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ECODISTRICTS CERTIFIED

SUPPLEMENTAL GUIDANCE ON IMPERATIVES COMMITMENT PREPARATION

DECEMBER 2017

This memo supplements the Certification Handbook with additional guidance on the preparation of an Imperatives Commitment. The guidance is organized below using Template sections from the Handbook. Each Template requirement appears in *italics* and is followed by guidance.

1. Introduction

Provide the district name, Imperatives Commitment adoption date, and names of preparers.

Provide introductory information on the Commitment, including name of the district, date of Commitment adoption, names of preparers, and, briefly, the Commitment preparation process.

2. Equity Commitment

a) Vision & Scope

Describe the district vision and commitment to procedural, structural, cross-generational, and distributional equity in all district activities.

Provide a brief commitment statement that expresses the district's vision of equity consistent with the Protocol Equity Imperative. Define a scope that includes applicable vulnerable groups in the district, and include a commitment to pursue equity for the groups in all activities, e.g. public engagement, governance, hiring, and project execution and evaluation. In cases where vulnerable groups are not present in a district, the Equity Commitment scope should address groups in the broader community that are likely to be directly or indirectly affected by the district.

b) Context

Describe vulnerable groups that are likely to be affected by district activities.

List vulnerable groups in the district and their approximate sizes. At a minimum, consider including: people of color, low-income people, youth, elderly, recent immigrants, people with limited English proficiency, people with disabilities, and homeless people. In cases where groups are not present in a district, such as brownfield sites or developments without a residential population, list those that may be affected in the broader community by changes and/or investment within the district.

Describe the conditions that have historically subordinated the vulnerable groups.

For each listed group, briefly describe historical conditions that subordinated a group, e.g. a lack of adult literacy courses has economically and socially impeded people with limited English proficiency.

Summarize official local equity policies and plans applicable to the district.

List municipal, county, and state equity policies and plans with applicability to the district. For each listed policy or plan, briefly describe its content and application to the district. For example, a municipal policy on equitable hiring and contracting may extend to organizations receiving municipal funds, which could include a district.

c) Work Plan

Describe tasks to be integrated into the Formation, Roadmap, and Performance phases to remove inequities and strengthen equitable outcomes.

For each Protocol phase and applicable type of equity, identify tasks that will be integrated into the phase to advance the Commitment. In outline form, a work plan could include the following simplified, illustrative content:

Equity in the Formation phase

- Procedural
 - Task 1. Outreach to identified vulnerable groups, including language translations, explaining Formation steps and participation opportunities.
- Structural
 - <u>Task 2</u>. Recruit vulnerable group representatives for the district decisionmaking body.

Equity in the Roadmap phase

- Procedural
 - <u>Task 3</u>. Ensure the feasible participation of vulnerable groups in Roadmap workshops, including language translation and pre-workshop process orientations.

- Structural
 - o <u>Task 4</u>. Perform an equity-screening of all proposed projects and programs during the strategy ranking step.
- Distributional & cross-generational
 - o <u>Task 5</u>. Evaluate the distributional and cross-generational impacts of project and program proposals during strategy ranking.

Equity in the Performance phase

- Procedural
 - o <u>Task 6</u>. As part of biennial progress reporting, prepare an evaluation of equity results to date, and recommend strategy adjustments to improve outcomes.
 - <u>Task 7</u>. Meet with vulnerable groups to review the equity of burdens and benefits from Roadmap execution to date, and recommend strategy adjustments.

d) Responsibilities & Schedule

List parties responsible for tasks.

For each work plan task, identify one or more entities that will have primary responsibility for task execution.

Provide a timetable for executing tasks.

Since the equity tasks are embedded in the three Protocol phases, this timetable is essentially an anticipated schedule for completing and maintaining certification. For each phase, it is sufficient to provide a generalized, narrative timetable for executing the tasks rather than a calendar-based, date-specific schedule.

e) Indicator

Describe at least one indicator of equity that will measure baseline conditions and changes over time.

Identify at least one equity indicator. Use Appendix B of the Certification Handbook for indicator selection guidance and examples.

f) Evaluation & Adjustment

Describe a procedure that will use indicator results in a feedback loop for continuous improvement of equity in district activities.

Provide a statement committing the district to using its biennial indicator updates and progress reports as equity feedback that will support ongoing equity advances. The statement should cross-reference a Performance phase work plan task devoted to this goal.

g) Letter of Support

Attach at least one letter of support affirming the appropriateness of the Equity Commitment from an organization or agency with equity-related responsibilities in the community, but that is not a member of the district team.

3. Resilience Commitment

a) Vision & Scope

Describe the district vision and commitment to building resilience knowledge and expertise that empowers action through robust organizations and networks, and enables people and places to thrive in the face of social, economic, and environmental stresses and shocks.

