

# Activity – NATURAL RESOURCES JENGA

Session 7 – IMPRINT+ Training course



**IMPRIINT+**



Co-funded by the  
Erasmus+ Programme  
of the European Union

2015-1-PT01-KA201-012976

**Activity:** Natural Resources Jenga

**Learning goals:** To learn in a fun a practical way, how natural resources and the economy are connected. To learn how making sustainable choices is a benefit to the economy.

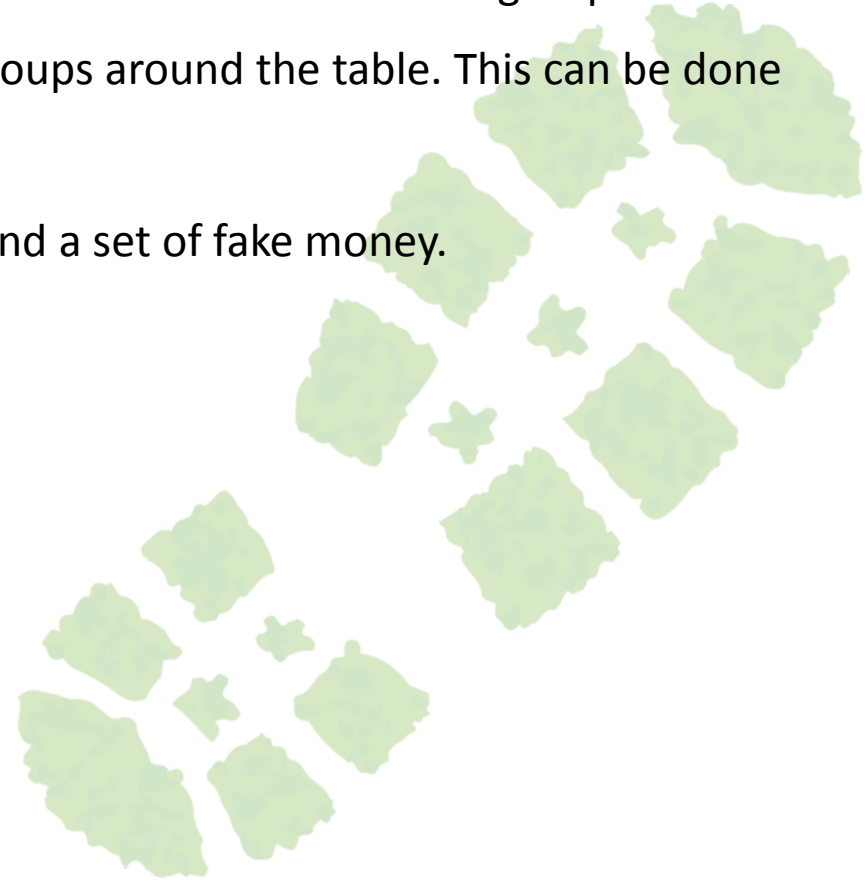
**Background information:** Natural resources are essential to our economy, most of our businesses from farming, to manufacturing, energy to textiles, cosmetics, food, construction and so on. Our natural resources are finite. Unless properly managed we will run out of these vital life support systems that we need to sustain a good quality of life.

**Prior Knowledge Needed** (*For the facilitator*): The facilitator should have a sound knowledge of environmental science, the basic principles of sustainability and ecology. The facilitator will also need to know how to play the game Jenga.

**Duration:** 1 hour

**Room organization:** You will need a table in the centre of the room and groups of chairs, enough for all participants in smaller groups around the table. This can be done indoors or outdoors in good weather.

**Support material:** A Jenga building game set and a set of fake money.



### Instructions I:

Prior to running this activity, it is useful paint the Jenga bricks to represent different natural resources, one third of them black (non renewable resources), one third blue (Resources that could be renewable if properly managed such as freshwater or woodlands) and one third green (these are completely renewable resources like wind and solar energy).

To begin the game, it is useful not to give too much of an introduction and invite participants to play an economic game. Ask the group what is the current goal of our economy or a business? The answer usually comes easily. “To make as much money as possible”

With that in mind divide the group into three smaller groups. Each group will represent a national economy; you can choose countries that are relevant to your participants to use. We use India, a European country and North America. Out of a group of 30 America has around 4 people least amount of people, Europe has 8 and India has 18. This is proportional representation to the population density of these countries.

### Instructions II:

Reiterate the goal about making money. The aim of this game is to make the most money, but as each group is a country, they must aim to make the most money per capita.

You can talk about the connection between natural resources and our economy and business as you introduce the Jenga game. (It is useful to have this already built, with the black bricks at the bottom the blue in the middle and green on the top).

Now you can explain the game: Just like normal Jenga, each group must send someone up to the Jenga tower to take a brick out. The groups take this in turns, starting with America (or the wealthiest country that you are using).

**Black bricks** being non-renewable resources such as oil, coal, diamonds and minerals are worth 100 million.

**Blue Bricks** being resources that could be renewable or non-renewable depending on management strategies such as: freshwater, woodlands, biodiversity and recreational areas are worth 50 million.

**Instructions III:**

**Green Bricks** being completely renewable resources such as energy from wind or solar power or agroforestry are worth 25 million.

If a group takes out a black brick the participants will be given a note to represent 100 million euros. The group at this point is given the choice. They can keep all the money OR they can reinvest in renewables but only get half of the money.

The facilitator must keep record of how many times each group chooses to reinvest. The bricks that are going to be “reinvested” should be used to begin building a new tower. The new tower will only be renewables (25 million) and can only be taken from once the old tower has collapsed.

Each group can only take a brick from the new tower if they reinvested previously. If they reinvested 3 times, they can keep going for 3 rounds, if they invested everything, they can go in indefinitely. As a brick is taken from the second tower it is automatically reinvested at a fraction of the cost, just 5 million.

### Instructions IV:

This demonstrates the generally low maintenance and management costs of renewable systems once they are established. (This involves the facilitator returning the brick to its original place on the second tower.)

It is through the process of choosing bricks and deciding on reinvestment that groups start to actively think what is the best for their people, economy and the natural resources. They can make a lot of money quickly for a short time or they can have a reasonable amount of money for a long time.

If you have the time this game can go on for quite a while. It is important to have a cut-off point. Ideally the game will end two rounds into using the new tower (if there is a new tower to use). If there is not, it will end when the original tower collapses.

### Discussion/Reflection Questions:

- After the game there is a great opportunity to discuss the choices participants made and why.
- What they thought of the choices presented to them.
- Do they think investing in renewables is a good idea? Why?
- What happened during the course of the game? Why did the tower fall?
- If we kept playing would the second tower ever fall?
- Is there a way we could make the second tower grow?
- Do they think that using more sustainable and ethical options will reduce or impact their quality of life?
- What choices do they make in their lives that perhaps impact their quality of life but they do because they think they benefit others or the environment? (i.e. recycling takes time but is good for the environment, or refilling a water bottle or bringing a reusable bag take effort)