

# 1.4.0

## SERIES 1

### Establishing Resilience Principles

# IDENTIFYING RESILIENCE PRINCIPLES



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Before beginning work on vulnerability and risk assessments or thinking about urban resilience, it is often useful to take a step back and examine your city's short- and long-term goals for adapting to climate change. Thinking about these goals will help you develop a process for evaluating the current situation in your city, developing plausible scenarios of what your city might face in the future, and whether your goals can actually respond to both current and future challenges. In this set, we present defining principles for resilience actions derived from existing practice and examples of criteria questions that can be used to evaluate whether planned activities adhere to those defining principles. You will use this information to begin framing your own resilience principles that you will use to guide your resilience planning process.

## IN THIS SET YOU WILL:

- ✓ Identify resilience principles and criteria used in previous social, environmental, or disaster risk reduction efforts in your city.
- ✓ Develop an initial set of resilience principles and criteria that you think will be important to guiding the urban climate change resilience planning process your city is about to undertake.

## Overview

Because climate change resilience initiatives are new, we don't have long-term evidence as to whether our research processes are investigating the right questions and whether the interventions we are developing will protect us and support better environmental, social and climate conditions in the future. Much of the research and experience that we have to date comes from the natural hazards, environmental protection, and sustainable development fields. As a result, there are no standard, universally accepted, hard rules for what climate resilience interventions or policies should do. We know a lot more about what we should NOT do—such as building in floodplains or destroying critical coastal wetlands that provide storm surge protection—than exactly how to prepare our cities for climate change. This raises an important point—climate change is not the only challenge our cities will face in the future. Our cities face multiple challenges related to population growth, providing services, food, infrastructure and a good quality of life and place of business for those living and working in the city, managing budgetary constraints, conflicting policies from national or provincial governments, and so on. To build truly resilient cities that are able to handle multiple challenges, not just climate change, we need to develop resilience principles and processes that take a systematic approach to handling these multiple, dynamic and uncertainties.

Though planning and implementing climate change resilience activities may be new and their success uncertain, it is relatively easy to identify broad areas in which an action should be responsive, and easier yet to identify what it should not do. This allows us to develop general guiding principles for resilience actions that address multiple future challenges your city might face beyond just climate change.

### Resilience processes, interventions, plans and policies **SHOULD**:

- Help a particular group, city services, ecosystem or urban area to adapt to and beneficially shape processes of social, environmental and climate change. This can and should include activities that reduce your city's consumption of energy, water, food, etc. and its contribution of greenhouse gas emissions and pollution.
- Help prepare for and mitigate the impacts or outcomes of not only short-term shocks (extreme events like floods or landslides), but ALSO long-term, gradual changes and increases in climate variability (e.g. longer droughts, more regular and intense heat waves, more variable weather during planting and harvest periods, etc.). Long-term, slow changes and

increased variability may not grab our attention as easily as specific hazard events that cause massive damage, but over time they can cause even greater damage and be even harder to recover from because we don't notice that things are happening until it is difficult to change course.

- Take a multi-hazard approach. If your city is located in an earthquake-prone area, or has infrastructure like a nuclear power plant or chemical manufacturing plant that could lead to a technological hazard, you need to ensure that all policies, plans, and interventions account for both these hazards and climate hazards.

## Climate resilience processes, interventions, plans and policies **SHOULD NOT:**

- Make social, environmental or climate conditions worse or create new problems.
- Commit to a course of action that is hard to correct later on if it turns out to have been a bad idea, or if conditions change.

## Developing Your Resilience Criteria

Determining whether proposed actions, plans, or policies meet these resilience principles can be examined on the basis of four governing criteria—*Legitimacy, Equity, Efficiency and Effectiveness*. For each of these criteria we can pose questions that help us evaluate whether our actions adhere to the resilience principles:

### **LEGITIMACY**

Do people believe in, support and provide the resources and authority necessary to enact the policy or action? Who is responsible for implementation?

### **EQUITY**

Who or what is being helped by the policy or action? What are the potential impacts—both positive and negative—for society, the environment or climate?

### **EFFICIENCY**

Does the policy or action fit within budget, planning timelines and policy priorities? Is the technical capacity to carry out the project readily available?

### **EFFECTIVENESS**

Can the policy or action do what it says it will do to reduce vulnerability and risk and build resilience? Can the

effectiveness of the policy or action be readily monitored?  
Does it acknowledge critical thresholds? Can it respond flexibly to unanticipated changes or impacts? Can the policy or action be reversed with minimal negative impacts if it turns out to have been a poor choice?

Your resilience criteria and criteria questions may be different from the ones we have provided as examples. What is important is that they be developed with the intent to truly explore whether a given action is feasible, well designed both conceptually and physically, whether it will achieve the benefits intended, whether it will reach the intended audience, and whether it will truly avoid doing further harm in the process.