

Over the next few decades, Europe will see its biggest societal changes since World War II due to global climate change. Climate change and the deterioration of the environment are a threat to Europe's current environmental conditions. In order to solve these issues, the European Green Deal was created. The aims of the deal are to make Europe climate-neutral by 2050, to increase economic growth using environmentally sustainable technology, to develop sustainable industries and transport and to reduce pollution. Meeting the aims of the deal and Estonia's environmental policies based on it will be a challenge and a process that all sectors, levels of government and socio-economic partners impacting the development of society will be able to contribute to in the coming decades.

**The main aim of this study was to determine the appropriate role of local governments in achieving the green transition in Estonia.** Recommendations for local governments for fulfilling this role effectively were established based on the results of the research. Another important outcome of the work was the development of **tools to support local governments in shaping, implementing and monitoring green policies (guidelines and a system of suggested indicators).**

The focus of the empirical analysis of the research was on (a) evaluating the readiness of Estonia's local government system to play an important role in the green transition and (b) describing the political aims, tasks, focal points of actions and best practice already applied in relation to the transition on which the role of local governments in the transition would be based. The solutions and recommendations established in the course of the research are based on the needs and possibilities to bring together the readiness of the Estonian local government system for the green transition and the challenges stemming from the transition itself.

In order to determine the readiness of local governments, a secondary analysis was

conducted on the results of a local government survey in the area of environment and climate carried out in February 2022 and case studies in four very different local governments in Estonia (Antsla and Saku municipalities and the towns of Sillamäe and Viljandi). A Master's seminar on the topic which involved local government officials and the results of expert interviews were also used as input, as well as relevant information materials and documents that caught the attention of the authors of this study.

**The green policies of local governments thus far are characterized by inconsistency and randomness.** Mostly they have focused on infrastructure investment projects related to government directives and funded by support measures – constructing light-traffic roads, updating street lighting, switching energy sources for district heating, renovating water supply systems and increasing the energy efficiency of municipal buildings. A few towns and municipalities stand out among this general mediocrity with good green political awareness, wherein they systematically work to develop sustainable competencies and include the community in the green transition or to test and implement innovative green solutions. Knowledgeable attempts at formulating a consistent and broad-based green policy (needs, aims, actions and monitoring) are still found in very few local government units and they usually struggle to implement these policies in their fields of activity – the strategic visions and principles of green policies do not make it into requirements and practical solutions in traffic management, road construction and landscaping, for example.

**The green future ambitions of most local government units are to continue their current activities and increase their volume.** In addition, the wider use of technical solutions for increasing energy efficiency and boosting their own role in raising environmental awareness among the population are seen as important areas that need to be developed. They feel that improvement is needed in the organisation of waste sorting and recycling.

The hypothesis that actors within local government organisations have varying levels of knowledge and attitudes regarding the green transition was proven. Another issue is the **low demand for green transition among local communities (voters) in some local governments (particularly rural municipalities and industrial towns with more traditional ways of life)**. According to the mapping done by officials as part of the case studies, the average resident considers the green transition less necessary than local government organisations. This weak demand from the community can be compensated for by the existence of vociferous green political activism, the existence of which is more likely in larger and more compact urban communities.

In summary, it is clear that **when developing the central government's green policies guiding local governments, we cannot rely on the assumption that all or most Estonian local government institutions (or their political leaders) have strong internal readiness for implementing the green transition in their town or municipality** or that the local government's readiness will not diminish over time – that there will be a supportive attitude and competent team from one election cycle to the next. The view that the green transition is the responsibility of the nation's centralised government is widespread.

Due to this and the hierarchical top-down nature of the current political framework, **the central government's task is to articulate concrete and, ideally, measurable expectations for local government units and to come up with solutions that both motivate their fulfilment (legal requirements, funding model components, support measures and performance agreements) and enable it (offering greater legal support in implementing administrative procedures that support the green transition when organising planning and construction work; greater rights to get involved in halting activities with negative climate impact and that waste resources or to amend**

environmental conditions) **in cooperation with local governments.**

As a basis for describing the future role of local governments, (a) a global (UN), EU and Estonian central government political framework was developed and (b) expert knowledge and practical experience important for the green policies of local governments were mapped. The main method for the mapping was thematic synthesis of written materials. In addition, three case studies were carried out in order to better understand the experiences of the Nordic countries: the county of Viken and the municipalities within in (Norway); Aarhus municipality (Denmark); and Kuntaliitto, the association of local and regional authorities in Finland.

