## Self-Assessment: 14.0 Final Design and Construction

This self-assessment worksheet is intended to assist State DOT staff involved in final design and construction to determine their level of engagement in GHG assessment and additional steps they could take to estimate and reduce GHG emissions. This worksheet is meant to be used as a guide and completed with any markings and notes that are helpful.

#### Primary GHG Interests and Responsibilities

Staff involved in final design and construction can support GHG emissions measurement and reduction through:

* Construction staging and detour routes.
* Reuse of deconstructed materials when possible.
* Selection of high recycled content materials for the chosen alternative.
* Equipment and fuel standards for the construction phase.
* Identification of offsets needed to mitigate remaining emissions, assuming that agency policy supports the purchase of offsets.

#### Staff Responsibilities

List the key staff person(s) responsible for ensuring GHG is considered in final design and construction. **Lead** = management/oversight; **Support** = technical or procedural support (e.g., emissions calculations).

| Unit | Title/Position/Topic | Name | Role (Lead/Support) |
| --- | --- | --- | --- |
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#### Level of Engagement

Select the level that best describes how engaged your agency, as a whole, is now on addressing GHG in final design and construction and how engaged you might want to be in the next few years.

| Now | Within 3 Years? | Does Your Agency Consider GHG Impacts in Final Design and Construction? | Level |
| --- | --- | --- | --- |
| \_\_\_\_\_ | \_\_\_\_\_ | No policy that requires GHG consideration in final design and construction. | 1 |
| \_\_\_\_\_ | \_\_\_\_\_ | Policy to consider GHG emissions in final design and construction. Possible qualitative GHG goals, no quantitative estimates or targets. No formal consideration. | 2 |
| \_\_\_\_\_ | \_\_\_\_\_ | Policy that sets reduction goals or targets for GHG emissions from the agency’s construction activity and requires consideration in project budgeting and operations. Baseline GHG inventory and forecast for construction. Limited strategy identification and assessment. Qualitative consideration at the program level.  | 3 |
| \_\_\_\_\_ | \_\_\_\_\_ | Policy that sets construction-related GHG reduction goals or targets and monitors progress on a Region/District or statewide basis. Quantitative consideration with mitigation strategies identified, including both fuels and materials as well as review of program operations as they bear on GHG emissions using a “Plan, Do, Check, Act” approach.  | 4 |

#### GHG Estimation and Reduction Strategies

Identify specific strategies your unit/functional area is undertaking now and which ones you might want to be undertaking in a few years. The table indicates what “level of engagement” (1–4) the strategy may be associated with. More advanced strategies indicate higher levels of engagement that also require more effort.

| Doing Now? | Within 3 Years? | Programmatic Strategy | Level of Engagement |
| --- | --- | --- | --- |
| \_\_\_\_\_ | \_\_\_\_\_ | Specify lower carbon fuels such as biodiesel, renewable diesel, and electricity where practical. | 2 |
| \_\_\_\_\_ | \_\_\_\_\_ | Follow procedures to improve traffic flow and reduce congestion and idling in detours. | 2 |
| \_\_\_\_\_ | \_\_\_\_\_ | Conduct research to identify the best possible materials mixes and market sources to deliver GHG reductions. | 3 |
| \_\_\_\_\_ | \_\_\_\_\_ | Communicate with material providers regarding desired changes in material preferences. | 3 |
| \_\_\_\_\_ | \_\_\_\_\_ | Develop standardized specifications. | 4 |
| \_\_\_\_\_ | \_\_\_\_\_ | Develop and deploy standardized specifications and methods that reduce GHGs. | 4 |
| \_\_\_\_\_ | \_\_\_\_\_ | Introduce electrically powered vehicles and equipment, as technology is ready. | 4 |

#### Action Plan

What actions will you take to implement the strategies you identified above to increase your agency’s engagement?

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| Action | Timeframe | Lead Responsibility |
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