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KOMMUNINVEST GREEN BONDS FRAMEWORK

View on Fossil energy –fossil reduction vs fossil-free

The overall aim of the Kommuninvest Green Bonds framework is to contribute to the transition to low-carbon and climate-resilient growth, through projects that address mitigation of climate change, adaptation to climate change or environmental management in other areas than climate change (the latter max 30 % of volume).

In its Second Opinion, Cicero points to the fact that some of Eligible projects may include fossil energy to a non-negligible extent (over 10-20%). This applies to the framework categories Renewable energy, Energy efficiency in energy systems and Public transportation and sustainable transportation.

The framework has a broad scope, as it is aimed at supporting climate and environment initiatives across Sweden's local government sector, all over Sweden. The projects address sectors of society with great impact on CO₂-emissions, but which are not totally CO₂-free.

We will not approve investment projects that lead to a lock-in of fossil energy-based infrastructure. However, we may approve projects with a component of fossil energy if the project enables the transition to a climate-neutral infrastructure and similar solutions, whilst reducing climate impact. Impact analysis and impact reporting is an absolute requirement for projects partly encompassing fossil energy to a non-negligible extent (over 10-20%).

The Environmental Committee is responsible for assuring that any project that includes a fossil component to a non-negligible extent will have significant positive climate and/or environmental impacts.

Our views on fossil with regards to the project categories listed above is outlined in this paper. A complete exclusion of fossil energy from any project is virtually impossible to achieve, since fossil energy is often embedded in components, building materials and energy production equipment, even in solar cells.

The Swedish energy system – a background

Sweden's energy system uses a very low proportion of fossil fuels, especially in the production of electricity and district heating. The total share of renewables in the energy system, at over 50 percent, is the highest in the European Union. In addition, Sweden

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has a large proportion of nuclear power for electricity generation, at about 40 percent. Fossil energy is mainly used in the transport sector and for industrial processes.

A particular Swedish feature is that half of the energy used for heating purposes is supplied by district heating. The expansion of district heating and its conversion from fossil fuels to biomass and waste is the main factor behind Sweden's reduced fossil CO₂ emissions by some 25 percent since 1990.

Why we allow a small share of fossil energy in district heating (max. 10 %)

In the district heating sector, a fossil energy component sometimes cannot be completely avoided. Fossil energy may be required to start up processes, to use for peak energy at times of extreme energy demand and for back-up purposes. District heating is a flexible energy system capable of extracting energy from various types of energy sources and waste. We only accept projects with positive climate impact, e.g. a reduced carbon footprint, and which uses a limited amount of fossil energy (max 10 percent).

We favor using waste for energy extraction as a resource-efficient and more climate-positive solution than landfill and other permanent deposits. However, waste often includes fractions of plastics, which according to international standards is regarded as fossil energy. Therefore, fossil waste incineration will not be accepted as a major component of eligible projects. (In general, maximum 10 per cent fossil component).

We view peat as a non-renewable energy source. A possible exception is peat whose extraction can be shown to reduce methane leaking emissions from peat bogs. Such peat could be tolerated as climate positive.

Kommuninvest also benefits from operating in a country where systems and regulations regarding waste sorting and smoke gas purification are highly developed.

Why some energy efficiency projects may include fossil energy

We support energy efficiency measures because they lead to a reduction in energy use, thereby contributing to a reduction in CO₂ emissions. The principal way for property owners to reduce climate impact is to make energy use more efficient. The focus of the projects will be on energy reduction, however the energy supply, which will generally not be a part of the project, may include a fossil energy component. Given the increasingly interconnected electricity system in the Nordic region and Europe¹, it is difficult for property owners to completely exclude fossil components in the energy

¹ The Swedish electricity mix is approximately 60 g CO₂ per kWh. This can be compared with about 100 g CO₂ per kWh for the Nordic electricity mix; 1000 g CO₂ per kWh for coal-generated electricity and nearly 400 g CO₂ per kWh for gas condensation, a common form of electricity generation in Europe. As electricity markets in the Nordic region and Europe become increasingly interconnected, it is not entirely clear how to assess the environmental impact. Furthermore, the share of renewable electricity in Sweden and Norway are regulated with green certificates rather than by individual buying of certified renewable electricity.



mix. Property owners that are supplied with district heating also have limited opportunity to influence the energy mix. The share of renewables in the energy system is mainly a task for national and EU regulation.

Why public transport and sustainable mobility projects may include fossil energy

We support public transport-related projects in order to increase the use of such systems, thereby reducing car use and hence the use of fossil energy. However, in the support of a build-up of public transport infrastructure, for example, we generally cannot be certain that this infrastructure will only be used by transport vehicles that run on renewable energy. This usually is outside the scope of the project.

Further, fuel mixtures for renewables often include minor fossil components, this generally is the case for both biodiesel, ethanol, bio-methane and electricity. The actual shares of renewables is often a question for national regulation and market. It is thus problematic to completely exclude fossil components.

If vehicles are part of the application, they generally should be powered by renewable fuels. Fossil fuel buses (i.e. diesel and hybrid) can only be approved if the municipality/county council shows that the investment:

1. reduces total Greenhouse Gas emissions by promoting public over private transportation more for the same cost than a solution based on green fuel-only buses; or
2. includes a plan to use a substantial portion of green fuels (for example biodiesel) in these buses; and
3. includes impact analysis and impact reporting.

Given that few municipalities and regions operate their own bus fleets, such projects are expected to be limited in number.

Impact analysis and reporting required

The framework clearly specifies that a project that includes fossil energy to a non-negligible extent will only be approved if an impact analysis shows that there will be significant positive climate and/or environmental impact and impact reporting afterwards is required. The individual loan application should state why fossil components are part of the energy mix. The above will ensure a high environmental standard in execution.