NET ZERO CITIES

EU MISSION PLATFORM | CLIMATE NEUTRAL AND SMART CITIES

Climate City Contract

2030 Climate Neutrality Action Plan

2030 Climate Neutrality Action Plan of the City of Klagenfurt

KLAGENFURT AM WÖRTHERSEE

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Summary

An abstract **summarizes the content** of the 2030 Climate Neutrality Action Plan (Action Plan) that is developed jointly by local authorities, local businesses and other stakeholders.

Textual element
For several years the city of Klagenfurt follows extensive climate action measures. Thanks to these measures, a significant reduction of GHG emissions has already been achieved in recent years. Nevertheless, as illustrated in the action plan, further measures will be necessary to reach the envisaged climate neutrality till 2030. The climate actions are a combination of direct GHG emissions measures (83% from the baseline year 2011) and GHG emissions compensation measures (17%). Most of the climate actions can be primarily categorized as “hard actions” as their focus is on the creation of new infrastructure (e.g. the electrification of the entire bus fleet). However, in most cases these primarily “hard action” projects also involve “soft actions”, such as raising awareness and behavioral changes (e.g. it’s not sufficient to introduce electric buses in Klagenfurt without a corresponding shift from private mobility toward public mobility). Generally speaking, the necessary actions for reaching climate neutrality are in the fields of energy systems, mobility & transport, and the built environment. For the successful implementation of the targeted climate actions, it is necessary that local authorities, local businesses, society as a whole and any relevant stakeholders cooperate and strive together for the goal of climate neutrality by 2030.

List of figures

The list of figures **identifies the titles and locations** (page numbers) of **all visual elements:** figures, drawings, photos, maps, etc. used in the Action Plan.

List of tables

The list of tables **identifies the titles and locations** (page numbers) of **all tables** used in the Action Plan.

Abbreviations and acronyms

The list of abbreviations and acronyms **identifies the abbreviations** (a shortened form of a word used in place of the full word) **and acronyms** (a word formed from the first letters of each of the words in a phrase of name) used in the Action Plan.

Abbreviations and acronyms	Definition
GHG	Greenhouse gas
KEBIP	Klagenfurt Electric Bus Investment Project
SCS	Smart City Strategy

1 Introduction

The introduction should outline the local policy context in which the Action Plan is being developed and describe the gap it is addressing in broad terms.

Introduction - textual element
In the 1st version of the Smart City Strategy (SCS) Klagenfurt, politically decided in 2018, GHG neutrality by 2050 was set. The city council decided on 25.5.2021, to bring forward the targets: The goal of the current smart city strategy version 6.0 is to reduce GHG by 70% by 2030 and by 90% by 2040, based on the baseline year 2011. Due to the participation in the EU-Cities Mission the city council decided on 30.12.2021 to reduce direct GHG by 80% and compensate residual emissions by 2030. Thanks to the extensive measures of the city of Klagenfurt and all involved stakeholders, an outstanding reduction of GHG emissions from the baseline year (2011) to the most recent inventory (2018) could be achieved. Nevertheless, to reach the goal of climate neutrality by 2030 further 219.000t of GHG emissions need to be saved. Due to its pioneering role towards climate neutrality, the city of Klagenfurt hast clear and quite ambitious climate actions sketched to reach the 2030 goal. This means, that if all planned climate actions will be successfully implemented, there will not be any gap. However, besides the presence of the sketched climate action plan, the city of Klagenfurt always welcomes further innovative climate action ideas as there might be some unpredicted challenges with the planned actions.

2 Work Process

This section should list the working steps carried out, for example along the NZC Climate Transition Map, or related steps planned as well as outline timeline and milestones for future iterations for the continuous development of the Action Plan.

Work Process - combination of textual and visual elements
As it can be observed in figure 01, Klagenfurt managed to achieve a significant GHG emissions reduction from the baseline year 2011. From 2011 to the most recent GHG inventory of 2018 (GHG emissions inventory for 2020 is currently being finalized) GHG emissions could be reduced by about 53%. The strongest reduction took place in the field of electricity followed by district heating. A smaller (but still notable) reduction could be achieved in the field of end energy while GHG emissions from traffic remained constant. From a thematic point of view, the city of Klagenfurt will focus on the following topics to reduce and compensate GHG emissions and thus achieve climate neutrality by 2030. The below listed documents are further presented in the attached figure 02 (key measures for GHG reductions) and figure 03 (key measures for compensation). Energy systems: 1) Implementation of district cooling for selected larger companies and/or establishments in the city center (direct GHG emissions reduction) 2) Expansion of district heating system (direct GHG emissions reduction) 3) Replacement of natural gas by green synthetic gas, which will be important for companies which are currently still dependent on gas, or private buildings for which an alternative to gas is currently not feasible (direct GHG emissions reduction) 4) Photovoltaic projects on municipality buildings (compensation measures) 5) Energy storage (compensation measure) 6) Photovoltaic projects in the central area of Carinthia (compensation measure) Mobility and transport: 7) Klagenfurt Electric Bus Investment Project (KEBIP), leading to a GHG emissions free public transport (direct GHG emissions reduction measure) 8) Expansion of e-mobility by the installation of further charging points targeted for individual and delivery traffic (direct GHG emissions reduction measure) 9) Change of mobility behavior including bike and e-car sharing within the city (direct GHG emissions reduction) 10) Change of mobility behavior in the central area of Carinthia – commuters (compensation measure) Built environment and housing: 11) Thermal building renovation is expected to lead to the strongest GHG emissions reductions. Particularly measures such as isolation and improvements of heating systems of older buildings show high potential (direct GHG emissions reduction)

12) Use of renewable raw materials (wood) in building industry (compensation measure)

Nature based and other innovative solutions:

13) Smart City offensive with economy and private developers (direct GHG emissions reduction)
14) Implementation of Smart City Measures (direct GHG emissions reduction)
15) Forestation of open spaces (compensation measure)
16) Climate projects in the central area of Carinthia (compensation measure)
17) Other CCS projects (compensation measure)

For reaching the envisaged climate neutrality, it is fundamental to include society in the corresponding transformation processes. We therefore developed the Climamundus project which focuses on demonstrating and informing people on various climate action impact measures. Climamundus was submitted to the first NZC Call in November 2022.
In order to further include society, companies and organizations in the necessary transformations, the implementation of a Smart City Lab is planned. The aim of this lab is to connect various actors for climate action measures and prepare their ideas for project funding submissions. The establishment of the Smart City Lab has been submitted for funding and first staff has been hired.

Due to the tense financial situation of Klagenfurt, the implementation of climate actions strongly depends on corresponding project calls. There are many project ideas in the "pipeline" waiting for a corresponding call. The team of the climate and environment department is already looking forward to the next NZC call.

3 Part A – Current State of Climate Action

Part A "Current State of Climate Action" describes the point of departure of the city towards climate neutrality, including commitments and strategies of key local businesses, and informs the subsequent modules and the outlined pathways to accelerated climate action.

3.1 Module A-1 Greenhouse Gas Emissions Baseline Inventory

Module A-1 "Greenhouse Gas Emissions Baseline Inventory" should detail and describe the city's latest GHG inventory to establish the emission baseline and to establish the emissions gap to 2030 climate neutrality according to the inventory specifications defined in the Cities Mission's *Info Kit for Cities* and the process outlined in the Action Plan Guidance.

A-1.1: Final energy use by source sectors				
Base year	2011			
Unit	MWh/year			
	Scope 1	Scope 2	Scope 3	Total
Buildings		1873673		1873673
(Fuel type/ energy used)		district heating, non-district heating (nat.gas, oil, other), electricity		
Transport		592025		592025
(Fuel type/ energy used)		diesel, gasoline		

Please note: As Klagenfurt is a front runner city in terms of climate action and thus an Austrian leading city with several GHG emission inventories based on the methodology of the covenant of mayors (using LCA in t CO2eq). A common standardized GHG emission inventory approach is currently being planned together with the largest Austrian Cities following the tool kit by the EU. In this course, it is planned to update the emission inventory of the city of Klagenfurt by latest December 2024. Hereby a more recent baseline year (2018) will be used as well.

