

Pathway to Low Carbon Transport in ASEAN region - How to Envisage the Roadmap? -

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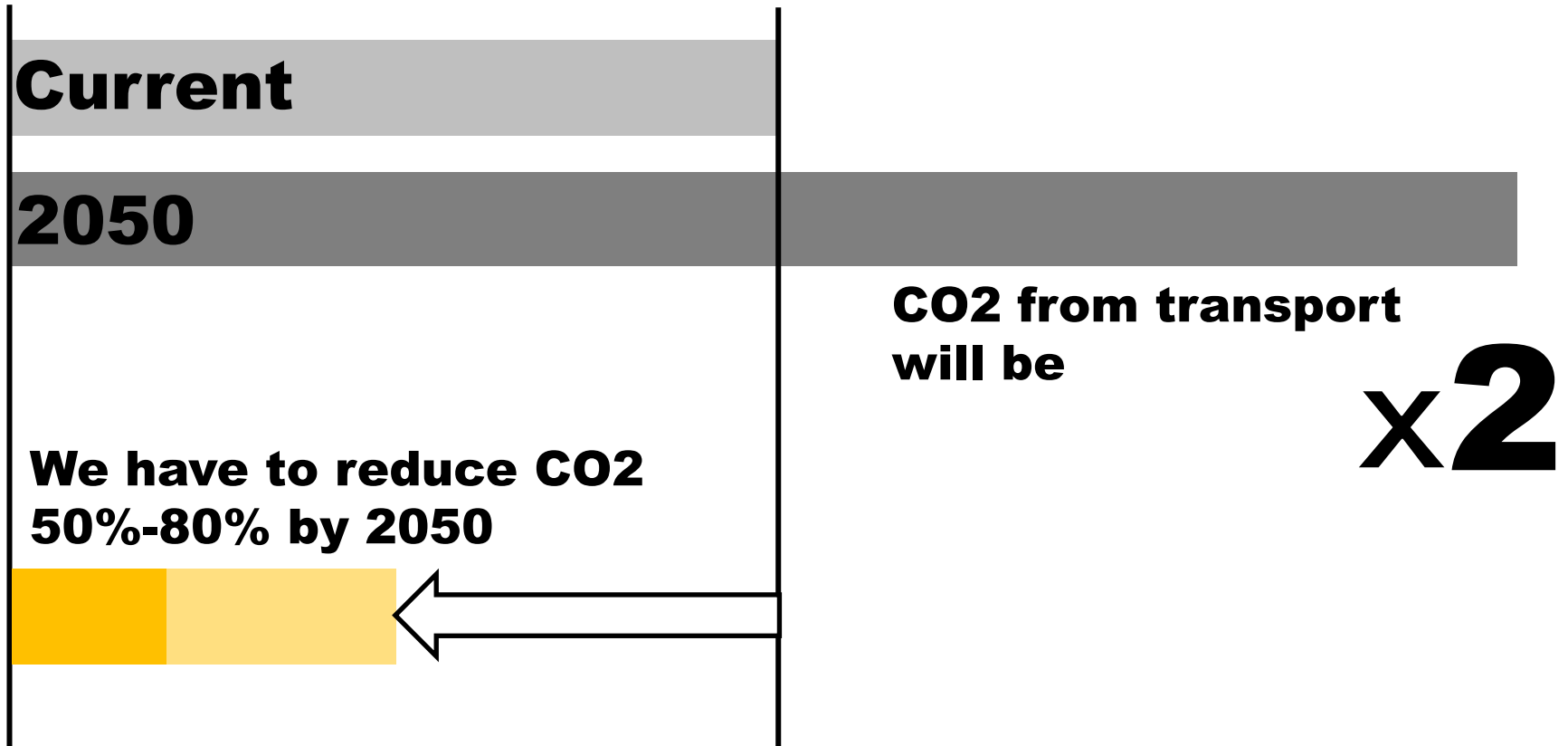
**Final Symposium of “Study of Long-Term Transport Action Plan for ASEAN”
Hotel Okura Tokyo, Tokyo, Japan, February 20th, 2014**

BACKGROUND AND FEATURES

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CO2 Emission from Transport Sector



Issues in ASEAN Transport

Increasing Transport Demand



And...

