**Introduction**:

* Presenters briefly introduce themselves
* ‘Today's discussion and survey is being conducted by INNOFACT AG - commissioned by the Helmholtz Centre for Environmental Research (UFZ) Leipzig.’
* ‘UFZ project, which analyses the findings of the discussion and survey, is funded by the BMBF.’
* Participants would like to rename themselves according to the code: *Please create an individual code at the beginning, which will allow us to link your discussion contributions with your answers in the questionnaire. This has no consequences for your anonymity and data protection, but helps us to analyse the data*.

\*First two letters of your mother's first name + last three letters of your postcode + first two letters of your father's first name\*

* Procedure of the meeting:
  + Introduction to the topic (10-15 minutes),
  + Discussion of the participants on two specific tasks (approx. 35 minutes)
  + Presentation of the questionnaire (approx. 5 minutes)
  + Independent answering of the questionnaire by the participants (30-40 minutes)

**Presentation of CDR and the specific land use-based measures (max. 10 minutes)**

* CDR = Carbon Dioxide Removal = carbon dioxide is removed from the air
* Serves climate protection, as carbon dioxide in the air contributes to global warming (as it is a greenhouse gas)
* Various methods are summarised under CDR
* Specifically, the following methods are used today:
  + **Afforestation**: trees are planted on land that cannot be used economically by agriculture.
  + **Agroforestry**: Agriculture and forestry are combined. One example of such a system is meadow orchards. In Germany, there are usually long rows of trees alternating with strips of fields.
  + **Short rotation coppices**: Planting of young forests that grow quickly (consisting of poplars, for example) and are harvested after a few years (5-20) - usually for the production of bioenergy.
  + **Rewetting**: Former moors that were drained in order to be used for agriculture are re-watered. They can still be used for agriculture, but less intensively (e.g. as pasture for animals such as cattle).
  + **Cover cropping**: Between the cultivation of crops such as maize, the field lies fallow, e.g. during the winter. Intercrops are plants that are cultivated during this time. By being worked into the soil afterwards, they serve as a natural fertiliser that partially replaces industrially produced fertilisers.
  + **Legumes**: cultivation of e.g. beans, peas, lentils, etc. These plants enrich the soil with nitrogen so that the use of fertilisers can be significantly reduced.
  + **Perennial crops**: Plants that are cultivated over several years.
* These methods absorb carbon from the air and store it both in the soil and in the plant material.
* This is an advantage over widespread agricultural practice, in which these measures are not applied
* The scientific literature also discusses whether CDR might have unintended negative effects. For example, that efforts to emit less carbon dioxide might be omitted 🡪 along the lines of ‘If CO2 can be sucked out of the air anyway, why should we blow less of it into the air?’
* Whether the risk really exists has not been proven beyond doubt. Although various studies exist, they come to different conclusions.
* In addition to the climate protection aspect, the individual measures also offer other advantages over ‘conventional’ agriculture, so-called ecosystem services.

**Ecosystem services approach (~5 minutes)**

* An ecosystem generally consists of living organisms and the inanimate environment
* Example of an ecosystem: Forest
* The services provided by this ecosystem are Habitat for different species of animals and plants (serves biodiversity), prevention of soil erosion (erosion of the soil by wind and water), flood protection (through better water absorption and storage in the soil), wind protection, quality of the soil benefits, shade is provided, etc.
* In the same way, the CDR methods mentioned above also provide ecosystem services that ‘conventional’ arable land does not offer
* BUT the provision of such ecosystem services also strongly depends on the respective site conditions and other factors, such as the design of the methods. In afforestation, for example, there are considerable differences between mixed forests and forests consisting of only one tree species (so-called monocultures). These monocultures are, for example, less resistant to pathogens and extreme weather events such as droughts, floods and forest fires and at the same time offer hardly any advantages for biodiversity. There is therefore uncertainty as to whether the ecosystem services that one would like to achieve will actually be achieved by a particular measure in the end.
* At the same time, there are costs of implementing measures, such as actual expenses for planting trees, maintenance, but also crop losses, as land is not only used for food production, the economic value of the land can decrease, etc.
* However, today's project focuses on the benefits, as we want to understand them better
* Specifically, we want to know how important the measures we are investigating are to the citizens and also their ecosystem services.

**Presentation of the discussion section & space for questions** after the presentation of the task (5 minutes)

**Two-part discussion section:**

* *‘How do you rate CDR in general?’ (6 minutes = 1 minute per participant)*
* *‘Now we ask you to work with the other participants to draw up a ranking of the CDR measures. Please argue why you think individual measures are better than others.’ To do this, the measures are illustrated on an online whiteboard and a scale from 0 to 10 (the moderator moves the measures along the scale as instructed by the participants' statements (25-30 minutes)*

\* Realisation Discussion\*

*Instructions for silent discussion:*

* *Ask silent participants what they think of the current order/how they would rank unranked measures and why*
* *Always ask whether other participants see the ranking of a measure in the same way*
* *If all measures are ranked: ask the group whether all participants agree*
* *Ask whether other issues also play a role in the choice of ranking that have not yet been mentioned as reasons, e.g. climate/environmental protection, aesthetics, costs of implementation, own leisure activities, noise/odour of agriculture, alternative land use, etc.*

**Introduction of the Choice Experiment** (max. 5 minutes):

The choice experiment looks like this:

- As you can see, there are 3 options - 2 of them are hypothetical and the third reflects the current reality

- The options differ in terms of various characteristics, which are shown in the left-hand column

- Now imagine that the federal government is planning a draft law that pays farmers for providing services that are beneficial to the environment, such as improving water quality.

- Farmers would be incentivised to implement appropriate measures to achieve the desired option.

- However, it is not certain that the option will actually be achieved, as many factors have an influence.

- The programme is financed from tax revenue. You would therefore pay directly for the implementation of your preferred option.

- There will be a total of 18 such choices. Please decide based on your own preferences and independently of the other choices. It is also important that your choice is realistic - so please think carefully about whether your household has the money available and is prepared to spend on such a programme.

- You will now receive the link to the survey in the chat. It should take about 30-40 minutes to answer the questions.