A-1.2: Emission factors applied; not applicable since we use CO2eq						
(please specify for primary energy type and GHG emission factor according to methodology used)						
For calculation in t or MWh of primary energy						
(Please indicate method used, e.g. GPC, IPCC, CRF, national etc.): Klagenfurt uses LCA in t CO2eq.						
Primary energy/ energy source	Carbon Dioxide (CO_2)	Methane (CH_4)	Nitrous Oxide (N_2O)	F-gases (hydrofluorocarbons and perfluorocarbons)	Sulphur hexafluoride (SF_6)	Nitrogen trifluoride (NF_3)

A-1.3: Activity by source sectors			
Base year 2011			
	Scope 1	Scope 2	Scope 3
Buildings		x	
Transport		x	

A-1.4: GHG emissions by source sectors				
Base year	2011			
Unit	CO2equivalent/year			
	Scope 1	Scope 2	Scope 3	Total
Buildings		325.000		
Transport		181.000		
Electricity		244.000		
Total		**750.000**		

A-1.5: Graphics and charts
Figure 01: GHG emissions and saving 2011 – 2018 – 2030

A-1.6: Description and assessment of GHG baseline inventory
In 2011, most GHG emissions were in the field of electricity (244,000t GHG emissions), followed by other end energy (218,000t GHG emissions). GHG emissions from the field of traffic accumulate to 181,000t, while district heating was responsible for about 107,000t GHG emissions.

Please note: Klagenfurt uses the LCA method and refers to CO2e (equivalent) emissions. Other GHG emissions besides carbon dioxide are included in the mentioned CO2e emissions, but not exclusively reported. The above-mentioned Scope 2 values include both upstream emissions and direct emissions from local combustion.

3.2 Module A-2 Current Policies and Strategies Assessment

Module A-2 “Current Policies and Strategies” should list relevant policies, strategies, initiatives or regulation from local, regional and national level, relevant to the city’s climate neutrality transition.

A-2.1: List of relevant policies, strategies & regulations (n.b. Klagenfurt currently focuses on strategies; table has been modified correspondingly)				
Level	**Name & Title**	**Description**	**Relevance**	**Need for action**
(local, regional, national, EU)	(Name of policy/ strategy/ plans)	(Description of policy/ strategy/ plans)	(Describe relevance/ impact on climate neutrality ambition)	(list any suggested action in relation – to be further picked in Module C-1)
Local	Smart City Strategy Klagenfurt Version 6.1	In the 1st version of the Smart City Strategy Klagenfurt, politically decided in 2018, GHG neutrality by 2050 was set. The city council decided on 25.5.2021, to bring forward the targets: The goal of the current smart city strategy version 6.0 is to reduce GHG by 70% by 2030 and by 90% by 2040, based on the baseline year 2011. Due to the participation in the EU-Cities Mission the city council decided on 30.12.2021 to reduce direct GHG by 80% and compensate residual emissions by 2030.	The Smart City Strategy is very relevant for reaching the envisaged climate neutrality by 2030 as it is the guiding strategy for all climate action measures.	All climate actions are directly or indirectly also contained in the Smart City Strategy.
Local	City Development Concept STEK2020+	The city development concept is a local development concept whose legal basis is the Carinthian Municipal Planning Act. It includes, for example, the concept of natural space, population development, urban green and open spaces, mobility and infrastructure, economic mission statement, analysis of urban potentials.		
Local	Covenant of mayors	In 2011, the city of Klagenfurt am Wörthersee joined the "Covenant of Mayors1". joined. This initiative aims to achieve the EU's 20-20-20 targets, such as: - Increasing energy efficiency by 20%, - Increasing the share of renewable energy sources by 20%, - Reducing GHG emissions by 20% by 2020.		
Regional	Mobilitycon-cept Klagenfurt 2035	Against the background of already existing goals, strategies and concepts in the present an overall mobility concept for Klagenfurt with a time horizon of 2035, was developed. The focus was on a reorientation of urban public transport, but beyond that the other modes of transport were also to be included. The mobility concept is based on a mission statement, which forms the foundation for the subsequent definition and determination of goals and measures.		

Local	Package of measures to reduce particulate matter (PM10) and nitrogen dioxide (NO2)	The package of measures to reduce particulate matter (PM10) and nitrogen dioxide (NO2) was developed at the beginning of 2003, politically decided by the city senate on 13.05.2003 and on the 21.02.2006 extended by NO2. In October 2016 the 10th workshop for the evaluation, revision and updating of the package of measures took place.		

A-2.2: Description & assessment of policies

The above-described measures, which are at different stages (implemented, in the process of implementation, in preparation), strongly contribute to Klagenfurt's envisaged climate neutrality by 2030. Assessments however show, that further measures will be necessary. These measures may regard intensifications of in A-2.1 contained topics (mobility) as well as new approaches of further topics (e.g. energetic building renovations).

Please note: the base year in this document is 2011, so there is an 83% reduction in GHG emissions based on 2011. Klagenfurt also has another GHG inventory based on data from 2018. Therefore, the defined climate measures refer to the period 2018-2030.
As mentioned above, the emission inventory of the city of Klagenfurt will be updated by latest December 2024, including the application of a more recent baseline year (2018).

A-2.3: Emissions gap

	Baseline emissions (percentage)		Residual emissions / offestting[1]		Baseline emissions reduction target[2]		Emissions reductions in existing strategies[3]		Emissions gap (to be addressed by action plan)[4]	
	(absolute)	(%)	(absolute)	(%)	(absolute)	(%)	(absolute)	(%)	(absolute)	(%)
Base 2018										
Buildings	*168.000*	*48*	*66.000*	*39*	*102.000*	*47*	*102.000*	*47*	*0*	*0*
Transport	*181.000*	*52*	*64.000*	*35*	*117.000*	*53*	*117.000*	*53*	*0*	*0*
Base 2011										
Buildings	325.000	43	66.000	20	259.000	42	259.000	42	0	0
Transport	181.000	24	64.000	35	117.000	19	117.000	19	0	0
Electricity	244.000	33	0	0	244.000	39	244.000	39	0	0
Total 2018	*349.000*		*130.000*							
Total 2011	750.000	100	130.000	17	620.000	83	620.000	83	0	0

[1] Residual emissions consist of those emissions which can't be reduced through climate action and are being offset. Residual emission may amount to a maximum of 20 % as stated by the Mission Info Kit.
[2] Baseline reduction target = Baseline emissions – residual emissions.
[3] Emission reductions planned for in existing action planning and strategies should be quantified per sector.
[4] Emissions gap = Baseline emission reduction target – Emissions reduction in existing strategies.

3.3 Module A-3 Systemic Barriers and Opportunities to 2030 Climate Neutrality

Module A-3 "Systemic Barriers to 2030 Climate Neutrality" should document the results of the stakeholder, systems and ecosystem mapping and identification of systemic barriers and opportunities.

System description	Stakeholders involved	Influence
Technology	- BABEG (Kärntner Betriebsansiedlungs- und Beteiligungsgesellschaft) - Lakeside Science & Technology Park	Support the establishment of climate-friendly, technology-driven businesses. The main technology for the transition towards climate neutrality however needs to be acquired at the world market (e.g. e-cars, e-buses) Openness of these stakeholders towards new technologies and their acknowledgment for climate protection may foster the 2030 goal; stubbornness instead may slow down the process.
Finance and business models	- Chamber of commerce (Carinthia / Austria) - Banks - FI, EIP	Strong influence as the city of Klagenfurt as well as companies and organizations need capital for the implementation of climate actions. Besides having a strong direct influence, banks etc. may take a leading role towards climate neutrality and hereby encourage others to follow the same path. New approaches to financing, e.g. such as climate bonds will create opportunities for climate actions; their absence instead may slow down the process.
Governance, policy and regulation	- BMK - Provincial government Carinthia - City senate and municipal council	Stakeholders belonging to this category not only set the legal framework conditions for necessary measures toward climate neutrality but also have the possibility to directly (financially) support them; through subsidy, grant etc.) A large barrier in this category represents frequent political changes - particularly after elections, but also after unforeseen political resignations. Missing plannability represents a large barrier for many climate actions.
Democracy, social innovation and social change	- Society - (high) schools - University of applied science Carinthia - University of Klagenfurt - Social Organizations (Diakonie, Caritas) - Hospital Klagenfurt	For reaching climate neutrality, it is necessary that all parts of society act in concert. Therefore, sensibilization of the topic is necessary, starting with the youngest at schools, with students at the university, or with socially marginalized groups. Through cooperation with social organizations and social innovations, it must be assured that all parts of society are considered in climate actions. Possible barriers in this system regard the challenge to reach all parts of society and encourage them to actively participate in climate actions and change their daily life behavior.
Capacity and capabilities	- Zentralraum Kärnten, - KWF - Neighboring communities	Despite the many climate actions within the city of Klagenfurt, to actually achieve climate neutrality it will be necessary to implement measures reaching beyond the city borders. By cooperating with the stakeholders belonging to this category it will be possible to enhance the capacity and capabilities needed for the implementation of climate actions beyond the city limits. Possible barriers regard missing cooperation and prioritization of own goals, leading to a neglection of the common need to foster climate actions.
Industry	- Influential companies - Companies (general) - Kärntner Messen	Through goal-oriented measures, also Klagenfurt's industry can strongly contribute to reaching climate neutrality. Corresponding measures can regard either directly the company's production and operation process or important side aspects (e.g. employee mobility). While the industry might be generally open for innovative climate action measures, they often have to compete on the international market. As climate action measures usually do not pay off