Provide a brief statement that expresses the district's vision of social, economic, and environmental resilience consistent with the Protocol Resilience Imperative, and include a commitment to minimizing and avoiding stresses and shocks when possible, and when unavoidable, mitigating their negative effects.

b) Context

Describe the district's chronic stresses and potential shocks, and its vulnerable populations.

List chronic social, economic, and environmental stresses in the district, including their character, relative magnitude, and vulnerable or at-risk populations. Also, list district exposures to potential social, economic, and environmental shocks, including their character, relative potential magnitude, and vulnerable or at-risk populations.

Summarize current local official resilience measures applicable to the district.

List municipal, county, and state resilience policies and plans applicable to the district. For each listed policy or plan, briefly describe its content and application to the district, e.g. officially-designated floodplain.

c) Work Plan

Describe tasks to be integrated into the Formation, Roadmap, and Performance phases to minimize and avoid stresses and shocks when possible, and, when unavoidable, to mitigate their negative effects.

For each Protocol phase and applicable type of resilience, identify tasks that will be integrated into the phase to advance the commitment. Note that in the Equity Imperative, "vulnerable

groups" are those that have been disadvantaged over time, whereas in the Resilience Imperative, "vulnerable populations" are those that are at risk of being impacted by stresses and/or shocks. In outline form, a work plan could include the following simplified, illustrative content:

Resilience in the Formation phase

- Knowledge/Expertise & Organizations/Networks
 - Task 1. Outreach to identified at risk groups, including language translations, explaining resilience goals.
- People & Place
 - o <u>Task 2</u>. Recruit at risk group and critical facility representatives for the district decision-making body.

Resilience in the Roadmap phase

- Knowledge/Expertise & Organizations/Networks
 - Task 3. Ensure the feasible participation of at risk groups in Roadmap workshops, including language translation and pre-workshop process orientations.
- People & Place
 - Task 4. Evaluate the robustness of strategies to withstand stresses and shocks, and eliminate over-reliance on single assets.

Resilience in the Performance phase

- Knowledge/Expertise & Organization/Networks
 - Task 5. As part of biennial progress reporting, prepare an overall evaluation of resilience results to date, and recommend strategy adjustments to improve outcomes.
- People & Place
 - Task 6. Meet with at risk groups to review the burdens and benefits from execution of resilience strategies to date, and recommend strategy adjustments.

d) Responsibilities & Schedule

List parties responsible for tasks.

For each work plan task, identify one or more entities that will have primary responsibility for task execution.

Provide a timetable for executing tasks.

Since the resilience tasks are embedded in the three Protocol phases, this is essentially an anticipated timetable for completing and maintaining certification. For each phase, it is sufficient to provide a generalized, narrative timetable for executing the tasks rather than a calendar-based, date-specific schedule.

e) Indicator

Describe at least one indicator of resilience that will measure baseline conditions and changes over time.

Identify at least one resilience indicator. Use Appendix B of the Certification Handbook for indicator selection guidance and examples.

f) Evaluation & Adjustment

Describe a procedure that will use indicator results in a feedback loop for continuously improving district resilience.

Provide a statement committing the district to using its biennial indicator updates and progress reports as feedback that will support ongoing advances in resilience. The statement should cross-reference a Performance phase work plan task devoted to this goal.

g) Letter of Support

Attach at least one letter of support affirming the appropriateness of the Resilience Commitment from an organization or agency with resilience-related responsibilities in the community, but that is not a district team member.

4. Climate Protection Commitment

The Protocol Climate Protection Imperative stipulates that a district must build a pathway to carbon neutrality. A district's Climate Protection Commitment is an assurance that the district is willing to pursue such a path, the details of which are set in the Roadmap phase, not in the Imperative Commitment. In addition to brief, generalized information suitable for the Commitment as described below, the guidance includes two tables of reporting parameters to help districts anticipate climate protection tasks that will need to be performed in the Roadmap phase pursuant to the Commitment.

a) Vision & Scope

Describe the district vision and commitment to carbon neutrality by eliminating, sequestering, and/or offsetting direct and indirect operational carbon dioxide (CO2) emissions from: buildings, water use, infrastructure operations, solid waste management, and transportation within, and to and from, the district.

Provide a brief statement of the district's vision of climate protection consistent with the Protocol Climate Protection Imperative, and include a commitment to achieving carbon neutrality through energy efficiency, renewable power, sequestration, and, to the least extent possible, offsets outside the district. The Commitment scope must include carbon emissions from energy used in buildings, transportation, and infrastructure, including water supply, wastewater treatment, and solid waste management. The Commitment statement does not need to specify a carbon neutrality target year, but rather an intent to set the neutrality year during the Roadmap phase.

b) Context

Describe energy production and use in the district, and direct and indirect sources and sinks of CO2 emissions.

