# Sustainable biomass mobilisation

Workshop Circular Biomass Strategy
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# How much biomass is there? Wrong question!

**IPCC observes reported range of <50 to >1000 EJ biomass potential in literature**

- Lower range of 50 EJ follows from the assumption that only waste material from other sectors can be used
- Higher range of 1000 EJ results from significant improvements in the global agro-food system
- Where does the PBL / CE range of 120 - 295 EJ fit? (Only broad consensus studies considered)

**Main perspectives**

- Sustainability requirements can limit the bioenergy potential (cautious, focus on avoiding harm)
- Sustainable development increases the bioenergy potential (constructive, focus on improvements)

**Stimulate sustainable feedstock production**

- Focus on low-ILUC-risk feedstock production – certification expected in 2022
- Larger potential possible through food-fuel synergy
- Improve waste mobilisation, improve collection and incentivize valorization
- Tap into the growing volume of residues from forestry and forest industry

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# Options for biomass with low ILUC risk

**Increasing crop yield**

- Through improved inputs and improved agricultural practices

**Low-carbon dLUC**

- Use of abandoned agricultural land, severely degraded land or unused land

RED II Low ILUC

**Combination is also possible**

- Bridging yield gap of food crop, thereby making land available for fuel crop

**Multiple cropping systems**

- Sequential cropping (may count as Annex A in RED II)
- Row cropping, intercropping, relay cropping, agroforestry, etc.

may be RED II Low ILUC

**Actions that reduce third party expansion into high carbon land**

- Could be most important option to avoid ILUC
- Not addressed in RED II – probably too complex

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# Requirement to “Additionality measures”

**Additionality :** Demonstrating that a certain amount of biomass is produced additionally compared to the reference scenario

**Link :** Demonstrating that the amount of additional biomass produced can be linked to biofuel demand or to an action by the biofuel supply chain

## Delegated Regulation Article 5

1. Biofuels, bioliquids and biomass fuels may only be certified as low indirect land-use change-risk fuels if:

(a) the additionality measures to produce the additional feedstock meet at least one of the following conditions:

(i) they become financially attractive or face no barrier preventing their implementation only because the biofuels, bioliquids and biomass fuels produced from the additional feedstock can be counted towards the targets for renewable energy under Directive 2009/28/EC or Directive (EU) 2018/2001;

(ii) they allow for cultivation of food and feed crops on abandoned land or severely degraded land;

(iii) they are applied by small holders;