		in the short run, inexpensive competition might represent a barrier to implement them.
Transport	- Klagenfurt Mobil GmbH - Verkehrsverbund Kärnten GmbH - Mobilitätsplattform Österreich -ÖBB, mobility companies, - Logistikcenter Fürnitz - E-car sharing - E-scooter sharing	Stakeholders belonging to this group have a high influence for achieving Klagenfurt's climate neutrality as transport is currently one of the central GHG emission sources. The corresponding stakeholders regard passenger transport and cargo transport and stretches its boundaries inside and outside the city. A fundamental barrier in the transportation system often regards the old mindsets of competitive thinking instead of goal-oriented cooperation.
Energy	- Bioenergie Kärnten - KDSG (Klagenfurt Dachstrom Gesellschaft) - Stadtwerke Klagenfurt AG - VDSG (Villacher Dachstrom GmbH)	This group of stakeholders has a high influence as they generate energy and heat for the city of Klagenfurt. High potential lies in a further GHG emission reduction of the district heating, the generation of locally produced green energy and intelligent use of waste heat, which can only be achieved if stakeholders belonging to this group cooperate. Barriers in the energy system are mostly external (e.g. hurdles due to legislation) and not directly from the involved stakeholders.
Waste and land use	Abfallwirtschaftsverband	
Housing and building	- Schools and universities (BIG) - Housing developers (public and private) - Current and future house owners	Achieving climate neutrality strongly depends on stakeholders belonging to the housing and building category. Fundamental aspects regard energy generation (photovoltaic on roofs and façade), reductions on energy consumptions (insulation) as well as aspects of sustainable mobility. Housing and building stakeholders not only have high potential when constructing a building, but also when executing building renovations. Barriers regards the missing openness of building engineers (for considering innovative climate actions when planning a building) as well as current and future house owners. The same is valid for the public side (BIG), where missing openness for innovative climate actions in the building sector can represent a large barrier.

A-3.2: Description of systemic barriers – textual elements

Due to the complexity and the necessary transition in various systems, the extensive goal of reaching climate neutrality by 2030 involves many barriers, which need to be overcome:
1. Population (commitment): There is currently a broad political consensus on achieving climate neutrality in 2030, but this goal is not yet firmly anchored in the population. The positive mood could change if the population has to make noticeable savings and increase fees in order to finance climate protection measures. The next municipal elections are not until March 2026, which means that there is a relatively large window of opportunity to objectively inform the population and actively involve them in the process toward climate neutrality. Compensatory measures must be found for socially disadvantaged population groups.
2. Infrastructure and mobility: mobility is responsible for most GHG emissions. A large-scale transformation however is very challenging. Society and all relevant actors are often stubborn and don't have the urgently needed open mindset.
3. Funds, project calls, and other financial support
Funding: due to the Corona pandemic, the city cannot balance its financial budget and must cover the loss with reserves. If it is not possible to secure the investments needed to achieve the climate goals through grants and loans, their implementation is at risk. Many of the climate actions planned are therefore strongly dependent on financial support through corresponding project calls at regional, national and international levels.
4. Regional, national and European strategies and laws: suitable strategies and laws can represent a large enhancer and lever, while unsuitable ones can represent a large barrier and, in some cases, may even hinder innovative and urgently needed projects completely.
5. Price increases: due to the war in Ukraine and market instabilities, certain sectors currently experience extreme price increases (high inflation). Such unpredictable price increases represent a risk for the implementation of planned projects and measures.

Obviously, none of the above-mentioned barriers can be entirely removed. Nevertheless, thanks to the progress the city of Klagenfurt already made towards climate neutrality and the experience with successfully implementing climate actions, they can be significantly reduced. Thanks to the expertise the involved team has, possible modifications and adaptions of climate actions to overcome unforeseen barriers are shortly possible.

A-3.3: Description or visualisation of participatory model for the city climate neutrality – textual and visual elements
Klagenfurt has been committed to the active participation of citizens in the form of participatory processes for several years. For example, events have already been held for ongoing projects and the attitude of the population has been captured and considered correspondingly. The project "SLiKH - Smart Living in Klagenfurt Harbach", a feasibility study for the development of one of the 8 Smart City target areas of the city, can be mentioned as an example. In multi-stage workshops, the ideas and needs for the urban development project were requested from the citizens and considered. In the currently running funding project "Mission Klagenfurt climate neutral and smart by 2030" in preparation for participation in the EU-Cities Mission, a participation process was initiated in which students from two Klagenfurt schools helped to shape and develop climate neutrality for Klagenfurt in a foresight process. The results from this involvement of youth shaped the city's Smart City Strategy, which focuses on climate neutrality by 2030. Thus, already today youth has the possibility to influence city short- and long-term developments. To foster this approach further, a youth advisory board is to be established to act as an advisory body on major projects, including climate neutrality. As further activities of the city, a public workshop series can be mentioned, about which information is regularly provided on various topics of climate change. With the recently submitted Climamundus project and the included task to establish a Climatefund, the active participation of citizens is further strengthened and their role reaches a new level as they can receive financial support for their own climate action measure projects. Additionally, the previously introduced Smart City Lab, is an approach to further enhance the active participation of citizens and relevant stakeholders. The lab will be located directly in the center of Klagenfurt and thus offers a low-threshold possibility of citizens to inform themselves and engage in climate action projects. Last but not least, a youth advisory board is currently established. The central aim of this board is to act as an advisory body on major projects, particularly on project in the field of climate neutrality.

4 Part B – Pathways towards Climate Neutrality by 2030

Part B represents the core of the Action Plan, shaped by local authorities, local businesses and stakeholders, comprising of the most essential elements: scenarios, strategic objectives, impacts, action portfolios and indicators for monitoring, evaluation and learning.

4.1 Module B-1 Climate Neutrality Scenarios and Impact Pathways

Module B-1 “Climate Neutrality Scenarios and Impact Pathways” should list impact pathways, early and late outcomes and direct and indirect impacts (co-benefits) according to and adapted from the NZC Theory of Change and the AP Guidance – clustered by fields of action.

B-1.1: Impact Pathways					
Fields of action	**Systemic levers**	**Early changes (1-2 years)**	**Late outcomes (3-4 years)**	**Direct impacts (Emission reductions till 2030)**	**Indirect impacts (co-benefits)**
Energy systems	Technology /infrastructure	Technological development will allow a multifaceted application (e.g. innovative PV systems) as well as a high energy generation/efficiency and thus GHG emission reductions.	Further technological development will increase e.g. the yield of already existing technologies. Technological development is also expected to reduce costs in highly innovative aspects.	Total envisaged emission reduction and compensation of about 114500t GHG emissions by 2030 in the energy system sector.	Improved quality of life and improved air quality
	Governance & policy	High political support due to: a) EU Green Deal b) Reduction of dependency on Russia	Political support is expected to remain high, but might partly vanish (e.g. new political leadership after elections)		Reduced dependency from the worldwide energy market and particularly from non-EU countries (e.g. Russia)
	Social innovation	Initiation of a local Climatefund supporting all kinds of small-scale climate actions	Strong anchoring of Climatefund		Price stability Socially fair energy pricing structures (financial savings for households)
	Democracy/participation	Establishment of youth and citizens' advisory council	Large-scale citizen participation projects		All social groups participate and profit from the energy transition
	Finance & funding	Financial support on regional, national and international levels will foster energy system actions. Revenues from the sale of energy are not sufficient for the investments needed.	Financial support on regional, national and international level will foster energy system actions. Revenues from the sale of energy are not sufficient for the investments needed.		Financial benefits from long-term and future-oriented investments (e.g. by selling energy and or/reduced purchased energy)
	Learning and capabilities	Smart City Strategy, involving various relevant departments of the City of Klagenfurt; Continuous workshop sessions with internal and external stakeholders	Smart City Strategy, involving Various departments of the City of Klagenfurt; Continuous workshop ses-		Turbocharging process thanks to reciprocal learning and intelligent linkages between different activities

