

*Purpose: This template is designed to support IWG members as they develop specific actions for implementation in 2009. A template should be filled out for each action developed. This template includes quantification principles and guidelines. Additional materials (e.g. background materials and/or analysis materials such as the documentation of key data sources, assumptions, uncertainties, models and methods) should be included or referenced where appropriate.*

### **Title:**

*The title should be brief yet descriptive, expressing in broad terms the specific mitigation action being recommended for implementation in 2009.*

### **2009 Action Description:**

*The proposition should be described in detail, and include:*

- **Design of the specific program** (what specifically is being proposed for implementation?)
- **Definitions**, if any are needed
- **Procedural and administrative provisions and requirements**
  - *Is additional authority needed? If so, how will it be obtained?*
  - *Is administration or enforcement required? If so, who will provide it?*
  - *Is fiscal support required? What are the direct, administrative, and implementation costs? Who will pay? Can the cost be met from existing state money or does it require new funding?*

### **Basis for Selection:**

- **Brief description of the rationale or guiding principles the IWG used to select the action.**
  - *Refer as needed to supporting information below (cost-effectiveness, emissions reductions, co-benefits)*

### **Implementation Approach and Mechanisms:**

*The implementation approach/mechanism(s) should be identified, along with the following details:*

- **Specific deliverable which the IWG will produce to accomplish implementation of the 2009 Action** (e.g. draft legislative text) , **along with who will produce it and by when**
  - *Note: the deliverable will likely incorporate the other elements contained in this template and developed by the IWG (e.g. the rationale for selecting the action can inform the preamble for legislation, and the description of the proposition may form the body of the legislation), but will be specific to the implementation approach/mechanism required for each 2009 Action.*
  - *Members of the IWG may choose to draft the deliverable, or state support staff may do the drafting, and members will review.*
  - *The deliverable needs to be in draft by the first week of September, and finalized by the first week of October.*
- **Brief description of potential barriers to implementation, and how the action has been designed to overcome them** (including upfront costs, potential externalities, negative leakage, etc.)

## Supporting Information:

*Include the following:*

- **Description of how this option might interact with a regional or national cap-and-trade, or other economy-wide market-based system for greenhouse gases.**
- **Where quantifiable, IWGs should include the following:**
  - **GHG reduction potential of the action, and underlying assumptions** (if action is amenable to quantification) reported in common units,<sup>1</sup> using consistent approaches to geographic scope and lifecycle analysis<sup>2</sup>
  - **Costs or cost savings (net present value, cost-effectiveness) of the action** (if action is amenable to quantification), using consistent methods and perspectives<sup>3</sup>, and reported in consistent units.<sup>4</sup>
- **Distribution of costs and benefits.** Costs and benefits that fall disproportionately on specific groups or actors, should be noted qualitatively, especially where studies or other information are available.
- **Qualitative description of additional external benefits** (e.g. green jobs creation). Unless studies or other information exists, the monetized environmental or social benefits, quality of life improvements, other health benefits, energy security benefits, and macroeconomic impacts from shifting benefits will not be quantified and included.
- **Implications/ engagement opportunities for individual action/behavior change** (e.g. behavior change needed to achieve implementation and/or achieved through implementation)
- **Implications/engagement opportunities for local and regional governments and private sector**

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<sup>1</sup> Net GHG reduction potential in million metric tons carbon dioxide equivalent (MMTCO<sub>2</sub>e) using IPCC 100 yr global warming potential, reported for 2012, 2020, and cumulatively 2009-2020. Where significant additional GHG reductions or costs occur beyond the project period as a direct result of actions taken during the project period, these will be indicated as appropriate.

<sup>2</sup> GHG impacts of policy options are estimated regardless of the physical location of emissions reductions. Where significant emissions impacts are likely to occur outside the state, this should be clearly indicated. These emissions reductions are counted towards the achievement of the state's emission goal, since they result from actions taken by the state.

Lifecycle analysis is applied wherever emissions impacts upstream (e.g., production, extraction) or downstream (e.g. waste disposal) from a specific activity constitute a significant fraction of a policy option's emissions impacts and studies are sufficient to enable estimation.

<sup>3</sup> The general approach of direct (NPV) cost and cost-effectiveness analysis is used, as widely applied to GHG mitigation policy options. Included are the direct, economic costs from the perspective of the state as whole (e.g. avoided costs of electricity rather than consumer electricity prices). Costs may include capital costs levelized (amortized) where appropriate, operation, maintenance and other labor costs, and fuel and fertilizer costs). This bottom-up approach is relatively transparent and is capable of reflecting the costs (and cost savings) associated with an individual policy option, in contrast to macroeconomic analysis, which aims to capture flows and interactions across all sectors of the economy.

<sup>4</sup> Net present value (NPV) cost savings for the period 2009-2020 in 2007 constant dollars, using a 5% real discount rate. Cost-effectiveness - Cost per metric ton of CO<sub>2</sub> equivalent emissions reduced (or removed) in units of \$/MTCO<sub>2</sub>e. This figure represents the NPV cost divided by the cumulative emission reductions, both over the 2009-2020 period.