Lack of Mass Transit System



Special Social and Geographical Characteristics in ASEAN Countries

Special Transport Mode



Objective

Propose **Long Term Transport Policies** to realize **CO2 emission reduction in 2050** for all **ASEAN countries**

Our Outputs

Action Plan



Tools and Database



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01000101101010  
01010110100010  
10010101011101  
10101001011011  
01101001010100  
10010101001001  
01111101010101
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HOW TO ENVISAGE THE ROADMAP?

- VISIONING-BACKCASTING APPROACH -

Flow of Visioning-Backcasting Approach

Visioning

Future Social Images
based on Societal factors

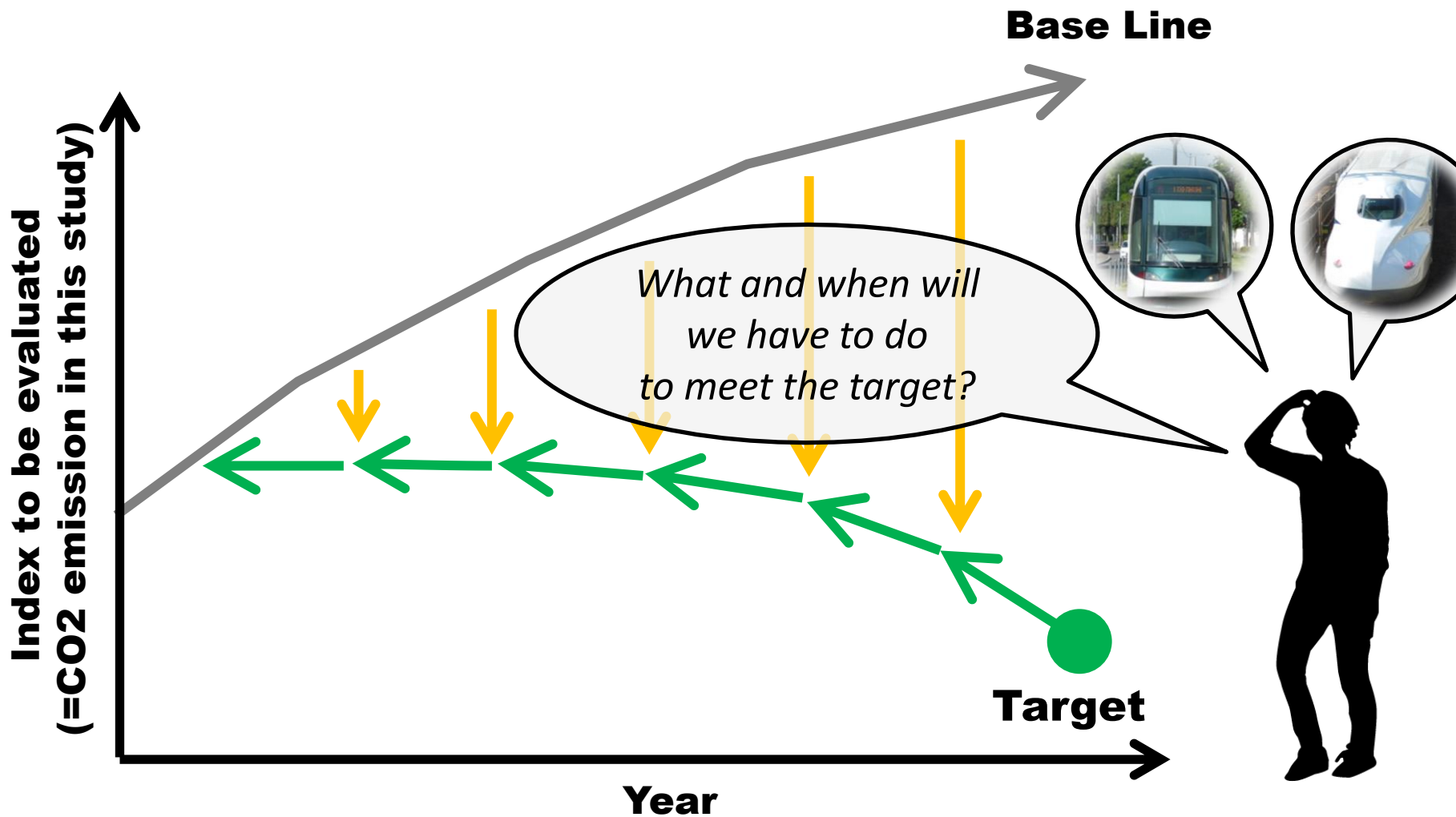
Future Transport Images
based on future social images

