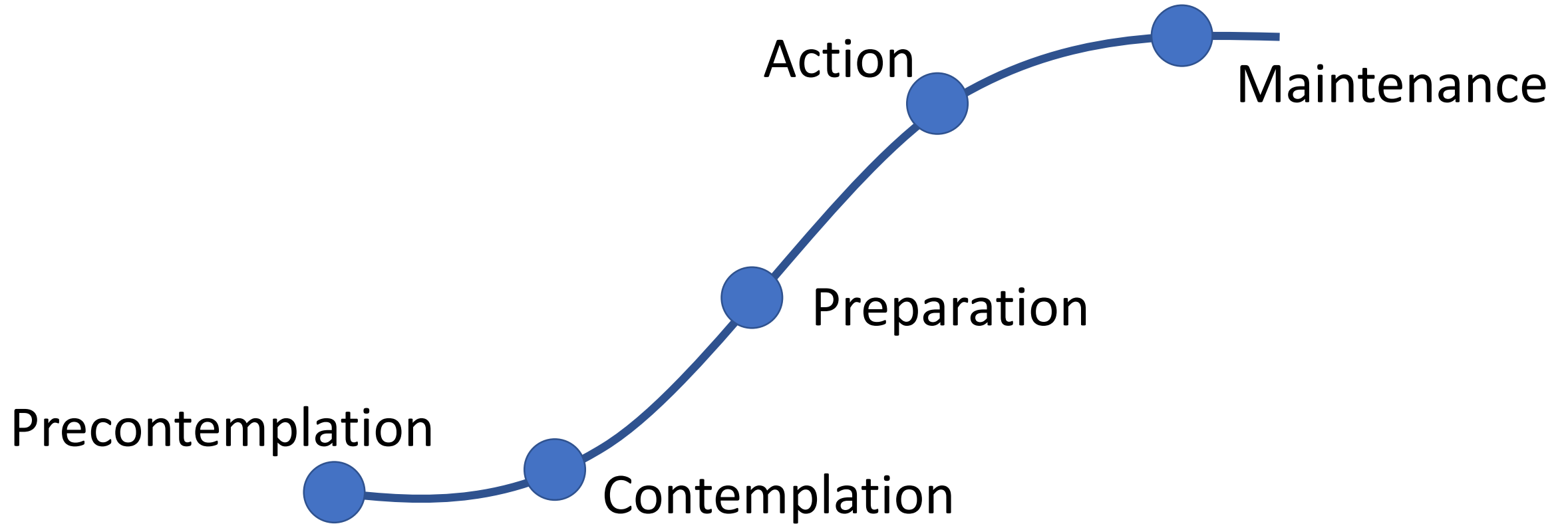
Punishment (laws, taxes, etc.)

Changing defaults  
or physical structure

Public Observability/accountability

Labeling/Benchmarking

# Selecting Strategies: Stages of Change



# Session Objective

- Develop program ideas and how we can collaborate to test them
- Questions for today:
  1. What are some creative program ideas for changing transportation behaviors?
  2. How can we work together to test and implement these programs?

# Your turn... Part 1: frequent personal transport

- Write down an idea for a program to change a transportation-related behavior
    - Specify the behavior type (purchase, efficient use, mode change)
    - Do you know a program already? Do you have a new idea for a program?
    - Specify one way that G20 can collaborate on this idea (e.g., sharing data, working together, running parallel programs at the same time)
    - 5 minutes
  - Share your idea with your neighbour
  - Share with the group
  - Part 2 and 3:
    - Repeat with Freight Transportation, and Infrequent Personal Transportation
- Incentives
  - Contests
  - Make it easy
  - Social norms
  - Commitment
  - Education
  - Feedback
  - Prompts
  - Laws or taxes
  - Public observability
  - Labeling
  - Gamification
  - Changing defaults

# Your turn... Part 1: Freight

- Write down an idea for a program to change a transportation-related behavior
  - Specify the behavior type (purchase, efficient use, mode change)
  - Do you know a program already? Do you have a new idea for a program?
  - Specify one way that G20 can collaborate on this idea (e.g., sharing data, working together, running parallel programs at the same time)
  - 5 minutes
- Share your idea with your neighbour
- Share with the group

# Breakout groups

- Move to an area of the room to work on a program for a specific domain
  - Frequent personal transportation
  - Infrequent personal transportation
  - Freight
- Share ideas and work together
- Try to come up with ideas for different types of behavior
  - Efficient use, purchasing, mode change
- For each idea, include idea for collaboration
- 20 minutes
- Present top 1-2 ideas to the whole group