

Background

- The Greenhouse Gas (GHG) Emissions Analysis Toolkit provides a framework to assist Metro staff with the following:
 - transparent guidance on the climate assessment tools currently available to Metro staff
 - a process to consistently report and evaluate Metro projects, programs and policies
 - a means of engaging elected officials in clear and consistent discussions around regional priorities and processes to address climate change

Section 1: Selecting a tool

- Section 1 outlines a four step process for Metro staff to use when analyzing the GHG impacts of project or policy proposals.

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Step 1: Scale definition: The scale of your project or plan, and the type of decision support tool needed to guide the policy-making process, will influence the complexity of the tool needed to meet your stakeholder needs.

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Step 2: Boundary definition: An analysis must specify emissions sources that are included and those that are excluded.

3

Step 3: Emission type: GHG emissions can be organized into four different types: embodied, construction, operational, and end-of-life.

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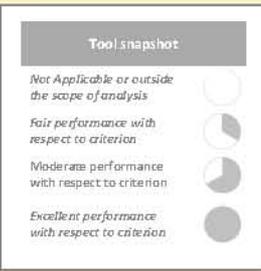
Step 4: Tool selection: Using the information from steps 1 - 3 identify which tool best meets your needs.

Stages of life-cycle emissions



Section 2: Tool descriptions

- Section 2 provides a brief description of each of the tools currently available to Metro staff, how to use the tool descriptions, and what to do if Metro's suite of tools does not meet a project's needs.
- Each tool description includes:
 - a brief introductory overview
 - tool strengths and limitations
 - required data inputs
 - budget and staff time needed to run the tool
 - staff contacts
 - visual aid demonstrating the recommended scale and approach for each tool



- Each description also includes a "tool snapshot" that identifies how well the tool compares to a set of evaluation criteria used during the staff assessment process.

Best Practice

- Metro recommends that, *whenever possible*, direct and indirect GHG emissions from all stages of relevant life cycles should be included in a Metro GHG impact analysis.

Section 3: Gaps analysis

GHG Assessment Toolkit Gaps Analysis		
Identified gaps in decision-support tools	Mode/ Data Needs	
	Update	New
Transportation Planning		
Dedicated funding for research and data capture for ongoing GHG emissions related analysis	✓	
No EPA guidance on sub-regional analysis	✓	
Emissions from freight and heavy-duty vehicles		✓
Land Use Planning		
Land use model to capture non-residential point-source emissions	✓	
Carbon sequestration potential of regionally unique natural systems		✓
Climate benefits of habitat restoration		✓
Climate impacts of green building development practices (all scales)		✓
Sketch planning tools used for detailed planning, engineering, and operational analysis		✓
Material Management		
Emissions from freight and heavy duty vehicles		✓
Consumption-based materials management model	✓	
Metro and Visitor Venues: facilities and properties		
See Land Use gaps 2-4		✓
GHG reduction potential of facility improvements or upgrades		✓
Additional GHG Tool Gaps		
Economic impacts of climate change		✓
Health impacts of climate change		✓
✓ Staff identified priority investment action		

For more information, contact:

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