Backcasting

**Future Directions of
Transport Policy**

Transport Action Plan
with their simulated effects

Backcasting to select policies to reduce CO2 emissions drastically



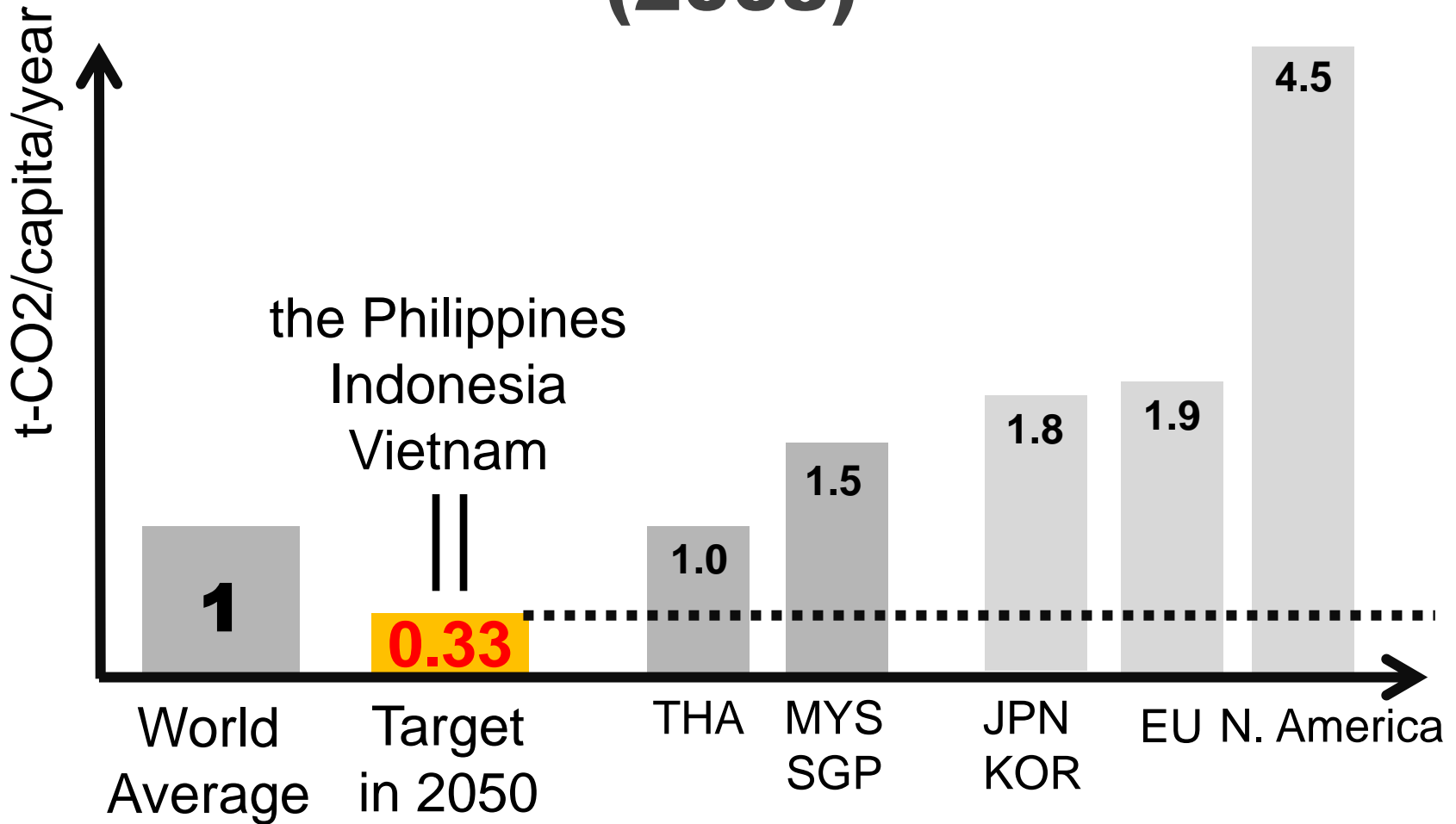
Our Target

- **All ASEAN Countries**
