The national Recovery and Resilience Plan (hereinafter referred to as RRP) is expected to outline a coherent package of reforms and projects. Its headline target is to mitigate the economic and social impacts of the coronavirus pandemic by increasing the sustainability and resilience of European economies and societies, plotting out the way that leads to green and digital transition. The funds provided by the Recovery and Resilience Facility (RRF) offer an excellent opportunity for Hungary to make a great move towards the climate targets set forth in Act No. XLIV. of 2020 on Climate Protection.

The detailed plan covering investments worth of about HUF 5800 billion was disclosed on 14 April 2021, and it must be submitted to the European Commission by the end of April. Energiaklub, in addition to applying the usual approach (such as target setting, compliance with the sustainability and climate objectives, public participation), provided detailed comments on certain components.

In order to really ensure a transition in line with the sustainability and climate targets, we recommend that the projected average annual extent of greenhouse gas (GHG) emission reduction (tCO2e/year) originating from the measures, and the specific costs of that over the lifetime (HUF/tCO2e) be indicated, in order to demonstrate the environmental sustainability of the investments, thus supporting a cost-efficient and climate-friendly economic recovery. Unfortunately, the RRP does not clearly reveal the basis on which the components, and within them the reforms and investments, have been selected, so it is not possible to judge whether they really serve the objectives most effectively, and provide the most appropriate responses to the challenges.

The percentage of the Hungarian RRP fund to be dedicated to climate policy objectives is unclear, as the plan includes different figures with reference to that. Out of these figures the most favourable value is 51%, but unfortunately the methodology by which this was calculated is unknown.

It would be important to take the second National Climate Change Strategy's directions as a basis for the RRP. Thus, taking into account the analysis of the situation with sectoral emissions, we recommend allocating the resources in a corresponding proportion - as a result at least 60% of the funds is to be spent on 'greening' the energy and transportation sectors (currently this value is about 30%), including building energy renovation that must be addressed.

We regret that the 'Comprehensive Impact Analysis' chapter lacks the environmental, and in particular, the climate protection impact analysis of each investment. Without that, it cannot be established whether the RRP actually fulfils the expectation that environmental objectives cannot be compromised

Main comments on the Energy - Green Transition component:

The RRF's plans regarding the energy area clearly include the decarbonisation of the energy sector and the conversion of electricity generation to carbon-neutral. The plan also places a great emphasis on facilitating residential renewable energy investments, and investments to increase the necessary grid capacity. Decarbonisation of the electricity sector and increasing the use of renewable energy are important strategic objectives, but these are not sufficient enough to achieve the climate targets: the plan should be more focused on the end-user sectors, which are responsible for nearly half of the energy consumption and carbon dioxide emission, with special regards to buildings. The primary focus of the energy sector's modernisation and greening shall be the reduction of the energy consumption. A sustainable future and the achievement of the climate targets could not be realized without the energy renovation of buildings. Therefore, it is essential that related reforms and measures be integrated into the RRP. Numerous studies show that without energy efficiency, the decarbonisation of

thermal energy production can incur huge costs. It is required that the volume of communication campaigns and financial incentives facilitating energy savings be increased.

When thinking only within the frames of the electricity system, flexibility can be realised only partially, to a much smaller extent. It would be necessary to look for opportunities and synergies all across the energy system - aligned with the 21st century opportunities - i.e. expanding towards heat energy (such as heat pumps and heat energy storage) and transportation (using electric vehicles), and to open up the scope of the opportunities to be mapped and the measures to be taken.

It is also contrary to the objectives of both the RRF and the RRP that in the field of green energy, it is almost exclusively about the subsidisation of solar energy, although, diversity or diversification is a precondition to resilience.

For resilience, the system developments shall be implemented by supporting an increasingly decentralised power generation. This way, to a certain extent, the transmission grid could be partially relieved, too. It is essential to intensively extend the energy storage capacities integrated into the system.

In the field of facilitating residential renewable energy investments, it is essential to earmark budgets to support heat pump heating systems. These systems combine well with photovoltaic units, thus contributing to the decarbonisation of both power supply and heating at the same time.

Main comments on the Catching-up Municipalities component:

In order to eradicate energy poverty, an overall methodology that takes into account every aspect of the issue and an analysis based on an extensive field survey, which enables the measurement of the extent and nature of energy poverty, shall be carried out. Based on this, truly effective interventions will be possible.

It is not efficient to involve photovoltaic units in space heating. Provision of heating using solar energy would greatly increase the balancing energy demand on the power grid, as in the summer there would be considerable overproduction, while in the heating season there would be a huge deficiency.

Without the massive and professional development of the buildings' energy efficiency, the use of electric heaters would be of no help to these families as the escaping heat energy would lead to an even greater dependency, moreover, it would unrealistically increase the power consumption. Prepaid electrical meters could only be installed in residential buildings that are equipped with electrical network that is in proper technical condition. It is feared that without comprehensive renovations, planned meters cannot be installed in many cases.

Overall, targeted investigations shall be launched to determine the settlements where it is possible to install local renewable energy based village heating plants and district heating systems.

Main comments on the Transition to Circular Economy component:

Without clarifying the legal framework (Act on Environmental Product Fee, Act on Waste etc.) the goals cannot be achieved. The component lacks the advancing and innovative approach, the title of the component is not in accordance with its contents.

Albeit the 'Liquidation of illegal landfills' would indeed be important, it is not closely related to the subject of circular economy, and as long as the regeneration of the problem is not prevented by a comprehensive awareness-raising, we think it would be more expedient to reallocate the HUF 25.5 bn assigned to this item rather to investments on the subject of 'Reinforcement of the intelligent, innovative and sustainable industry and the secondary raw material market'.

An important but missing subject is the 'cycle' of land use: revitalisation and utilisation of brownfield sites - the latter one primarily in connection with the climate targets and with other components of the RRP.