

Joint Statement on Sustainable bioenergy for climate and development goals

In consideration of the persistent debates about what role bioenergy should play in support of climate and sustainable development goals, and acknowledging the most recently available scientific evidence, the undersigned organizations issued the following joint statement.

Sustainable bioenergy is a **component of the bioeconomy**. It can be produced from biomass resources in multi-functional, integrated agriculture, forestry, fisheries and aquaculture systems, along with food, feed and/or bio-based products, from biogenic waste and residue streams, or as a co-product of ecosystem management.

Sustainable bioenergy can be produced with **energy-efficient and low-emission technologies**, and is derived from **sustainable biomass resources**.

Sustainable bioenergy can make a **crucial contribution to keep global warming below 1.5 °C** by the end of the century. It plays a **unique role in just and inclusive energy transitions**, and is especially important for sectors and regions where other decarbonization options are costly or not yet available.

Biomass and its bioenergy derivatives are **versatile, storable and dispatchable**; they can replace fossil energy and complement variable renewables and other low-carbon options in transport, power and heat production, industrial processes and clean cooking, thereby enhancing resilience in the energy system.

Sustainable bioenergy can contribute to **energy security, clean energy access, rural development, increased agricultural productivity, improved farmer incomes, job creation, gender equality, responsible industrial development, poverty eradication, and climate change mitigation and adaptation strategies**.

Benefits and trade-offs of bioenergy systems **depend on context, scale, and local needs and priorities**. **Good governance of bioenergy systems is key to maximize opportunities and minimize risks of negative impacts**, and to ensure an integrated approach that aligns with the Sustainable Development Goals.

Good governance builds on evidence-based assessment of environmental, economic, social and political factors, and safeguards food and energy security, climate justice, biodiversity stewardship, land and water rights and local development priorities. It follows the principles of nature-based solutions,¹ including local stakeholder engagement, and free, prior and informed consent. Recognized norms for quality and sustainability can facilitate investment, fair trade, monitoring and verification.

Through good governance, sustainable bioenergy **addresses the risks related to the land and resources** used for its production and the potential impacts on food security, natural ecosystems and carbon stocks,² as well as the challenges in managing equity and justice, and achieving economic competitiveness and affordability.

This statement was developed by a Cross-Initiative coordination group on bioenergy convened by the Global Bioenergy Partnership (GBEP). The Statement was issued by:

¹ United Nations Assembly Resolution on nature-based solutions for supporting sustainable development (UNEP/EA.5/Res.5).

² As discussed in IPCC, 2019. *Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems* (P.R. Shukla, J. Skea, E. Calvo Buendia, V. et al. [eds.]).

Clean Energy Ministerial Biofuture Platform Initiative

Food and Agriculture Organization of the United Nations (FAO)

Global Bioenergy Partnership (GBEP)

International Energy Agency (IEA)

*IEA Bioenergy Technology Collaboration Programme**

International Renewable Energy Agency (IRENA)

United Nations Economic Commission for Europe (UNECE)

*United Nations Environment Programme (UNEP)**

United Nations Industrial Development Organization (UNIDO)

*Pending final approval.