

Gaps, challenges and possible way forward to black carbon inventory development from Japan's perspective

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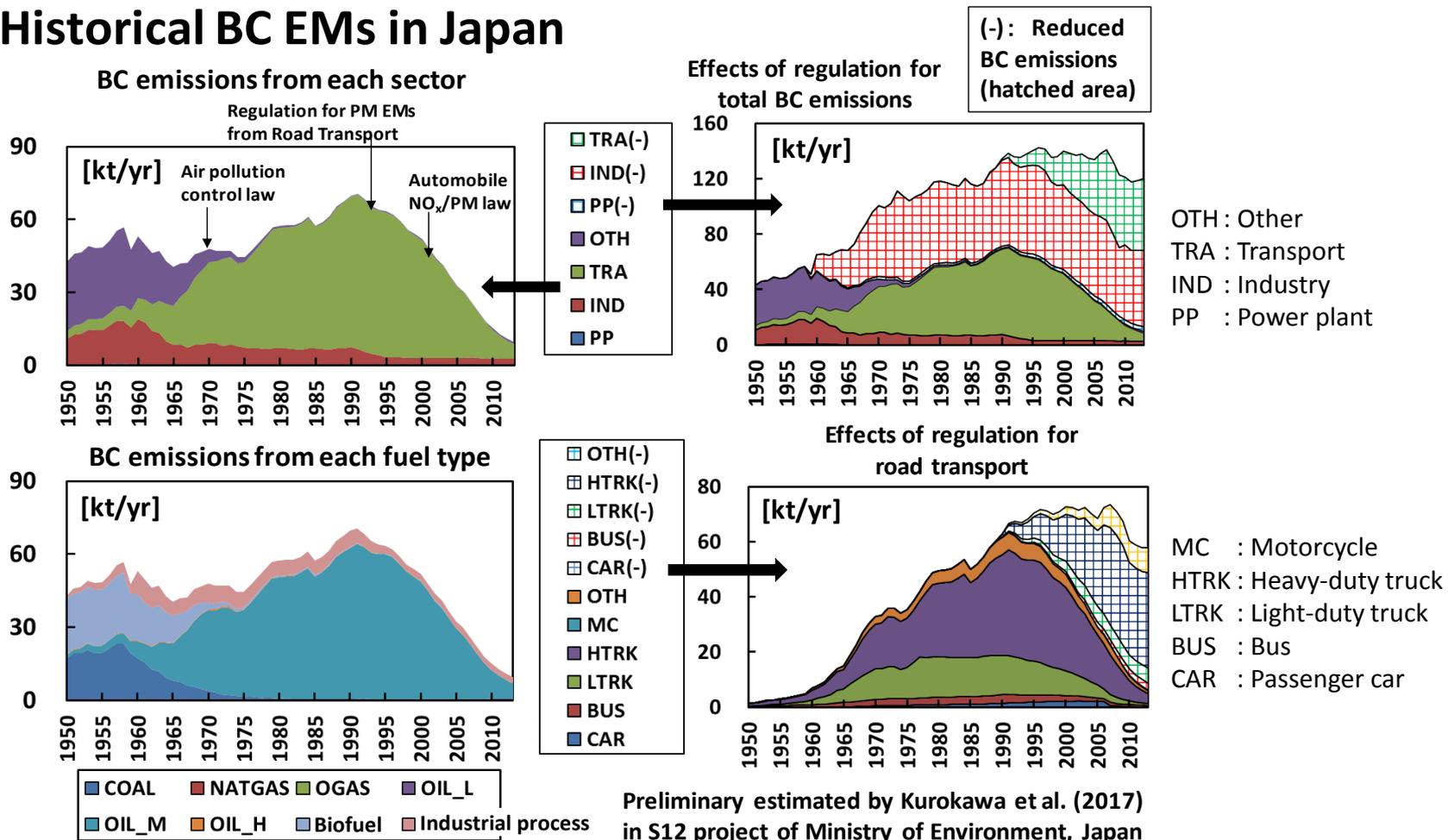
(National Institute for Environmental Studies)

*Climate and Clean Air Coalition
Scientific Advisory Panel Expert Workshop
"Metrics for Evaluating and Reporting on Black Carbon
and Methane Interventions"
16-17 March 2017 @ Ottawa, Canada*