**The aims set, the indicators for monitoring development, the described principles and requirements and the planned and implementable measures within the political framework will largely influence the local governments' tasks in the green transition.** On the basis of suggestions from theoretical and applied research, guiding materials and descriptions of best practice, a broad knowledge base regarding options for fulfilling local green policy goals and finding solutions to problems was formed.

The first applicable result of the research is formulating a clear and **practically oriented definition of the green transition to form the conceptual and structural basis of local governments' green policies.** This is made up of three components: (a) justifying the need for the green transition based on global processes and problems and their local impact; (b) the central aims and tasks of the green transition that help to prevent, alleviate and/or avoid these problems; and (c) the aims, tasks and activities related to the green transition within the tasks and fields of activity of local governments.

In defining the reason behind the need for the green transition we suggest focusing on three main problems: climate change and the extreme weather conditions accompanying it (danger to people's health and economic impact); overuse and lack of

resources (rising prices of goods, fuels and production input, migration pressure and risk of resource wars); and the decrease in natural diversity and rising vulnerability of ecosystems (decrease in the value of ecosystem services).

The solutions (aims) for preventing, alleviating and/or avoiding the defined problems are as follows: halting climate change (particularly global warming); adapting to the negative impact of climate change; conserving resources; and maintaining and restoring biodiversity and ecosystems. A more detailed list of tasks and activity focuses that will enable progress towards fulfilling these aims is presented in the work. These lists also comprise the content of the definition of the green transition as a collection of processes and activities.

Thirdly and, from the perspective of local governments' green policies, of the greatest importance practically, we outline what the content of local governments' green transition should be, described by task and field of activity. Its importance stems from the understanding that **local governments' green policies cross fields and tasks and that the aims and principles of the green transition must be integrated into local government activities as a whole. The green transition is not a new, separate task or field of activity.** The role of local governments in the transition arises from their responsibility for local development – resourceful, sustainable and environmentally friendly development. The role of local governments in society does not need to be changed for the green transition – it remains the organisation and leadership of local life and integrating and coordinating developments in various areas of life.

The local government green transition guidelines developed as part of this work include eight green policy aims and principles related to general tasks (strategic development planning; financial management; organising procurements; managing municipal property; development of local government organisation; inclusion; communication; and monitoring) and

12 related to fields of activity (spatial planning; organising construction work; housing; streets and roads; transportation; heating; water supply; waste management; landscaping; nature conservation and environmental management; free time, culture and sport; and education and youth work) as well as recommended focuses or activities. Together, these define the more detailed content of local governments' green transition according to the knowledge available at the time of the study. As a result of this definition, the organisational measures used to implement the green transition within local governments are all standard: planning the use of public resources and land based on green policy aims (according to the budget, budgetary strategy and general spatial planning) and implementing relevant changes in the legal acts, contracts and organisational internal documents regulating local life (e.g. work plans and job descriptions).

**The changes stem from local government organisations** (municipal councils and governments, institutes and associations) – generating awareness of green policies, developing the necessary competencies, sharing responsibilities and work tasks and process design. As a result of organisational changes, it should be possible to differentiate between activities and expenses that contribute to sustainable development and the green transition and those that do not. Once this is achieved, it will be possible to launch the informed strategic planning of local green policies as well as to monitor local sustainable development. **In initiating the changes, the key role must be played by local government leaders.**

Due to the universality of the green transition, another role of the local government in addition to making their own main activities green is **to get the local community – residents, civil associations, companies, etc. – involved in activities that support the transition.** In terms of the local government's use of resources, the most efficient green policy measures are those that support the efforts of the local community – residents, apartment associations, companies, etc.

As part of this study, **recommendations for shaping the knowledge network of the local government green transition were developed.** In addition to sharing information, the tasks of the network would be to create information and interpret it for the network's partners, activate local government units to contribute to the green transition, develop transition-related competencies in local government units and 'implant' them in local government and management structures in order for the aims of the green transition to be taken into consideration in all local government activities. A central aim of the knowledge network is for local government employees (council and government members, officials and other employees) to be competent in this area (with the relevant knowledge and experience) and have up-to-date information. The knowledge network should support the functioning of the local government system's organisations (city and municipal governments, councils and their commissions, municipal institutions and companies) as learning organisations – offering them external input (information, knowledge and practical experience) for self-development and for promoting co-creational decision-making processes in solving issues related to the green transition.

