

# PODCAST 3 - LOGICAL FALLACIES AND COGNITIVE BIASES IN GREEN JOBS



Co-funded by  
the European Union



GREEN  
INDUSTRY  
FOUNDATION

BAB  
HUSKY



## HOW TO RECOGNISE AND AVOID LOGICAL FALLACIES AND COGNITIVE BIASES?



**Host:**

Welcome to another episode of our podcast on critical thinking in green jobs. Today we'll talk about how logical fallacies and cognitive biases can affect our decisions and actions in the area of sustainable development.

As always, we are starting with a definition.

*Logical fallacies are irregularities in reasoning that lead to false conclusions, and cognitive biases are unconscious tendencies that affect our perception of reality.*



**Host:**

Let's start with some of the most common logical fallacies that can arise in the context of green technology and environmental protection. Joining us today is the project manager.

What logical and cognitive obstacles do we encounter?



**Project manager:**

Error no. 1 is an ad hominem argument.

It is attacking the person instead of their arguments. For example, someone might say: "Your ideas on recycling are wrong because you are not an expert in this field."

This kind of error distracts from the substance of the issue and leads to a failure to address the real problem.



**Host:**

It's interesting, what are the other ones?



## **Project manager:**

Error no. 2 is a vicious circle (petitio principii)

It involves assuming the truth of what is to be proven. For example: "We know this technology is the best, because we have been using it for years."

This closes the door to critical analysis and consideration of other, perhaps better, options.

Error no. 3 is false dilemma

Presenting only two options when there are more possibilities. For example: "We must either accept the pollution or give up on economic development". Such thinking limits our perspective and can lead to hasty decisions.

Error no. 4: Post hoc ergo propter hoc

Assuming that if something came after something, it was caused by it. For example: "After the introduction of recycling in the city, pollution dropped, so this must be the only reason".

This does not take into account other potential factors that may have influenced the outcome.



## **Host:**

Now let's talk about cognitive biases, which are equally important and can distort our perception of reality.





**Project manager:**

One of these is the Confirmation Bias – that is, the tendency to seek out and interpret information in a way that confirms already existing beliefs. For example: “Since I believe that solar energy is the best solution, I ignore the data pointing to its disadvantages”. This leads to one-sided thinking and the omission of important information.



**Host:**

There are quite a few of these obstacles, do you still have anything to share?



**Project manager:**

Oh, yes!

Accessibility heuristics , is an assessment of the probability of events based on how easily we can recall similar instances. For example: "After watching news stories about environmental disasters, I overestimate the risk of a similar event in my area. It can lead to irrational fears and decisions based on emotions rather than facts.

And lastly, the Fundamental Attribution Error – that is, attributing other people's behaviour to their personality traits rather than to the external situation. For example: “This project failed because the team leader was incompetent”, ignoring other factors. This can lead to unfair judgements and ineffective solutions.



**Host:**

So how can we avoid these fallacies and biases in our daily work?



## **Project manager:**

Strategy 1: Self-awareness – let's develop self-awareness of our biases and tendency to make logical errors. It is often enough for us to stop and think: “Am I now acting under the influence of a prejudice?”

Strategy 2: Looking for counter-arguments – instead of looking for information that supports our beliefs, let us deliberately look for counter-arguments. This will help us gain a fuller picture.

Strategy 3: Verifying sources – check the credibility of information sources and ensure that the data relied on is accurate.

Strategy 4: Apply critical thinking techniques – use techniques such as analysis, synthesis and evaluation to help structure thinking and avoid cognitive pitfalls.



## **Host:**

Logical fallacies and cognitive biases are common obstacles in our daily work, but with critical thinking we can identify and avoid them.

Let's pay attention to how we think, be open to new information and constantly review our beliefs. This will not only improve our decisions, but also contribute to more sustainable solutions in our work.