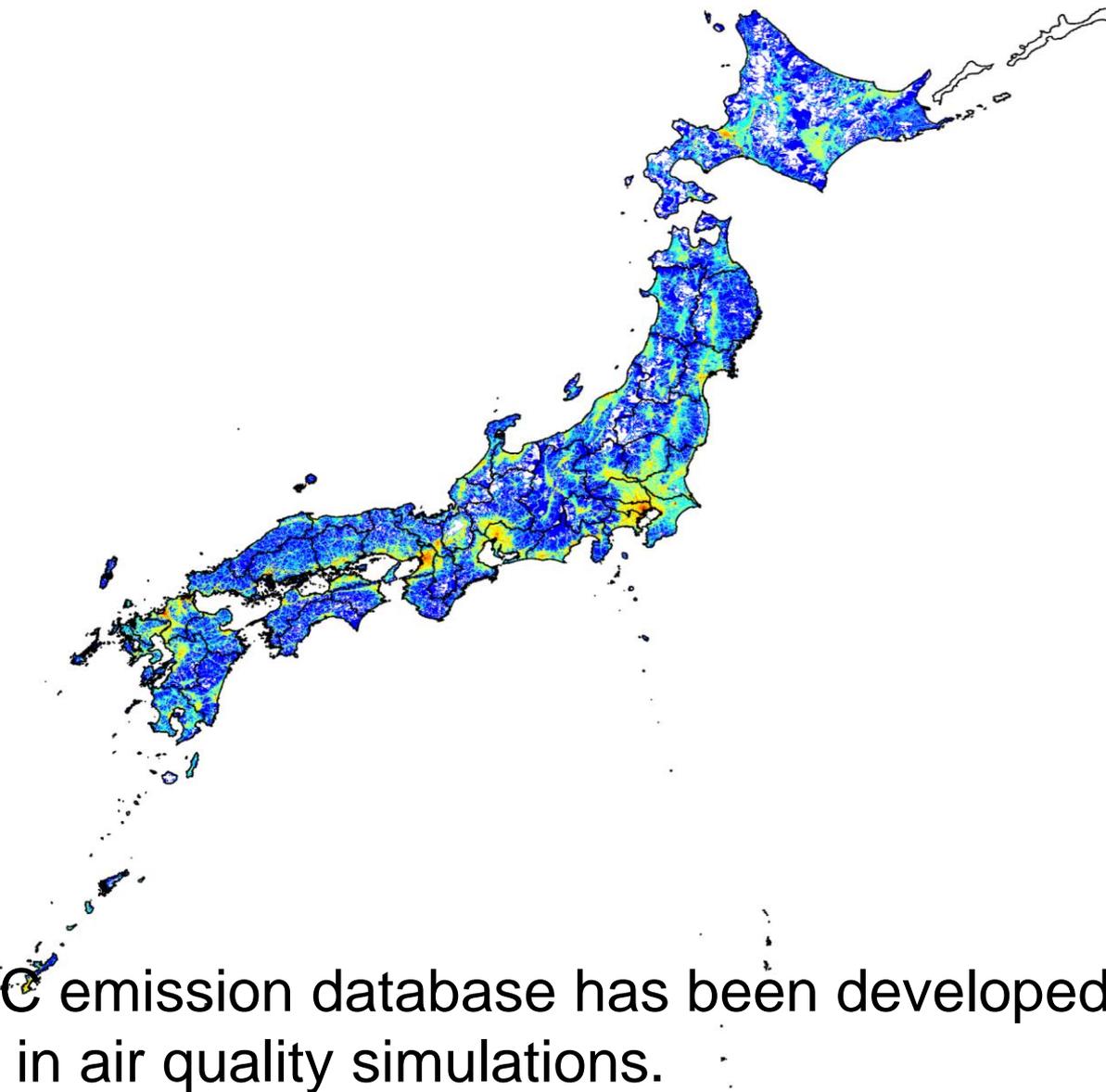
Examples of existing BC inventory in Japan

- BC emission amount and effects of regulations in current and past years have been estimated.

Historical BC EMs in Japan



Examples of existing BC inventory in Japan



- Gridded BC emission database has been developed to be utilized in air quality simulations.

Gaps

- ❑ Are methodologies, target sectors, and data used to estimate BC emissions consistent with other countries?