			sions with internal and external stakeholders		
Mobility & transport	Technology /infrastructure	Large-scale deployment of new technologies (electrification of buses and cars) will further improve technologies and reduce costs.	New technologies, particularly e-buses and e-cars will become the new standard.	Total envisaged emission reduction and compensation of about 130000t GHG emissions by 2030 in the energy system sector	Improved quality of life (e.g. through time savings)
	Governance & policy	Development of suitable legal infrastructure and support for new mobility forms (e.g. installation of e-car chargers, the dedication of parking places for e-car sharing).	Governance and policy make new mobility forms the new standard (e.g. by raising the hurdles in the registration of new combustion engine cars)		Reduced dependencies on oil from non-European countries (e.g. Russia).
	Social innovation	Development of new mobility models focusing on the inclusion of all social groups.	Further adjustments assuring the inclusion of all social groups.		All social groups participate in the new mobility forms. More social equality (e-cars can be shared instead of purchased)
	Democracy/participation	Development of inclusion and participation processes	The importance of sustainable mobility and transport is acknowledged and supported in society		The majority of society uses the new mobility forms and appreciates its existence.
	Finance & funding	The basis for technology development and installation of corresponding infrastructures (e.g. charging stations). Given the current situation (Russia's war in Ukraine), strong financial support.	Financial support is expected to continue as the 2030 EU goals approach.		Strong financial support at the beginning offers the possibilities of long-term costs reductions (e.g. economies of scale)
	Learning and capabilities	Further improvement of mobility and transportation technologies and acceptance.	Continuous learning allows further improvements in various related fields (e.g. inclusion of all social groups, suitability of legal framework).		Sustainable mobility and transport will become the new standard
Built environment	Technology /infrastructure	Further development of new sus-	Availability of climate-friendly construction	Total envisaged emission reduction and	Less energy demand (heating and cooling) in

		tainable technologies in the building sector (for new buildings and retrofitting existing buildings)	and refurbishment possibilities	compensation of about 55000t GHG emissions by 2030 in the energy system sector	the housing sector.
	Governance & policy	Latest sustainable construction technologies are politically supported and fostered. Thermal building renovation programs are developed	Legal framework only allows new buildings to be sustainably build. Large scale		Less dependencies on non-EU countries for energy (particularly for heating).
	Social innovation	Development of programs which assure that sustainable housing is possible for all social groups.	Implementation of programs assuring that sustainable housing is possible for all social groups.		Improved quality of life Less social tensions as sustainable housing is not a luxury, but a possibility for all social groups.
	Democracy/participation	Development of participation processes.	The importance of green and sustainable housing is acknowledged and supported in society.		Society sees sustainable housing as the new standard.
	Finance & funding	Financial support enables a transition toward green and sustainable housing (including thermal refurbishments)	Further financial support continues the process of thermal building renovation.		Thanks to the financial support, a large share of existing buildings is thermally refurbished. Sustainable new houses have become the new standard
	Learning and capabilities	Further improvement of a green and sustainable way of construction and building	Continuous learning allows further improvements in the transitions toward green and sustainable housing		Thanks to continuous learning processes, renovation processes gain on quality and new sustainable housing approaches can be developed.
Nature-based and other innovative solutions	Technology /infrastructure	Diverse role: for some activities technology will be a fundamental lever (e.g. CCU). Technological development will allow pilot studies. For other activities (e.g. forestation projects, it rather plays a minor role)	Technological development necessary for extending pilot studies towards small scale actions.	Total envisaged emission reduction and compensation of about 49500t GHG emissions by 2030 in the energy system sector.	Large scale highly innovative climate actions implementation lead to an improvement of life (e.g. through a smart and intelligent city)

	Governance & policy	Development of the necessary legal framework.	Legal framework allows the implementation of various actions at different development stages (e.g. some are very innovative and in the development stage e.g. CCU)		Improved quality of life
	Social innovation	Fostering the assurance that all social groups and their circumstances are considered in nature-based and innovative solutions	All social groups are considered in the nature-based and innovative solutions and participate in selected projects		Improved quality of life, climate actions as a relaxing and rehabilitation area (greening measures) for all social groups
	Democracy/participation	Fostering the assurance societal acceptance and/or participation in nature-based and innovative solutions	The necessity of nature-based and innovative solutions is acknowledged and actively supported.		Improved quality of life. Society is strongly connected to the climate measures and turbocharges the process.
	Finance & funding	Availability of financial means as the basis for the development and implementation of nature-based and innovative solutions.	Financial support for nature-based and innovative solutions is a fixed component in national and international calls.		Improved quality of life
	Learning and capabilities	Further improvement of nature based and innovative solutions	Continuous learning allows further (technological) improvements		Improved quality of life

B-1.2: Description of impact pathways– textual and visual elements
All six levers will be relevant for the corresponding fields of action. The impact of each lever, however, may vary significantly depending on the field of action and will change as the prevailing conditions will change in the future. The envisaged direct impact of the various levers is a reduction of GHG emissions, leading to climate neutrality by 2030. Indirect impacts instead mostly regard an improved quality of life and/or a better social cohesion.

4.2 Module B-2 Climate Neutrality Portfolio Design

Module B-2 "Climate Neutrality Portfolio Design" should contain a project description for **each intervention planned**, including interventions by local businesses and industry, according to the template B-2.1, including actions those interventions targeted at enhancing carbon sinks to address residual emissions. Narrative analysis and comments can be provided in B-2.2. A summary of how residual emissions are addressed, should be provided in B-2.3.

B-2.1: Description of action portfolios - textual or visual		
Fields of action	Portfolio description	
	List of actions	Descriptions
Energy systems	1) Implementation of district cooling 2) Expansion of district heating system 3) Replacement of natural gas by green synthetic gas 4) Photovoltaic projects on municipality buildings 5) Energy storage 6) Photovoltaic projects in the central area of Carinthia	The actions belonging to the field of energy actions either regard direct GHG reduction measures or GHG compensation measures. Some of the actions are completely new implementations such as district cooling which until now does not exist in Klagenfurt, while others are an extension of already existing approaches (e.g. district heating system). Other actions require the development and implementation of innovative technologies (generation of green synthetic gas) Additionally, the started photovoltaic initiative needs to be further fostered on municipality buildings and in the future also energy storage systems such as large batteries will play an important role.
Mobility & transport	7) Klagenfurt Electric Bus Investment Project (KEBIP) 8) Expansion of e-mobility (individual and delivery traffic) 9) Change of mobility behavior including bike and e-car sharing within the city 10) Change of mobility behavior in the central area of Carinthia (commuters)	All mobility and transport actions strive towards an emission-free mobility. On one hand, by the electrification of the entire bus fleet, Klagenfurt will be one of the first cities offering completely GHG emission-free public transport. Together with measures aiming to intensify the use of public transport, a strong lever is targeted. On the other hand, when public transport is not possible, there will be a strong focus on fostering emission-free mobility (e.g. electric cars). Furthermore, several measures fostering bike usage are planned. These do not only include the construction of bike trails, but also priorities at busy intersections and safe parking facilities. For people not having their own bike at hand (e.g. as they arrive by public transport), the existing bike sharing system (nextbike) will be further extended
Built environment and housing	11) Thermal building renovation 12) Use of renewable raw materials (wood) in the building industry	Poorly insulated buildings and/or outdated heating systems are responsible for a large share of GHG emissions. Therefore, a thermal renovation campaign is needed. Where possible, in the course of this campaign, more houses will be connected to the city's district heating system. Furthermore, innovative measures for the usage of renewable raw materials (wood) in the building industry will lead to a reduction of emissions in the built environment
Nature-based and other innovative solutions	13) Smart City offensive with economy and private developers 14) Implementation of Smart City Measures 15) Forestation of open spaces 16) Climate projects in the central area of Carinthia 17) Other CCS projects	The Smart City offensive with economy and private developers will be continued and concrete smart city measures implemented. Forestation of open spaces, climate projects in the central area of Carinthia, will be the most important compensation measures, as well as other CCS projects.