For purposes of the Commitment, it is sufficient to describe current energy and CO2 emission conditions in a generalized fashion using readily available data, and to commit to preparation of a detailed CO2 inventory during the Roadmap phase, as illustrated in Table 1.

Summarize current local official climate protection measures applicable to the district.

List municipal, county, and state climate protection policies and plans applicable to the district. For each listed policy or plan, briefly describe its content and application to the district, e.g. municipal standards for energy-efficiency upgrades during building renovations.

For existing climate policies or plans, identify specific goals for CO2 change, whether total elimination (carbon neutral) or a percentage reduction; and identify timetables for goal achievement, e.g. carbon neutrality by 2050.

c) Work Plan

Describe tasks to be integrated into the Formation, Roadmap, and Performance phases to reach carbon neutrality.

For each Protocol phase, identify tasks that will be integrated into the phase to advance the Commitment. In outline form, a work plan could include the following simplified, illustrative content:

Climate Protection in the Formation phase

- <u>Task 1</u>. Outreach to identified vulnerable groups, including language translations, explaining climate protection goals and participation opportunities.
- <u>Task 2</u>. Recruit climate protection practitioners and vulnerable group representatives for the district decision-making body.

Climate Protection in the Roadmap phase

- <u>Task 3.</u> Ensure the feasible participation of vulnerable groups in Roadmap workshops, including language translation and pre-workshop process orientations.
- <u>Task 4.</u> Conduct a carbon-screening of all projects and programs during the strategies ranking step.

Climate Protection in the Performance phase

- <u>Task 5.</u> As part of biennial progress reporting, prepare an evaluation of carbon reduction results to date, and recommend strategy adjustments to accelerate the rate of reduction.
- <u>Task 6.</u> Meet with vulnerable groups to review the burdens and benefits of climate protection strategies to date, and recommend strategy adjustments, if needed, for improving equitable outcomes.

d) Responsibilities & Schedule

List parties responsible for tasks.

For each climate protection work plan task, identify one or more entities that will have primary responsibility for task execution.

Provide a timetable for executing tasks.

Since the climate protection tasks are embedded in the three Protocol phases, this is essentially an anticipated timetable for completing and maintaining certification. For each phase, it is sufficient to provide a generalized, narrative timetable for executing the tasks rather than a calendar-based, date-specific schedule. The Commitment timetable does not identify the carbon neutrality year, which is set in the Roadmap phase.

e) Indicator

Describe at least one indicator of climate protection that will measure baseline conditions and changes over time.

Identify at least one climate protection indicator. Use Appendix B of the Certification Handbook for indicator selection guidance and examples.

f) Evaluation & Adjustment

Describe a procedure that will use indicator results in a feedback loop for continuously toward carbon neutrality.

Provide a statement committing the district to using its biennial indicator updates as climate protection feedback that will improve progress toward carbon neutrality. The statement should cross-reference a Performance phase work plan task devoted to this goal.

g) Letter of Support

Attach at least one letter of support affirming the appropriateness of the Climate Protection Commitment from an organization or agency with climate protection-related responsibilities in the community, but that is not a district team member.

Additional Climate Imperative Guidance to be used in the Roadmap Phase

The Climate Protection Commitment is largely addressed in the Roadmap phase, and that phase is explained here to give districts additional context on the extent of the Commitment. The level of detail described below is not necessary for the Climate Protection Commitment.

For carbon emissions scoping and accounting, districts are encouraged to use the <u>Global Protocol for Community-Scale Greenhouse Gas Emission Inventories</u>, with the following modifications:

- The inventory boundary is a district's geographic boundary.
- It is only necessary to inventory CO2 emissions; other greenhouse gas emissions are optional.
- Using the Global GHG Protocol emission scope categories, CO2 sources include:
 - Scope 1. Operational emissions from sources located within the district boundary, including the building, transportation, and infrastructure sectors.
 - Scope 2. Operational emissions occurring outside the district boundary from the use of grid-supplied electricity and thermal energy within the district boundary.

Scope 3.

- Transportation, water supply, wastewater treatment, and solid waste management operational emissions occurring outside the district boundary due to activities taking place within the boundary. Emissions embedded in products and services produced outside the district and consumed within the district are optional.
- Transportation emissions include 100% of person-trips within the district, and a reasonable share, e.g. 50%, of external person-trips that begin or end

in the district. Pass-through person-trips should be excluded, and freight transport is optional.

External water supply, wastewater treatment, and solid waste management
emissions should be based on a pro rata share of total emissions occurring at
central municipal systems devoted to these services. The pro rata share should be
based on a district's population and employment.

