



# USING SCIENCE TO DISCOVER WHAT MATTERS RESILIENCE

# What Resilience is for

**Resilience is a key tool** for making decisions about interconnected issues, making it possible **to prioritise** what really matters.

This prioritisation is made possible by examining the relationships between the components of a complex system. This approach not only considers the isolated element (conventional approach) but also **examines it as a function of its position within the system.** 

This approach makes it possible **to test the effects, interactions and impacts of an element with the other elements** of the system, providing a more indepth analysis of superior quality.

Resilience articulates the entire process, quickly handling complex mathematical calculations so that participants perceive it as an interactive experience.



## Process

**Resilience workshops are divided into three phases** in order to: set out the problem, brainstorm issues, and assess and generate links between them.



INITIAL PHASE SETTING OUT THE PROBLEM The problem is described to the workshop participants in order to inform them and align them towards resolving it.

PHASE 1 BRAINSTORMING Participants brainstorm ideas, which will be used in the subsequent problem solving phase.



PHASE 2 ASSESSING AND LINKING IDEAS Participants evaluate the ideas produced in the brainstorming phase using a two-step approach: assessing the ideas and building links between them.



# Resilience

Resilience is a tool to solve problems of prioritising salient issues in 3 simple steps.

Its power lies in its ability to analyse complex problems where the solutions are interconnected.

### **INITIAL PHASE**



neutrality.

This phase is divided into two parts, which involve examining the problem and examining how the tool works

#### The session moderator sets out the problem to be solved in order to report on trends and solutions. For example, what a carbon-neutral city consists of, or what measures are taken by cities that aspire to carbon

Once the problem has been described, the participants receive a description of how the tool and the different screens work, to cover any doubts that may arise.

Brainstorming

PHASE 1

In this stage, participants propose **ideas** that they consider to be **relevant**. This process takes place through an interactive interface in which participants can lend support to issues posted by others and propose new issues.







Issues proposed in the preceding phase are analysed at this stage. This assessment is done in two ways:



#### Assessment of issues in several

dimensions. Participants assess the issues based on the criteria defined in the project. These criteria can include, for example, impact, probability, relevance, difficulty or any dimension that is considered to be meaningful.

Linking issues. Workshop participants link issues by generating relationships between them. These relationships are used by the algorithms in Resilience, which make it possible to understand and identify the most salient issues

## Results

When the Resilience workshop concludes, a common space is created where participants can access the results. That space contains reports, rankings and issue interconnection networks that explain and support the optimal solution to the issue.

> On conclusion of the workshop, participants have a **clear** vision of the priority issues and of those that are less important, based on algorithms developed from network theory.



**DURATION:** 30 - 60 minutes





DURATION: 30 - 45 minutes

## Resilience

## CASE STUDY

The purpose of this case study is to bring out issues or actions to be taken so that a **city** can become **carbon-neutral**, highlighting which of those **actions are essential to achieving that goal**.

This is the sort of situation in which Resilience excels: **inter-related issues** 

whose combined effects are difficult to examine or evaluate

Resilience can discriminate which of all the proposed initiatives can have an essential multiplicative impact and serve as a lever for the other initiatives. This maximises the chances of success by generating the greatest impact at the lowest cost.

Smart energy-efficient buildings OF PRIIOTRIES CO<sub>2</sub> Green areas TAX Ô Energy autoproduction SCALE Carbon taxes Efficient, neutral transport ZERO systems Use of sustainable materials Zero waste 111111 ..... ..... Proximity to the workplace ...... 0 0



BUSINESS AS UNUSUAL

### 

© November, 2020 ACCIONA S.A. All rights reserved.