- **From Now to 2050**
- **0.33 t/person/year**



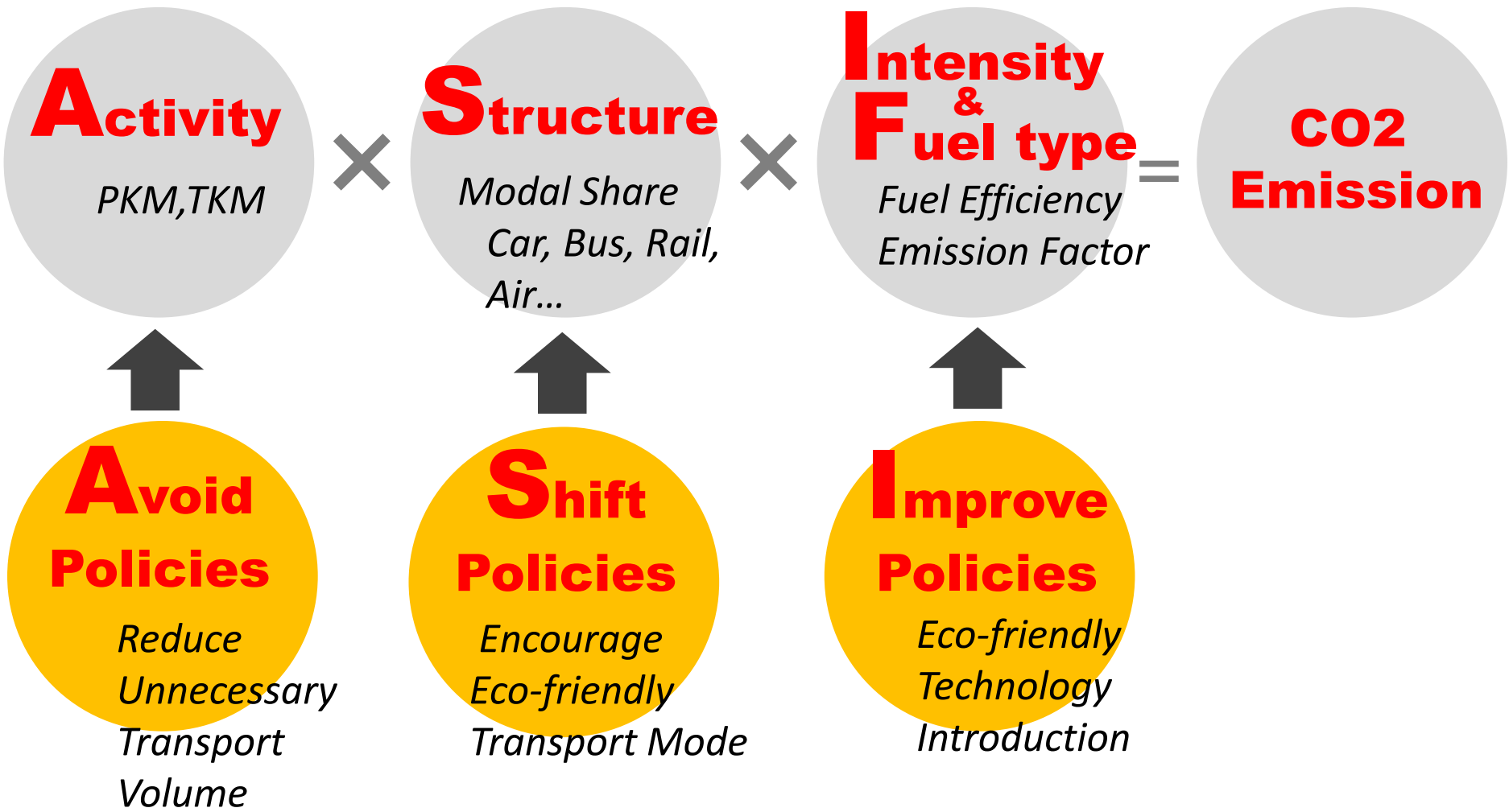
- **Focusing Transport Policies**

CO₂ Emissions from Transport Sector, per capita (2008)



(IEA, 2010)

How to Evaluate CO2 Emission?



Backcasting Tool