B-2.2: Individual action outlines		
(fill out one sheet per intervention/project)		
Action outline	Action name	Implementation of district cooling system
	Action type	Hard (infrastructure) Direct GHG emissions reduction measure
	Action description	A district cooling system will be implemented in the center of Klagenfurt, providing a GHG emission-friendly cooling possibility on hot summer days.
Reference to impact pathway	Field of action	Energy systems
	Systemic lever	Technology /infrastructure, governance & policy, finance & funding
	Outcome (according to module B-1.1)	Possibility too cool selected buildings in the center of Klagenfurt using a GHG emission friendly approach
Implementation	Responsible bodies/person for implementation	Grid operator
	Action scale & addressed entities	District cooling is currently only relevant for larger buildings (large office buildings, shopping malls, hospitals). Nevertheless, scaling possibilities (similar to the ones of district heating) are given.
	Involved stakeholders	Stadtwerke Klagenfurt AG, companies (general), hospital Klagenfurt
	Comments on implementation	It will be the first district cooling system in Klagenfurt and thus represents a high innovative character.
Impact & cost	Generated renewable energy (if applicable)	Not given
	Removed/substituted energy, volume or fuel type	Not given
	GHG emissions reduction estimate (total) per emission source sector	5000t GHG.
	Total costs and costs by GHG unit	12 Mio € / 2400 € per t GHG

B-2.2: Individual action outlines		
(fill out one sheet per intervention/project)		
Action outline	Action name	Expansion of district heating system
	Action type	Hard (infrastructure) Direct GHG emissions reduction
	Action description	Klagenfurt already has a well-functioning district heating system. For reaching climate neutrality by 2030 this system will be further extended.
Reference to impact pathway	Field of action	Energy systems
	Systemic lever	Technology /infrastructure, governance & policy, finance & funding,
	Outcome (according to module B-1.1)	More houses and buildings will be heated with renewable and GHG emission friendly heat. Additionally, domestic hot water preparation will also be possible using the district heating system.
Implementation	Responsible bodies/person for implementation	Grid operator
	Action scale & addressed entities	The system is being continuously extended.
	Involved stakeholders	Stadtwerke Klagenfurt AG, companies (general), Housing developers (public and private)
	Comments on implementation	District heating system is well-functioning, but the potential can be further enhanced by extending the network.
Impact & cost	Generated renewable energy (if applicable)	Not given
	Removed/substituted energy, volume or fuel type	gas, oil, wood, coal (proportion is unknown)

	GHG emissions reduction estimate (total) per emission source sector	15000t GHG.
	Total costs and costs by GHG unit	30 Mio € 2000€/t GHG

B-2.2: Individual action outlines		
(fill out one sheet per intervention/project)		
Action outline	Action name	Replacement of natural gas by green synthetic gas
	Action type	Hard (infrastructure) Direct GHG emission reduction
	Action description	Conversion of natural gas in the gas supply of the city towards green synthetic gas. The focus is primarily on the residential and commercial sectors, where the greatest potential for savings lies in the first few years. With a conversion to 100% green gas supply by 2030, the potential GHG emissions savings amount to 30,000t GHG emissions per year.
amount to 15,000t GHG emissions per year. Reference to impact pathway	Field of action	Energy systems
	Systemic lever	Technology /infrastructure, governance & policy, finance & funding, learning and capabilities
Implementation	Outcome (according to module B-1.1)	Conversion from natural gas towards green synthetic gas.
	Responsible bodies/person for implementation	Bioenergie Kärnten
	Action scale & addressed entities	The action starts with a first pilot plant, which can be extended following a modular construction approach.
	Involved stakeholders	Bioenergie Kärnten, Stadtwerke Klagenfurt AG
Impact & cost	Comments on implementation	Very innovative action. Potential for an international lighthouse project.
	Generated renewable energy (if applicable)	Details to be elaborated
	Removed/substituted energy, volume or fuel type	Details to be elaborated
	GHG emissions reduction estimate (total) per emission source sector	30,000t GHG.
	Total costs and costs by GHG unit	50 Mio € 3300€/t GHG

B-2.2: Individual action outlines		
(fill out one sheet per intervention/project)		
Action outline	Action name	Photovoltaic projects on municipality buildings
	Action type	Hard (infrastructure) Compensation measures
	Action description	For the expansion of PV-systems in the city area, the city and the public utility provider founded the Klagenfurt Dachstrom GmbH. By 2030, there will be a continuous expansion of PV systems on municipal buildings and other potential areas. A total of EUR 30 million will be realized for photovoltaic systems on the roof areas of Klagenfurt will be invested. Further potential is explored.
Reference to impact pathway	Field of action	Energy systems
	Systemic lever	Governance & policy, finance & funding

	Outcome (according to module B-1.1)	By generating GHG emission-free electricity, the share of GHG emission-free electricity in the Austrian mix will be increased
Implementation	Responsible bodies/person for implementation	KDSG (Klagenfurt Dachstrom Gesellschaft)
	Action scale & addressed entities	The installation of PV-systems is currently in realization at several buildings and the expansion will be further intensified.
	Involved stakeholders	KDSG (Klagenfurt Dachstrom Gesellschaft), Stadtwerke Klagenfurt AG, Housing developers (public and private), schools and universities (BIG), companies (general)
	Comments on implementation	High potential to reduce energy dependencies
Impact & cost	Generated renewable energy (if applicable)	Data has been requested
	Removed/substituted energy, volume or fuel type	Details to be elaborated
	GHG emissions reduction estimate (total) per emission source sector	30000t GHG
	Total costs and costs by GHG unit	30 Mio € 1000€/t GHG

B-2.2: Individual action outlines		
(fill out one sheet per intervention/project)		
Action outline	Action name	Energy storage
	Action type	Hard (infrastructure) Compensation measure
	Action description	The increasing number of photovoltaic systems leads to higher energy fluctuations. Tu buffer these fluctuations, it will be necessary to store some of the energy when there is a surplus and provide it when there is a shortage. Energy storage systems in form of batteries can be in small, medium and large sizes. While the first category (small sizes) is primarily relevant for single houses, the city of Klagenfurt mainly focuses on medium and large-size batteries (e.g. for apartment buildings or office buildings).
Reference to impact pathway	Field of action	Energy systems
	Systemic lever	Technology /infrastructure, governance & policy, democracy/participation, finance & funding,
	Outcome (according to module B-1.1)	By buffering the fluctuations (surpluses and shortages) related to the generation of green energy, fossil energy generation can be further reduced and the share of green energy in the Austrian mix can be enhanced.
Implementation	Responsible bodies/person for implementation	KDSG (Klagenfurt Dachstrom Gesellschaft), Stadtwerke Klagenfurt AG
	Action scale & addressed entities	Energy storage in the form of batteries is still in the initial phase, but recently gains attention. There is a large potential for scalability, fostered by the currently high electricity prices.
	Involved stakeholders	KDSG (Klagenfurt Dachstrom Gesellschaft), Stadtwerke Klagenfurt AG, Housing developers (public and private), schools and universities (BIG), companies (gene-ral)
	Comments on implementation	High potential, particularly in combination with photovoltaic.
Impact & cost	Generated renewable energy (if applicable)	Not given

	Removed/substituted energy, volume or fuel type	Details to be elaborated
	GHG emissions reduction estimate (total) per emission source sector	4500t GHG
	Total costs and costs by GHG unit	Details to be elaborated
(Detail how residual emission will be offset, if applicable)		

B-2.2: Individual action outlines		
(fill out one sheet per intervention/project)		
Action outline	Action name	Photovoltaic projects in the central area of Carinthia
	Action type	Hard (infrastructure) Compensation measure
	Action description	With the aim to increase GHG emission-free energy generation in Austria, large-scale photovoltaic projects in the central area of Carinthia (outside the city boundary) will be developed and planned. As a first step, the VDSG was founded by the Stadtwerke Klagenfurt AG and the City of Villach in February 2023. The VDSG focuses on the installation of photovoltaic on municipality buildings in Villach; an approach which Klagenfurt actively follows since 2020 (foundation KDSG).
Reference to impact pathway	Field of action	Energy systems
	Systemic lever	Technology /infrastructure, governance & policy, democracy/participation, finance & funding,
	Outcome (according to module B-1.1)	With the installation of large-scale photovoltaic systems in the central area of Carinthia, the share of GHG emission-free energy will be increased.
Implementation	Responsible bodies/person for implementation	VDSG Villacher Dachstrom GmbH (owned by the Stadtwerke Klagenfurt AG and the City of Villach). Communities and cities in the central area of Carinthia
	Action scale & addressed entities	Photovoltaic systems for energy generation are meanwhile state of the art. It's now time to install them in large-scale projects.
	Involved stakeholders	KDSG (Klagenfurt Dachstrom Gesellschaft), VDSG Villacher Dachstrom GmbH, Stadtwerke Klagenfurt AG, Housing developers (public and private), schools and universities (BIG), companies (general)
	Comments on implementation	High potential as technology is ready. The necessity to find suitable areas for photovoltaic installation.
Impact & cost	Generated renewable energy (if applicable)	Details to be elaborated
	Removed/substituted energy, volume or fuel type	Details to be elaborated
	GHG emissions reduction estimate (total) per emission source sector	30000t GHG
	Total costs and costs by GHG unit	Details to be elaborated
(Detail how residual emission will be offset, if applicable)		