In the Roadmap phase, the pathway to carbon neutrality is formulated using a set of CO2 reduction strategies and a timetable that culminates at a carbon neutrality year. The neutrality year does not need to match the Roadmap horizon year, but it must be coordinated with the Roadmap horizon and any existing local climate plan horizon or neutrality year. The district timetable should include at least short-term and mid-term milestone years with corresponding CO2 reduction targets.

Districts are encouraged to document their carbon neutrality pathway in their Roadmap by using Table 2 or an equivalent format, during the strategies identification and ranking steps. In formulating CO2 reduction strategies, districts may include estimated reductions from national and international improvements in energy technologies and efficiencies, e.g. vehicle and appliance standards, that are beyond the control of the district. In ranking carbon neutrality strategies, onsite measures devoted to eliminating energy demands, improving energy efficiencies, generating renewable power, and taking other zero-carbon actions must be prioritized over the use of CO2 emission offsets that occur outside the district.

It is possible that 100% of a district's CO2 emissions cannot be technically or cost-effectively eliminated within a district's planning timeframe. It may therefore be necessary, after all feasible carbon elimination measures are incorporated, to plan for offsetting remaining emissions by purchasing credits for CO2 reduction actions outside the district, as shown at the bottom of Table 2. Such offsets should be minimized to the greatest extent possible, have funding methods described in the Roadmap, and be limited to: renewable energy certificates verified by entities such as the *Green-e* program of the Center for Resource Solutions; or carbon reduction and removal credits certified by a verification body in conformance with *ISO 14065:2013 Requirements for Greenhouse Gas Validation and Verification Bodies for Use in Accreditation or Other Forms of Recognition, such as the Rainforest Alliance, Gold Standard, and Verified Carbon Standard.*

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Table 1. Illustrative CO2 Inventory - Additional Resource for the Roadmap Phase

		Base Year Energy Use								Base Year CO2 Emissions						
Energy End-Uses	Million Btu/Year								Tons/Year							
	Grid Supplied Electricity	Onsite Renewable Electricity	Nat Gas	Dist Htg & Clg	Gasoline	Diesel	Biofuel	Total Energy Use	% of Total Annual Energy Use	Grid Electricity	Nat Gas	Dist Htg & Clg	Gasoline	Diesel	Total Emissions	% of Total Annual CO2 Emissions
Buildings																
Residential																
Non-residential																
Buildings subtotal																
- Fransportation																
Internal person-trips - 100% of trips																
Motor vehicles																
Transit																
External person-trips - 50% of trips beginning/ending																
Motor vehicles																
Transit																
Transportation subtotal																
nfrastructure																
Internal																
Street lighting & traffic control																
Water/wastewater/stormwater pumping																
Wastewater treatment																
Solid waste management																
External																
Water supply - pro rata share																
Wastewater treatment - pro rata share																
Solid waste management - pro rata share																
Infrastructure subtotal																
Infrastructure subtotal Fotal																10

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Table 2. Illustrative Carbon Neutrality Pathway - Additional Resource for the Roadmap Phase

Table 2 - Carbon Neutrality Pathway										
Energy End-Uses & Illustrative CO2 Reduction	Unadjusted Base Year CO2 Emissions (tons)	Percent CO2	Remaining CO2 Emissions to be							
Strategies		Short-Term Milestone Year	Mid-Term Milestone Year	Neutrality Year	Offset at Neutrality Year (tons/year)					
Buildings										
Residential & non-residential buildings										
Efficiency design & retrofits										
Fuel switching to clean sources										
Transportation										
Motor vehicles										
Fuel efficiency improvements										
Fuel switching to clean sources										
Trip reduction incentives/pricing mechanisms										
Ped/bike improvements - mode switching										
Transit										
Vehicle fuel switching/efficiency improvements										
Ridership service improvements										
Land-use/urban design support										
Infrastructure										
Onsite energy production										
Renewable power generation										
District heating & cooling										
Street lighting & traffic control										
High efficiency fixtures & controls										
Water supply										
Onsite rainwater harvesting										
Water/wastewater/stormwater pumping										
High efficiency pumps & controls										
Wastewater treatment										
Onsite treatment & effluent reuse										
Solid waste management										
Composting & recycling										
Neutrality Year Results (CO2 tons/yr)										
Total unadjusted emissions to be offset										
Onsite sequestration & excess renewable power sales					()					
Total adjusted emissions to be externally offset										
External Offsets at Neutrality Year (CO2 tons/yr)										
Renewable energy certificates					()					
Verified reduction & removal credits					()					
Carbon Neutrality (CO2 tons/yr)					Zero					