Excel based tool Installed

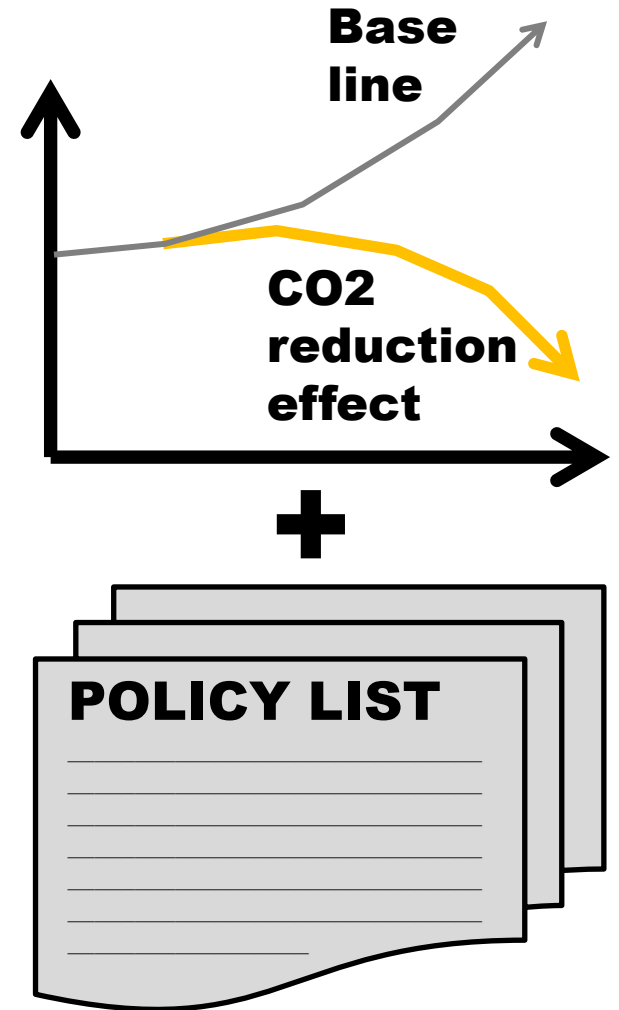
- Base line scenario
- Candidate ASI policies
- Fuel efficiency
- Emission factor etc.

Able to assess by each region

- City (Primary, Large, Small)
- Rural
- Inter regional etc.