B-2.2: Individual action outlines		
(fill out one sheet per intervention/project)		
Action outline	Action name	KEBIP 2.0
	Action type	Direct GHG emissions reduction
	Action description	Since December 2020, KEBIP (Klagenfurt Electric Bus Investment Project) provides support on three core topics: 1) E-buses and accompanying infrastructure including a new depot, 2) bus preference measures and an intelligent traffic management system, 3) mobility hubs for access to shared mobility and other mobility services. The result is a technically and economically detailed, contract-ready, feasible and financeable investment program. GHG emission savings of 55.000 t.
Reference to impact pathway	Field of action	Mobility & transport
	Systemic lever	Technology /infrastructure, governance & policy, finance & funding, learning and capabilities
	Outcome (according to module B-1.1)	Provision of completely GHG emission-free public transport in the City of Klagenfurt
Implementation	Responsible bodies/person for implementation	KMG Klagenfurt Mobil GmbH
	Action scale & addressed entities	Intensification of the usage of public transport, shortening intervals
	Involved stakeholders	KMG Klagenfurt Mobil GmbH
	Comments on implementation	Klagenfurt aims to take the lead concerning GHG emission-free public transport in Austria/Europe
Impact & cost	Generated renewable energy (if applicable)	Not given
	Removed/substituted energy, volume or fuel type	Complete removal of diesel in the City's public transport bus fleet (2.43 Mio liters per year) plus additional energy savings resulting from a reduction of individual traffic, totaling 20,75 Mio. liters or ca. 200 GWh of diesel per year.
	GHG emissions reduction estimate (total) per emission source sector	55000t GHG.
	Total costs and costs by GHG unit	150 Mio € 2727 € /t GHG

B-2.2: Individual action outlines		
(fill out one sheet per intervention/project)		
Action outline	Action name	Expansion of e-mobility (individual and delivery traffic)
	Action type	Hard (infrastructure) Direct GHG emissions reduction
	Action description	For more than 10 years Klagenfurt has been promoting the switch toward e-mobility. Various projects (e.g. CEMOBIL) have already been initiated, through which for example the charging infrastructure has been expanded, e-car sharing services created and electric vehicles purchased (for the municipal fleet and public transport). Through further measures (e.g. installation of e-car charging stations), the attractiveness of e-cars will be further increased.
Reference to impact pathway	Field of action	Mobility & transport
	Systemic lever	Technology /infrastructure, governance & policy, social innovation, democracy/participation, finance & funding, learning and capabilities
	Outcome (according to module B-1.1)	More people will switch from combustion cars to e-cars

Implementation	Responsible bodies/person for implementation	Stadtwerke Klagenfurt AG, city of Klagenfurt
	Action scale & addressed entities	The corresponding measures of the Austrian Government and European Union, e.g. ban on combustion cars, will further foster the switch towards e-mobility.
	Involved stakeholders	Stadtwerke Klagenfurt AG, housing developers (privat and public), companies (general)
	Comments on implementation	Continuous process which contains many measures.
Impact & cost	Generated renewable energy (if applicable)	Not applicable
	Removed/substituted energy, volume or fuel type	Details to be elaborated
	GHG emissions reduction estimate (total) per emission source sector	25000t GHG
	Total costs and costs by GHG unit	18 Mio € 720€/t GHG

B-2.2: Individual action outlines		
(fill out one sheet per intervention/project)		
Action outline	Action name	Change of mobility behavior including bike and e-car sharing within the city
	Action type	Soft (behavior change) and hard (infrastructure) Direct GHG emissions reductions
	Action description	For reaching the envisaged climate neutrality, a fundamental change in mobility behavior is necessary. This primarily means, a switch from private individual mobility with cars towards public transport. Additionally, bike usage needs to be intensified. Even though the bike trail system in Klagenfurt was recently extended, to fully unfold its potential further extensions and renewals are necessary. At busy car intersections, a safe crossing for bikes must be guaranteed and generally, bikes must have priority over individual car traffic. Further measures to enhance the attractiveness of bike usage regard safe and practical parking positions. For people not having their own bike at hand (e.g. as they arrive by public transport), the well-functioning bike sharing system (nextbike) will be further extended.
Reference to impact pathway	Field of action	Mobility & transport
	Systemic lever	Technology /infrastructure, governance & policy, social innovation, democracy/participation, finance & funding, learning and capabilities
	Outcome (according to module B-1.1)	Private individual combustion car usage, which is currently the standard, will become an exception.
Implementation	Responsible bodies/person for implementation	City of Klagenfurt and Stadtwerke Klagenfurt AG
	Action scale & addressed entities	As public transport and bike usage become more attractive, the mobility change will turbocharge itself automatically.
	Involved stakeholders	Stadt Klagenfurt, Stadtwerke Klagenfurt AG, housing developers (private and public), companies (general), schools and universities (BIG)
	Comments on implementation	A continuous process that contains various measures.
Impact & cost	Generated renewable energy (if applicable)	Not given
	Removed/substituted energy, volume or fuel type	Details to be elaborated

	GHG emissions reduction estimate (total) per emission source sector	20000t GHG
	Total costs and costs by GHG unit	Details to be elaborated

B-2.2: Individual action outlines		
(fill out one sheet per intervention/project)		
Action outline	Action name	Change of mobility behavior in the central area of Carinthia (commuters)
	Action type	Soft (behavior change) and hard (infrastructure) Compensation measure
	Action description	On an average day, about 50,000 people come to Klagenfurt for different reasons, such as: work (commuters), education (e.g. high schools, universities), shopping and entertainment, medical and health related topics. By intensifying public transportation (bus and train) offers for those people, GHG emissions in the central area of Carinthia will decrease.
Reference to impact pathway	Field of action	Mobility & transport
	Systemic lever	Technology /infrastructure, governance & policy, social innovation, democracy/participation, finance & funding, learning and capabilities
	Outcome (according to module B-1.1)	A decreasing number of people from the central area of Carinthia travel to Klagenfurt by combustion car.
Implementation	Responsible bodies/person for implementation	Communities and cities in the central area of Carinthia
	Action scale & addressed entities	As public transport becomes more attractive, the mobility change will turbocharge itself automatically.
	Involved stakeholders	Stadt, Stadtwerke, Klagenfurt Mobil GmbH, Verkehrsverbund Kärnten GmbH, Mobilitätsplattform Österreich, ÖBB, (public) transportation companies, regional government of Carinthia
	Comments on implementation	Can strongly be influenced by national and international regulations and incentives (e.g. Klimaticket Österreich)
Impact & cost	Generated renewable energy (if applicable)	Not given
	Removed/substituted energy, volume or fuel type	Details to be elaborated
	GHG emissions reduction estimate (total) per emission source sector	30000t GHG
	Total costs and costs by GHG unit	Details to be elaborated

B-2.2: Individual action outlines		
(fill out one sheet per intervention/project)		
Action outline	Action name	Thermal building renovation
	Action type	Hard (infrastructure) Direct GHG emissions reduction
	Action description	Thermal building renovations of all municipal buildings, including official buildings and municipal apartments, not only reduces heating costs for the city of Klagenfurt but also GHG emissions.
Reference to impact pathway	Field of action	Built environment and housing
	Systemic lever	governance & policy, finance & funding
	Outcome (according to module B-1.1)	Less energy consumption for heating and thus less GHG emissions.

Implementation	Responsible bodies/person for implementation	City of Klagenfurt
	Action scale & addressed entities	Funding programs at regional and national level as thermal building renovation is an expensive topic
	Involved stakeholders	Stadt, Stadtwerke, regional government of Carinthia
	Comments on implementation	Long-term action as it is very expensive. Thermal renovation is usually attractive when a renovation is needed anyhow or the old insulation is very inefficient (or even absent).
Impact & cost	Generated renewable energy (if applicable)	Not given
	Removed/substituted energy, volume or fuel type	Details to be elaborated
	GHG emissions reduction estimate (total) per emission source sector	54000t GHG
	Total costs and costs by GHG unit	170 Mio € 3148€/t GHG

B-2.2: Individual action outlines		
(fill out one sheet per intervention/project)		
Action outline	Action name	Use of renewable raw materials (wood) in building industry
	Action type	Soft (raising awareness) and hard (practical assistance for pilot projects) Compensation measure
	Action description	The building sector is one of the most relevant GHG emissions emitter. Through innovative projects renewable raw materials will be applied and the GHG emissions reduced
Reference to impact pathway	Field of action	Built environment and housing
	Systemic lever	governance & policy, finance & funding
	Outcome (according to module B-1.1)	Reduction of GHG emissions in the building sector
Implementation	Responsible bodies/person for implementation	Construction companies, city of Klagenfurt
	Action scale & addressed entities	High potential if the planned measures (pilots) will be successful and subsequently scaled.
	Involved stakeholders	City senate and municipal council, Stadtwerke, provincial government Carinthia, companies (general), Lakeside Science & Technology Park
	Comments on implementation	Suitability partly depends on regulations and norms
Impact & cost	Generated renewable energy (if applicable)	Not given
	Removed/substituted energy, volume or fuel type	Not given
	GHG emissions reduction estimate (total) per emission source sector	1000t GHG
	Total costs and costs by GHG unit	Details to be elaborated