Regarding competencies supporting the green transition in local governments, we recommend basing them on the key competencies to be developed as part of the activities of the green transition knowledge network presented in the JRC report 'GreenComp. The European sustainability competence framework' (2022) because of its comprehensive and systematic handling of the subject. These competencies are as follows:

- Embodying sustainability values – valuing sustainability, supporting fairness and promoting nature
- Embracing complexity in sustainability – systems thinking, critical thinking and problem-framing

- Envisioning sustainable futures – futures literacy, adaptability and exploratory thinking
- Acting for sustainability – political agency, collective action and individual initiative

**The main structural components of the knowledge network are the coordinator, the green transition (national) support/competency network and local government units.** Their tasks are to gather and create knowledge, to plan the activities of the network, to maintain technical and social platforms that allow the network to function and to coordinate its activities. We recommend giving this role to the Association of Estonian Cities and Rural Municipalities, which needs to be given more capacity (competency delegated by the local government, labour and financial resources) in order to fulfil it successfully.

The national support network of the local government green transition is made up of national green policy organisational institutions (the Government Office) and state institutions with competency in the field (the Ministry of the Environment, the Centre for Environmental Investments, the Environmental Board, the Environmental Agency, the Transport Administration, Enterprise Estonia, the Ministry of Finance, etc.). Scientific institutions, companies and associations with competency in the field can also be contractually involved in supporting the network's activities (e.g. SEI Tallinn and Green Tiger). The main task of the support network is to function as a counselling centre for local government units. The special work group of the support network is the green transition team, whose task is to launch a science-based green transition in local government units that are not managing to do this independently. Other institutions in the support network include the main partners of the Association of Estonian Cities and Rural Municipalities in creating knowledge and as sources of information in the field.

Change is also necessary in the organisation of local governments. A successful green transition in local government units requires political support and direction. This is why it is important to designate a **steering committee in the council** for

coordinating the transition and green policy, preferably the one dealing with development issues. Leading the green transition must also be designated as a **duty of a city or municipal government member**. A formal duty assigned by way of a statute or order must be upheld through activities boosting knowledge and awareness among local government leaders. In order to ensure the strong and stable ‘planting’ of green transition knowledge in each local government unit, it is recommended to create the position of **local government green transition coordinator**. Larger local government units should employ a full-time coordinator working directly under the mayor or within their office. For smaller local government units it may be appropriate to hire a common officer (within associations of municipalities or municipal development organisations) who has a contact person in each local government unit (e.g. the development advisor, environmental specialist or advisor). For broadbased leadership of the local green transition, it would also be useful to create a **local green transition leadership group** that includes, in addition to government members and green transition coordinators, other officials and municipal institution leaders to whose work green transition topics are relevant, as well as council members and representatives of civil associations. The task of such a leadership group is to articulate the aims and activities of the local green transition and to monitor developments.

This study also provides a **proposal for developing a monitoring system for the local government green transition and lists of suggested indicators based on the logic of the system**. A comprehensive monitoring system for the local government green transition should comprise four types of indicators: (a) context indicators – describing important processes and developments in the context of the local green transition; these are mostly used for articulating problems and challenges; (b) indicators of general sustainable development that cross local government fields

of activity – describing development in the central aims of the green transition of the local government as a territory: reducing the climate impact of human activity, adapting to climate change, conserving resources and maintaining natural diversity; if the indicators are related to green transition obligations connected to the EU and central government, the values aimed for are determined in cooperation with the central government and local government units; (c) indicators related to the local governments’ general tasks – describing the development in the aims of the green transition of the local government as an organisation; and (d) indicators related to local government fields of activity – describing e.g. developments directly under the control of the local government as well as broader developments in fields of activity.

**Local government green transition guidelines were created as part of this work**. The introduction to the guidelines summarises the main applied results of the research: the reasoning logic of the green transition; the practical content of the transition in terms of aims, tasks and activity focuses; the importance of a green transition political framework for local government green policy; and a definition of the role of local governments in the transition. The guidelines consist of general guidance and principles of activity on which the development of local green policies should be based, as well as practical recommendations for the eight local government tasks and 12 fields of activity.