

## Assignment 2. Scenario Logics. Due Apr 28, 2022.

### Class exercise (April 21, 2022)

In order to develop scenarios that take into the most divergent plausible futures, we must explore interactions among critical and uncertain driving forces which may challenge our assumptions about future trajectories. Scenario Logics are characterizations and graphic representations of alternative futures based on the interaction of the two most important and uncertain driving forces.

**Objective:** Create a scenario logic matrix. Develop initial hypotheses for your scenarios. You want to start thinking about alternative storylines and the major differences between your scenarios. You are creating the outside 'frame' within which you will be developing specific scenarios.

**1. Select 2 end points for each key driving force's dimension:** Think about two extremes for each driving force's dimension. These are simply initial hypotheses, focus on the direction (i.e. major/minor increase in temperature, high water flow/ low water flow, more forest productivity/less forest productivity, fast-growing demand of energy/slow-growing demand of energy, etc.). For this exercise try to limit it to two endpoints.

**2. Create a scenario logics matrix:** Cross the two driving forces, accompanied by their unique dimension to create a four-frame matrix.

### Present the scenario logics in class on April 21 Class exercise (April 21, 2022)

**3. Develop hypotheses for each scenario:** Look at each frame in the matrix and think about the interactions of the two endpoints. Develop initial hypotheses about how each scenario is different.

- **Hypotheses:** In order to describe a future, you will likely make some assumptions about the interactions between the driving forces' endpoints. For example, let's say your scenarios' driving forces are climate change and urbanization, what do you expect to be the effect of increase temperature and increased sprawl on energy or water consumption? How would other important driving forces will be influenced? Would the economy grow? Slowdown? Would ecosystem health decrease?
- **Challenges and opportunities:** Identify potential challenges communities will face under different scenarios and the opportunities that these alternative futures may provide for mitigating and adapt to expected environmental changes.

### 4. Describe each scenario with a name, three words and an image/symbol

- **Name or headline:** a catchy name, a compelling headline, or even an image, can help convey the basic message of a scenario quickly and effectively. They can also be used to communicate the major differences between the scenarios. However, you need to be very careful, sometimes a good name says too much, too quickly. Think about the implication of the name, what are the assumptions it carries, do you mean them?
- **Descriptors:** come up with three words or phrases that help convey what might happen under each scenario. Try to use the same descriptors for all four scenarios so that you

can compare them. A descriptor could be the trajectory of another driving force (i.e. population growth) or could be another dimension of the two most important and uncertain driving forces.