### **English Transcript 3**

Title: How to change the mindset? A Social and Ecological Economics as alternative

### Intro (250 Words)

Against the backdrop of today's climate crisis, future fit economics becomes an absolute necessity – and the good thing is that experts in the field claim it's possible! (Novy et al. 2023:12). However, to get there, we must change our understanding of economics completely, and include the economy's social and ecological dimension into our thinking and doing.

The so-called **iceberg model** by famous **feminist economist Maria Mies** shows us why: (GRAPH1 Iceberg Model). While **our** today's dominant **understanding of economics focuses only on the visible tip of the iceberg**, we need to start digging deeper and broaden our horizon for the invisible rest of it. For much too long we have ignored this foundational part and are thus on the way to destroy it.

The iceberg model shows us that **economics is more** than just the growth-oriented competition for more capital, higher wages, and a bigger Gross National Product. Besides **banks, stock exchanges, and markets for wage-labor**, at its foundation, another economy, another WORLD exists.

This world encompasses the household and care work for children and the elderly, capital of exploited colonies, as well as nature's resources. In short, it's the foundations of today's economy: our societies and nature. (GRAPH1 End)

To come to another understanding of economics that considers the iceberg in its entirety, this video will provide you with inputs on

- the concept of social metabolism and the economy's planetary boundaries
- the concept of social provisioning and the economy's societal boundaries

## Main Part (530 Words)

If we want our understanding and doing of **economics to become fit for future**, we have to take into account its **embeddedness into social structures and natural, biophysical processes.** (GRAPH2: embeddedness)

In a first step, the iceberg model showed us that the economy is not just about the commodified production, consumption and allocation of goods and services, but also about the RE-PRODUCTION of these economic activities and products. Only if someone replants trees after their cutting, only if we repair damaged machines, only if humans can recover after hard work, the economy we know can function.

To understand the relation of our economic activities with our ecological and social surrounding in depth, two further concepts are useful:

First, the concept of "social metabolism" (GRAPH3 economy's social metabolism). This concept stresses the ways how societies take energy and material inputs from nature, and give

it back to it as degraded outputs after their processing in the economic system. (GRAPH 3 END)

To make an example: To create a chair, a tree – input from nature – will be needed. This natural input itself is based on solar energy that makes the tree grow in the first place. After it grew, the tree can be processed in the economy through work: It will be cut, shaped into smaller pieces, and put together so that someone can sit on it. At a certain point of time, the chair will become used up, and its single parts will either be recycled or used as firewood – the outputs are thus either degraded materials or degraded thermal energy. (Make step by step points for this paragraph)

The concept of social metabolism makes clear that **every economic activity is** – at its basis – **dependent on natural inputs in form of energy and matter, as well as biophysical processes connected to this.** Therefore, as long as we have limited natural resources, limited capacities of ecosystems to recreate, and limited possibilities to make use of solar energy, our economy needs to stick to these natural limits, as its foundational basis. This idea is as well depicted in John Rockström et al. (2009) famous concept of planetary boundaries (GRAPH4: planetary). It shows that we have to respect ecological limits along many different dimensions and stay in a safe operating space, if we really want to avoid crisis. (GRAPH 4 End).

While the concept of social metabolism showed us that the economy can be understood as the processing of energy and matter. The concept of social provisioning helps us to understand economic activities as well along their societal function (GRAPH5 Provisioning systems). The basic idea is that the economy has the function to organize the usage of natural resources to satisfy human needs and create well-being. (GRAPH5 end) Whether the economy functions well or not, is thus not to be measured by its productivity alone, but rather by factors that measure whether humans needs and certain social outcomes – be it material or immaterial – are met. To make sure that the economy is used for the socially desired outcomes, many scientists thus argue as well for societal boundaries (Brand et al. 2021). They argue that in addition to the limits given by nature, our society itself needs to define certain limits, for instance to wealth, to avoid economic activity that creates inequality, unsustainable growth, and crisis.

### Outro (190 words):

For the first time in human history, the Human Development Index declined in 2021 and 2022 two times in a row (UNDP 2023). No longer is our economy working for our human well-being, and within planetary boundaries. To change this, we must get to a new understanding of economics that discusses the limits of nature's capacities within our societies.

The iceberg model, the concept of social metabolism, and the idea of the economy as a social provisioning system have shown us on a theoretical level how this change becomes possible. By understanding first, that the economy is more than just the tip of the iceberg – that it is also household work, exploited labor, and natural resources, Second, that every economic activity depends on limitedly available natural energy and matter. Finally, that our economy is inherently social and therefore we ourselves as a society must set boundaries to our economic system to avoid future crisis. (**Bullet points**)

All of this, if taken by heart, makes our understanding of economics a sustainable one. However, to bring us closer to practice, we will now discuss in a next step what sustainability really means in the context of economics.

# Sources:

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- Novy A., Bärnthaler R., Prieler M. (2023). Zukunftsfähiges Wirtschaften. Herausforderungen der sozialökologischen Transformation. 2 Aufl. Weinheim: Beltz Juventa.
- Rockström, J., Steffen, W., Noone, K. et al. (2009). A safe operating space for humanity. Nature 461, 472–475 (2009).
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