B-2.2: Individual action outlines		
(fill out one sheet per intervention/project)		
Action outline	Action name	Smart City offensive with economy and private developers
	Action type	Soft (raising awareness) and hard (infrastructure) Direct GHG emissions reduction
	Action description	Various innovative approaches together with businesses to reduce GHG emissions. These may include (but are not limited) building efficiencies (insulation) and climate-friendly construction approaches of buildings and facilities.
Reference to impact pathway	Field of action	Nature-based and other innovative solutions
	Systemic lever	governance & policy, finance & funding
	Outcome (according to module B-1.1)	Less GHG emissions related to private and industrial / economy activities in Klagenfurt.
Implementation	Responsible bodies/person for implementation	City of Klagenfurt
	Action scale & addressed entities	Funding programs at regional and national level. Furthermore, suitable building and production guidelines provide a strong factor for scalation
	Involved stakeholders	City senate and municipal council, provincial government of Carinthia, companies (general)
	Comments on implementation	Strongly depends on national and international funding programs as well as the general economic situation.
Impact & cost	Generated renewable energy (if applicable)	Not given
	Removed/substituted energy, volume or fuel type	Details to be elaborated
	GHG emissions reduction estimate (total) per emission source sector	10000t GHG
	Total costs and costs by GHG unit	Details to be elaborated

B-2.2: Individual action outlines		
(fill out one sheet per intervention/project)		
Action outline	Action name	Implementation of Smart City Measures
	Action type	Soft (raising awareness) and hard (infrastructure) Direct GHG emissions reduction
	Action description	This action focuses on the large-scale implementation of various smart city measures.
Reference to impact pathway	Field of action	Nature based and other innovative solutions
	Systemic lever	Governance & policy, finance & funding
	Outcome (according to module B-1.1)	Less GHG emissions related to private and industrial / economy activities in Klagenfurt.
Implementation	Responsible bodies/person for implementation	City of Klagenfurt
	Action scale & addressed entities	Funding programs at regional and national level.
	Involved stakeholders	City senate and municipal council, provincial government of Carinthia, companies (general)

	Comments on implementation	Strongly depends on national and international funding programs as well as the general economic situation.
Impact & cost	Generated renewable energy (if applicable)	Details to be elaborated
	Removed/substituted energy, volume or fuel type	Details to be elaborated
	GHG emissions reduction estimate (total) per emission source sector	5000t GHG
	Total costs and costs by GHG unit	30 Mio € 6000€/t GHG

B-2.2: Individual action outlines		
(fill out one sheet per intervention/project)		
Action outline	Action name	Forestation of open spaces
	Action type	Hard (natural rehabilitation) and soft (raising awareness) Compensation measure
	Action description	Forestation projects of open spaces will compensate GHG emissions. Additionally, this measure will lead to many positive side-effects (e.g. improvement of urban biodiversity).
Reference to impact pathway	Field of action	Nature-based and other innovative solutions
	Systemic lever	governance & policy, finance & funding
	Outcome (according to module B-1.1)	GHG compensation and fostering of urban biodiversity.
Implementation	Responsible bodies/person for implementation	City of Klagenfurt
	Action scale & addressed entities	Funding programs at regional and national levels
	Involved stakeholders	City senate and municipal council, Stadtwerke, provincial government Carinthia, companies (general)
	Comments on implementation	Long-term process
Impact & cost	Generated renewable energy (if applicable)	Not given
	Removed/substituted energy, volume or fuel type	Not given
	GHG emissions reduction estimate (total) per emission source sector	500t GHG
	Total costs and costs by GHG unit	Details to be elaborated

B-2.2: Individual action outlines		
(fill out one sheet per intervention/project)		
Action outline	Action name	Climate projects in the central area of Carinthia
	Action type	Soft (raising awareness) and hard (infrastructure, natural rehabilitation) Compensation measure
	Action description	This climate action includes several climate projects in Klagenfurt's neighboring communities and the central area of Carinthia. The primary focus is the bonding of GHG emissions, however, also several

		positive side effects will be considered (e.g. enhancement of biodiversity).
Reference to impact pathway	Field of action	Nature-based and other innovative solutions
	Systemic lever	governance & policy, finance & funding
	Outcome (according to module B-1.1)	GHG emission bonding through innovative climate projects
Implementation	Responsible bodies/person for implementation	City of Klagenfurt, provincial government of Carinthia
	Action scale & addressed entities	Funding programs at the regional and national level; the inclusion of society as a multiplicator.
	Involved stakeholders	City senate and municipal council, Stadtwerke, provincial government Carinthia
	Comments on implementation	The envisaged climate projects will have many positive side effects, e.g. enhancement of biodiversity, and sensibilization of society.
Impact & cost	Generated renewable energy (if applicable)	Not given
	Removed/substituted energy, volume or fuel type	Not given
	GHG emissions reduction estimate (total) per emission source sector	14000t GHG
	Total costs and costs by GHG unit	Details to be elaborated

B-2.2: Individual action outlines		
(fill out one sheet per intervention/project)		
Action outline	Action name	Other CCS projects
	Action type	Hard (infrastructure) Compensation measure
	Action description	CCS is a very recent topic. The city of Klagenfurt has several innovative project ideas of CCS in mind, which will be concretized, developed and implemented in the following years
Reference to impact pathway	Field of action	Nature-based and other innovative solutions
	Systemic lever	governance & policy, finance & funding
	Outcome (according to module B-1.1)	Capturing of GHG emissions and their utilization through innovative approaches.
Implementation	Responsible bodies/person for implementation	City of Klagenfurt, Stadtwerke
	Action scale & addressed entities	Scaling strongly depends on technology development. Many of the necessary technologies are still in a pilot (small-scale) stage. Additionally, national and international funds will strongly include the scalability, as many of these innovative technologies are still more expensive than conventional technologies.
	Involved stakeholders	City senate and municipal council, Stadtwerke, provincial government Carinthia
	Comments on implementation	Long-term action as many of the technologies are still in a pilot stage.
Impact & cost	Generated renewable energy (if applicable)	Not given
	Removed/substituted energy, volume or fuel type	Not given
	GHG emissions reduction estimate (total) per emission source sector	20000t GHG
	Total costs and costs by GHG unit	Details to be elaborated

B-2.3: Summary strategy for residual emissions
Not applicable. The currently planned actions reduce GHG emissions by 83%. The remaining GHG emissions will be compensated by the above-described actions. n.b. the described actions include hard (infrastructure) measures and soft (compensation, raising awareness) measures.

4.3 Module B-3 Indicators for Monitoring, Evaluation and Learning

Module B-3 "Indicators for Monitoring, Evaluation and Learning" should contain a selection of indicators taken from the Comprehensive Indicator Sets developed by NZC. The following should be provided: An overview table listing the indicators selected per outcome and impact including targets and evaluation points (B-3.1); and a metadata table for each indicator selected, as specified in the Comprehensive Indicator Sets (B-3.2).

Since 2018 the city of Klagenfurt has a Smart City Strategy. In its latest version (Smart City Strategy V7.0), it contains nine fields of action with 25 targets which are measured by various indicators. The action fields of the Smart City Strategy and its indicators are strongly linked to the SDGs (Sustainable Development Goals) of the United Nation. While some of the fields of action match with the above-described climate actions, others are rather fundamental levers, turbocharging GHG emission reductions.

The latest version of indicators is currently under development. It is expected that many of them will be suitable for the CCC. The below-suggested indicators will be updated and adjusted as soon as the indicators from the latest Smart City Strategy are finalized.

Additionally, the GHG emissions of Klagenfurt are frequently analyzed by an external expert. It is foreseen to increase the frequency of GHG monitoring (e.g. every two years). A higher frequency will allow to identify successes and challenges on the way to climate neutrality faster and undertake corresponding measures.

Action field: energy systems		
Targets	**Indicators**	**Target value**
Photovoltaic expansion on municipality buildings and other municipality objects	• Cumulative capacity of installed photovoltaic (from 2022 onwards)	50,000 kWp installed by 2030
Increasing the share of climate-friendly heating systems in Klagenfurt	• Number of households using climate-friendly district heating	35,000 households connected to the city's district heating system by 2030

Action field mobility & transport		
Targets	**Indicators**	**Target value**
Enhancing and fostering the sustainable modular split	• Share of people using eco-friendly mobility	65% using eco-friendly mobility means

Charing infrastructure as a lever for e-mobility	• Number of public e-charging points provided by the public utility provider Stadtwerke Klagenfurt AG	500 operating charging points by 2030

Action field: built environment and housing		
Targets	**Indicators**	**Target value**
Thermal building renovations reduce the required energy consumption	• Number of renovated municipality-owned buildings	20 buildings
Innovative pilot projects for climate-neutral and energy-positive buildings	• Number of pilot projects dedicated to climate-neutral and energy-positive buildings	50 buildings

Action field: nature-based and other innovative solutions		
Targets	**Indicators**	**Target value**
Cooperations with Carinthian companies for business transformation towards sustainability	• Number of cooperations with companies • Number of supported pilot projects on sustainability measures in companies	• 100 cooperations by 2030 • 15 pilot projects by 2030
Supported cooperative climate action projects outside of the city of Klagenfurt	• Number of climate action projects outside from the city of Klagenfurt	• 10 projects by 2030

5 Part C – Enabling Climate Neutrality by 2030

Part C "Enabling Climate Neutrality by 2030" aims to outline any enabling interventions, i.e. with regard to organizational setting or collaborative governance models, or related to social innovations – designed to support and enable the climate action portfolios described in Module B-2 as well as aiming to achieve co-benefits outlined in the impact pathway (Module B-1).