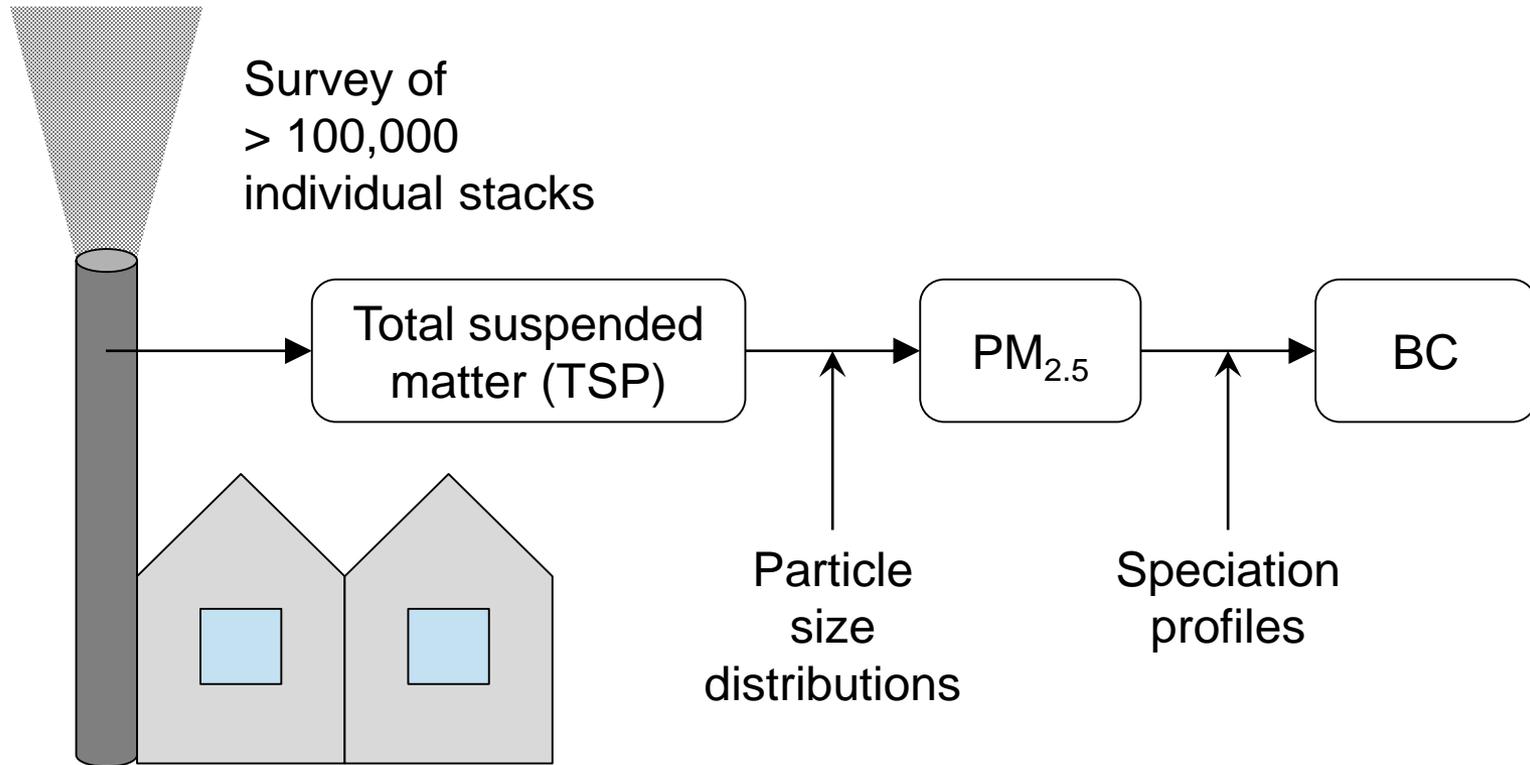


- ❑ Check consistencies with other worldwide inventories including EMEP and IPCC.
- ❑ Determine optimal methodologies to harmonize with other countries as well as to represent conditions specific to Japan (if necessary).
- ❑ Gather necessary data.

Challenges to establish framework

- The government is working on establishing a framework to develop, maintain, and improve the National Emission Inventory including BC.
 - Prepare related documents.
 - Keep transparency, continuity, and accessibility.
 - Reflect latest scientific findings.
 - Evaluate uncertainties.
 - Cooperate among industries, governments, and academia.
 - Share information among related agencies.
 - Establish an specialized organization.

Technical challenges



- ❑ Various uncertainties in converting TSP measured in hot plume to BC emissions.
- ❑ Affected by other aerosol components including condensable dusts.