

## What is the SNAP Initiative?

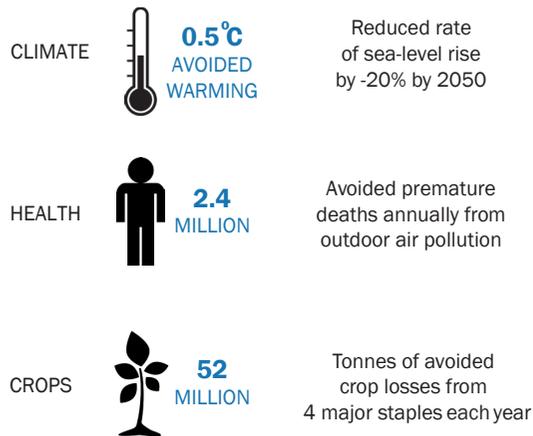
The goal of the SNAP Initiative is to develop capacity within CCAC partner countries for effective national planning for rapid and large-scale implementation of SLCP mitigation. This is being achieved through support for the national planning process, strengthening institutions, collaboration with regional and global actors, and the development of relevant tools.

## Why take action on SLCPs?

Short-Lived Climate Pollutants (SLCPs) are chemicals that have a warming influence on the climate and stay in the atmosphere for a relatively short time – on average from a few days to about 15 years. Most SLCPs are also dangerous air pollutants that impact public health, food, water, ecosystems and the economic security of large populations.

## Annual Benefits

From large-scale mitigation by 2030:



# SNAP Toolkit

The SNAP toolkit contains two main analytical tools to support decision making:

**LEAP-IBC**

**BenMAP-CE**

## LEAP-IBC

An application of SEI's Long-range Energy Alternatives Planning system (LEAP) Including the Integrated Benefits Calculator (IBC).

**LEAP-IBC** allows users to build SLCP-relevant emissions models and implement hypothetical SLCP control strategies.

### Pollutants estimated by LEAP-IBC

**SLCPs:** methane, black carbon, ozone  
**Co-emissions:** OC NMVOCs NO<sub>x</sub> CO  
**Long-lived GHGs:** CO<sub>2</sub> N<sub>2</sub>O

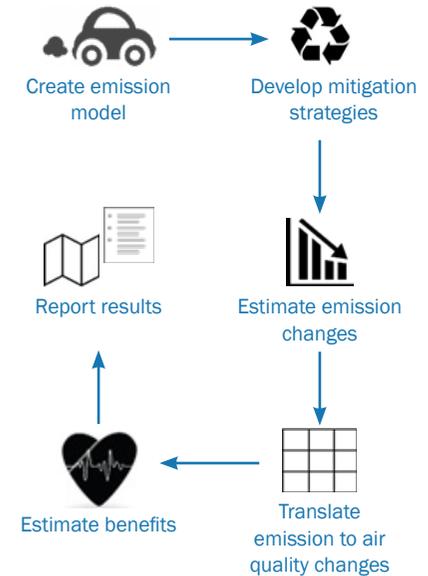
### Benefits estimated in LEAP-IBC

**Health:** premature deaths p.a. from O<sub>3</sub> & PM<sub>2.5</sub>  
**Crops:** tonnes yield lost from exposure to ozone  
**Climate:** temperature in annual time-steps for scenarios

**Emissions:** estimated from emission factors (defaults provided) and activity data for sectors. Baseline and mitigation scenarios built by users.

**Benefits:** in IBC, the emissions linked with the GEOS-Chem adjoint global air quality model to estimate concentrations of pollutants and estimated benefits climate.

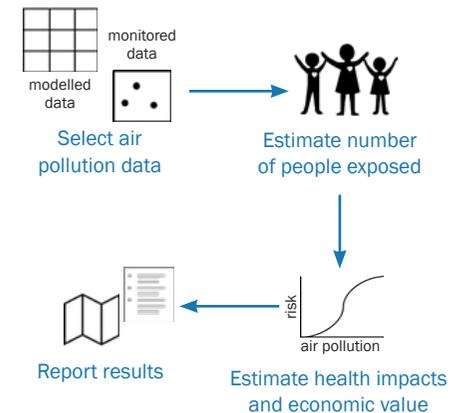
## LEAP-IBC in Action



## BenMAP-CE

*Customized Health Benefits and Economic Evaluation Tool*

Relates changes in particle pollution and ozone concentrations to health outcomes with estimated economic value.



## Results for Policy

The SNAP toolkit is designed to produce quantitative estimates of the expected benefits of SLCP mitigation strategies. This information is critical for assessing policy options for SLCP mitigation strategies. These tools produce high quality graphics and easy to understand numerical results that summarize key information for decision makers.

## Customized support

### Just beginning?

Use the LEAP-IBC tool to develop historical emission inventories, baseline and mitigation scenarios.

### Have existing emission data?

Modify the LEAP-IBC tool with your specific data.

### Multiple impact assessment

Use the LEAP-IBC tool to estimate health, climate and crop benefits of SLCP mitigation.

### Have existing modeling or monitoring data?

BenMAP-CE has more refined health and economic benefit capabilities.



## LEAP-IBC is a one-stop shop.

*Rather than using multiple tools, I use LEAP-IBC which allows both energy and non-energy emissions from all sectors to be calculated with the added ability to assess impacts of mitigation scenarios. LEAP-IBC can easily be modified to capture the impact of specific activities, such as replacing kerosene lamps with solar lanterns if you want to, a convenience you can't find in any other software. This means that LEAP-IBC can effectively serve the interests of local users.*



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## Contacts

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### For SNAP or CCAC queries:

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# CLIMATE & CLEAN AIR COALITION

## SNAP toolkit on Short-Lived Climate Pollutants



*A suite of analytical tools to assist national action on SLCPs*

**SNAP** - Supporting National Planning for Action on Short-Lived Climate Pollutants (SLCPs)