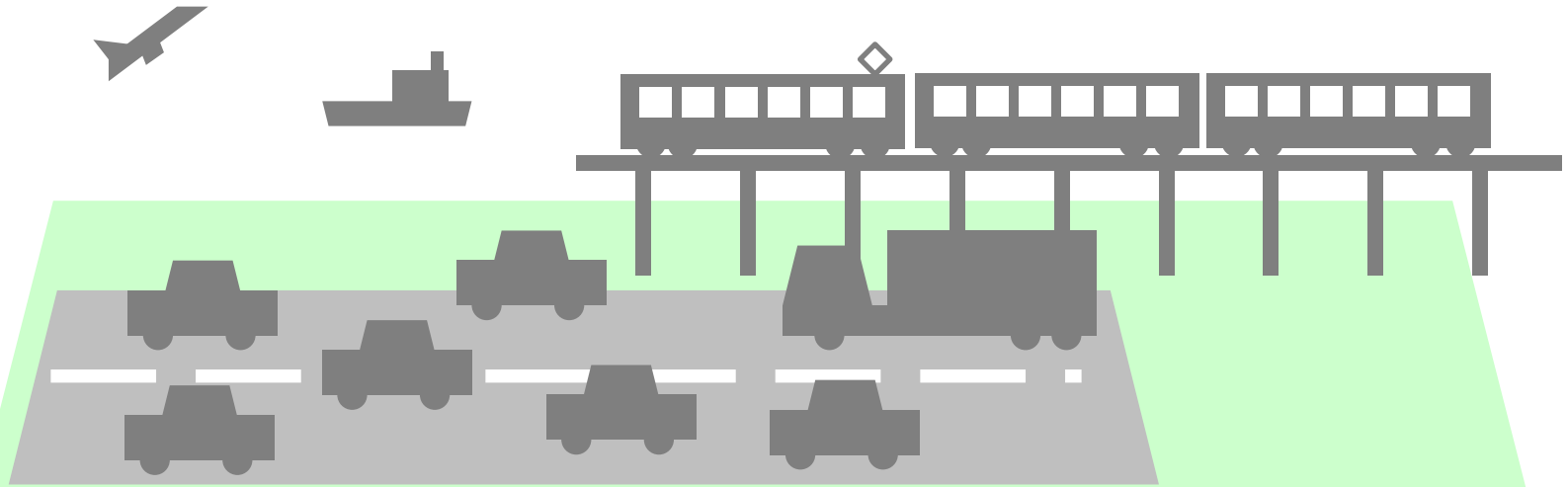


**User
Inputs**



Visioning

to understand the relationship between society and transport



Transport

Society

Population

Culture

Energy

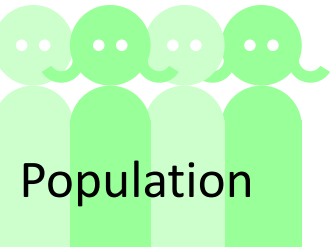
Economic

etc...



Visioning

to select appropriate policies according to social image

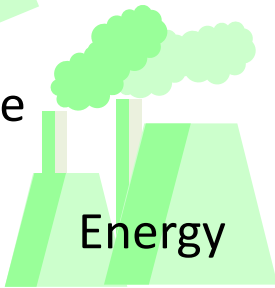


Population



Economy

Culture



Energy

Land use

etc



Future Image



Walking?



Public Transport?

