The most important fact why nuclear energy cannot fulfil the taxonomy goals is the unsolved problem of nuclear waste management in particular of the very long-lived high level waste (HLW). As of yet, no final repository for HLW such as spent fuel from nuclear reactors is in operation. The **Finnish final repository, the only one under construction, is in limbo due to worrisome results of copper research experiments:** This means that copper in a KBS-repository may corrode at much faster rates than acceptable and release radioactivity from the canisters already after only around 1,000 years of storage time. The issue of corrosion is now, in December 2020, still under investigation and far from certain and could derail the entire project in Sweden and Finland. **The safety of future generations is at stake** if a Final Repository is planned without the possibility to recover the nuclear waste. The preservation of knowledge, data and memory is another unsolved problem and it will require enormous and continuous resources, long after nuclear power production will have ceased – another clearly not sustainable aspect of nuclear energy.

In most countries, an **assessment of environmental impacts of the nuclear waste management programmes is missing**. This should have been done in a Strategic Environmental Assessment (SEA) for the national programmes, but most countries have not undertaken a SEA.

The EC Report on the implementation of the Nuclear Waste Directive from 2019 shows the **general bad status of the Member States national nuclear waste management programmes**. Without a clear concept how to deal with the nuclear waste progress cannot be expected soon. When financing, regulatory structures, inventory data and transparency regimes are not available or in a poor status, decades of improvement have to follow before a safe enough nuclear waste management programme can result.

Nuclear energy is inextricably intertwined with the risk of creating significant harm for humans and the environment: the risk of chronic illness due to a **severe accident**, of loosing agricultural areas due to severe contamination, disastrous social and economic impacts for people having to live in contaminated territories. These risks are by no way negligible, especially in the light of the study from Wheatley et al (2016) assessing a 50% chance that a severe accident occurs every 60-150 years.

**A circular economy** is characterized as an efficient use of resources followed by recycling or re-use; waste is minimized. None of this is true for the nuclear energy sector: from the very beginning, uranium mining, enormous amounts of all types of nuclear wastes are produced and have to be stored ad disposed of for up to a million years, despite efforts of reprocessing spent fuel, which is being abandoned. **The nuclear chain cannot be a cycle**.

In the Draft Delegated Act’s Annexes, for several energy technologies a level of 100 g CO2e/kWh is given. If the same level would be used for assessing nuclear energy, most recent data on CO2 from uranium have to be included to avoid underestimation of nuclear energy’s emissions – studies show that this 100 g level might be exceeded if using certain uranium sources.

**Nuclear proliferation** is often ignored, because the debate usually centers on energy production. However, proliferation was brought back into the discussion by the authors of a task similar to the taxonomy effort, the 2018 IPCC report: “*Nuclear energy, the share of which increases in most of the 1.5ºC-compatible pathways (…), can increase the risks of proliferation (SDG 16), have negative environmental effects.”*

**These facts show that nuclear energy has to be kept out of the taxonomy.** We call upon the Commission to ensure that full participation for the public will be possible also for the Joint Research Centre Report on the nuclear question.