



Global Call for innovative solutions in cleantech and sustainable land management -

mobilizing private sector innovations for climate change mitigation and adaptation and sustainable development

Category definition*

1. Solutions for decarbonizing growing urban environments

Urbanization has profoundly affected the environment all over the world and has intensified the impacts of climate change. On the one hand, urban centers place substantially more pressure on natural resources than rural communities, given the population density in cities and related higher demands for water, agricultural, energy, mobility and other resources. On the other hand, climate change presents numerous challenges in the urban context, particularly for growing cities located in fragile areas, such as coastlines. This category seeks to identify innovative solutions to decarbonize life in rapidly growing urban environments with the potential to be scaled.

2. Solutions for clean and efficient energy generation and storage

Renewable energy solutions are one of the most effective tools in the fight against climate change, by drastically cutting carbon emissions in the energy sector. This category seeks technological solutions for generating and distributing energy in a clean and smart way, especially affordable and decentralized renewable energy solutions that are applicable in developing countries. Furthermore, it seeks to identify solutions that allow complementing intermittent energy generation solutions (solar PV, wind and hydropower). Moreover, it comprises approaches that transmit and distribute electricity more effectively amidst an increasing number of decentralized energy resources and innovative approaches towards the storage of energy.

3. Solutions for circular production and industrial processes

Applying circular principles, such as the re-use, re-manufacturing and re-cycling of resources, offers vast scope to reduce industry's carbon footprint and thus to contribute to climate change mitigation. Energy and process efficiency measures equally represent an underrated hidden champion in climate technology. They comprise not only energy-saving devices but also the re-design of existing production processes, the avoidance of certain emissions-intensive steps in the value chain of products, or smart approaches on more climate-cautious consumption of resources. This category seeks to identify innovative technological solutions, leading to higher resource efficiency and cleaner production practices in industry.

4. Solutions for sustainable land management

Land use is fundamentally linked to both climate change mitigation and adaptation, and offers great potential to reduce emissions, sequester carbon and increase both human and biophysical resilience. This category seeks to identify solutions for productive lands, including new technologies and innovative approaches to production with a demonstrable positive contribution to soil health, land rehabilitation and combating desertification. It is a call for players in the food, fibre and feed supply chains to highlight solutions that ensure more sustainable land use throughout the production process. Solutions could include supply management approaches, as well as changes within the supply structure or new technology and approaches. This category also considers innovative solutions for developing sustainable value chains in dryland regions with demonstrable positive contribution on soil health and to combat land degradation at scale, while meeting global consumption demands and moving away from net-negative land products.

There will be at least one winner per category. Depending on the number of submissions, categories might be further divided into sub-categories, e.g. by stage of maturity of technological solutions **early stage (technologies at an advanced stage of R&D ready for implementation, these solutions have verified data from testing), **growth stage** (solutions that have already been piloted with verified data at a replicable scale and that have a demonstrated Proof Of Concept (POC)), as well as **mature technologies** (technologies that are demonstrably established on the market and are aiming at the expansion to new markets).*