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Visioning Tool

**How to envision the future?
How to select policies?**



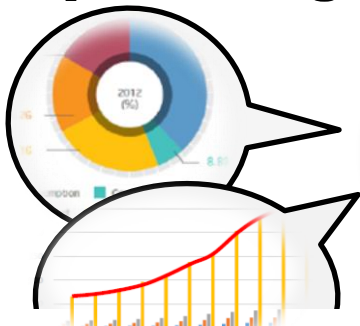
Meeting

**in the
future**



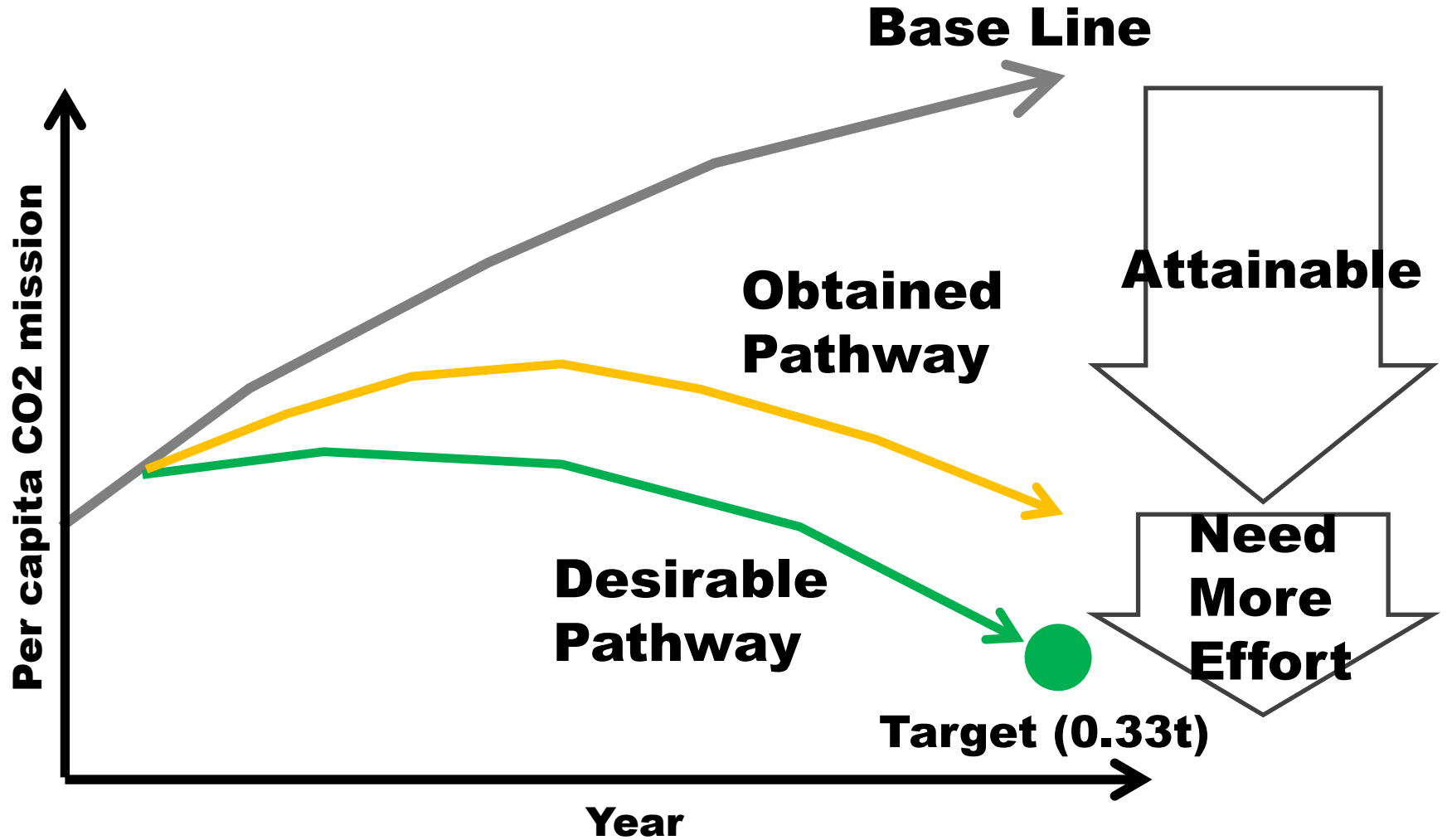
- This tool will help you to envision future images of your country and select suitable transport policies.

Expert Judge



WHAT WE FOUND BY THIS STUDY? - SHORT SUMMARY -

What We Found?



What Does Make It Difficult to Meet 0.33t Target?

- **Barrier of “Reality”?**

- “Leap frog” is required to reduce CO2 emission
- Is it “unrealistic” to introduce new technology and develop infrastructure?
 - Recourse, Governance, ... there are many barriers

- **Lack of Policies?**

- Large metropolitans have many policy options
 - New technology, Public transport, Land use design, ...
- How about other area or interregional, etc.?

Importance of Avoid, Shift and Improve

- **Avoid Policies Should be Prioritized**
 - Avoid policies are overlooked in current policy pipelines
 - Adopted Avoid policies now will have further impacts by influencing behavioral changes in the future
 - Most complex, but ASEAN countries cannot avoid “Avoid policies” introduction
- **To Keep Present Transport Structure Would be Key**
 - Quality public transport supply and integration with land use
 - “Improve policies” can concentrate public transport and it will make synergy effect with Shift policies
- **Solutions May Lie Outside the Transport Realm?**

To reduce CO2 emission drastically,
“TRANSITION”
is required now.



Thank you for your patience

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