5.1 Module C-1 Organisational and Governance Innovation Interventions

Module C-1 "Organisational and Governance Innovation Interventions" consists of a summary table, listing organizational and governance interventions and describing their impact (C-1.1) and a section for more detailed descriptions and comments (C-1.2).

C.1.1: Enabling organisational and governance interventions					
Intervention name	Description	Responsible entity/ dept./ person	Involved stakeholder	Enabling impact	Co-benefits
(indicate name of intervention)	(describe the substance of the intervention)	(indicate responsible)	(list all stakeholder involved and affected)	(describe how intervention enables climate neutrality)	(indicate how intervention helps achieve impact listed in Module B-1)
Climate relevance tool for City Senate Proposals	A brief assessment if submitted (and discussed) city senate proposals are climate relevant and if yes, their impact (positive or negative)	Department of climate and environment protection (City of Klagenfurt)	City Senate (City of Klagenfurt); All stakeholders submitting a city senate proposal	Raising awareness of climate impacts in City Senate decisions.	Fewer emissions and better quality of life as responsible entities will avoid proposals to City Senate with negative climate impacts.

C-1.2: Description of organisation and governance interventions – textual and visual elements
The main focus of the planned organizational and governance innovation interventions lies firstly in raising awareness for climate concerns. Once a high level of sensibility is reached, it will be necessary that climate-related aspects will become a fundamental decision criterion in organizational and governance decision-making processes.

5.2 Module C-2 Social and Other Innovation Interventions

Module C-2 "Social and Other Innovation Interventions" consists of a summary table, listing organizational and collaborative governance interventions and describing their impact (C-2.1) and a section for more detailed descriptions and comments (C-2.2).

C.2.1: Enabling social innovation intervention				
Intervention name: Climatefund				
Description	Responsible entity/ dept./ person	Involved stakeholder	Enabling impact	Co-benefits

(describe the substance of the intervention)	(indicate responsible)	(list all stakeholder involved and affected)	(describe how intervention enables climate neutrality)	(indicate how intervention helps achieve impact listed in Module B-1)
For a successful transition towards climate neutrality, it is fundamental to include all groups of society. Therefore, it is planned to develop and implement a Climatefund, aiming to financially support small-scale climate actions initiated by citizens. Through cooperation with social organizations, it will be assured that the accessibility of the Climatefund will be low-threshold and all social groups will be included.	Department of climate and environment protection (City of Klagenfurt)	City of Klagenfurt, social organizations (Diakonie, Caritas)	The Climatefund has two primary focuses. First through calls and corresponding events, workshops etc., it raises awareness about the importance for climate protection. Second, thanks to the financial support of small-scale climate actions, it actively fosters climate action measures.	Besides the positive climate effects, an important co-benefit will be the strengthening of the social cohesion. A strong social cohesion is not only important for successful climate actions but also for various other challenges we face (ageing society, energy crisis etc.)
Intervention name: Smart City Lab				
The Smart City lab will be the contact point for anyone having a concrete climate action project in mind. Thus, firms, (social) organizations), individuals etc. The Smart City Lab team will evaluate the project idea, connect corresponding stakeholders and assist in setting up the project for submitting it to a funding agency	Department of climate and environment protection (City of Klagenfurt)	City of Klagenfurt	Many actors have climate action projects in mind. However, they are unsure about their feasibility and funding. Thus, these ideas often remain a single thought. The Smart City Lab offers large potential to evaluate such ideas and assist in its implementation.	A significant co-benefit will be the strengthened relationship of various actors. This strengthened relationship is not only relevant for climate actions, but also for many other challenges we face.

C-2.2: Description of social innovation interventions – textual and visual elements
The above-described social innovation interventions assure that all social groups are included in the transitions toward climate neutrality. The introduction of the Climatefund and the Smart City Lab may only be a starting point. In case the inclusion of all social groups will be dissatisfying, further social innovation interventions will be developed and introduced.

5.3 Module C-3 Financing of Action Portfolio

Module C-3 “Financing of Action Portfolio” should contain the list of action portfolios and interventions outlined in Modules B-2, and those from C-1 and C-2 with cost implication to provide a summary list of interventions that need to be unpacked in the Investment Plan.

C-3.1: Summary of interventions with cost implication (to be unpacked in Investment Plan)					
Action/ intervention name	Responsible entity and person	Start/end date	Field of action	Impact	Total cost estimated

(list action portfolios and interventions from Modules B-2, C-1 and C-2, which have a cost implication)	(indicate responsible entity and person)	(indicate start and end date of the activity)	(indicate the field of action the interventions belongs to)	(indicate impact - i.e. the GHG reduction/ co-benefit)	(indicate the total costs in €, estimated for the intervention)
Implementation of district cooling system	Stadtwerke Klagenfurt AG	Asp - 2026	Energy systems	Reduction of 5000t GHG emissions.	12 Mio €
Expansion of district heating system	Stadtwerke Klagenfurt AG	ongoing	Energy systems	Reduction of 15000t GHG emissions.	30 Mio €
Replacement of natural gas by green synthetic gas	Bioenergie Kärnten	Asp - 2030	Energy systems	Reduction of 30000t GHG emissions	50 Mio €
Photovoltaic projects on municipality buildings	KDSG (Klagenfurt Dachstrom Gesellschaft), Stadtwerke Klagenfurt AG	ongoing	Energy systems	Compensation of 30000t GHG emissions	30 Mio €
Energy storage	KDSG (Klagenfurt Dachstrom Gesellschaft), Stadtwerke Klagenfurt AG	ongoing	Energy systems	Compensation of 4500t GHG emissions	Details to be elaborated
Photovoltaic projects in the central area of Carinthia	KDSG (Klagenfurt Dachstrom Gesellschaft), Stadtwerke Klagenfurt AG	ongoing	Energy systems	Compensation measure of 30000t GHG emissions	Details to be elaborated
KEBIP 2.0	Klagenfurt Mobil GmbH	ongoing	Mobility & transport	Reduction of 55000t GHG emissions	150 Mio €
Expansion of e-mobility (individual and delivery traffic)	Stadtwerke Klagenfurt AG)	ongoing	Mobility & transport	Reduction of 25000t GHG emissions	18 Mio €
Change of mobility behavior including bike and e-car sharing within the city	City of Klagenfurt, Stadtwerke Klagenfurt AG	ongoing	Mobility & transport	Reduction of 20000t GHG emissions	Details to be elaborated
Change of mobility behavior in the central area of Carinthia (commuters)	City of Klagenfurt, Stadtwerke, Klagenfurt Mobil GmbH	ongoing	Mobility & transport	Compensation measure of 30000t GHG emissions	Details to be elaborated
Thermal building renovation	City of Klagenfurt, Stadtwerke	ongoing	Built environment and housing	Reduction of 54000t GHG emissions	170 Mio €
Use of renewable raw	City of Klagenfurt	asp - 2030	Built environment and housing	Compensation of 1000t GHG emissions	Details to be elaborated

materials (wood) in building industry	City senate and municipal council				
Smart City offensive with economy and private developers	City of Klagenfurt, City senate and municipal council	ongoing	Nature-based and other innovative solutions	Reduction of 10000t GHG emissions	Details to be elaborated
Implementation of Smart City Measures	City of Klagenfurt, City senate and municipal council	ongoing	Nature-based and other innovative solutions	Reduction of 5000t GHG emissions	30 Mio €
Forestation of open spaces	City of Klagenfurt, City senate and municipal council	asp - 2030	Nature-based and other innovative solutions	Compensation of 500t GHG emissions	Details to be elaborated
Climate projects in the central area of Carinthia	City of Klagenfurt, City senate and municipal council	asp - 2030	Nature-based and other innovative solutions	Compensation of 14000t GHG emissions	Details to be elaborated
Other CCS projects	City of Klagenfurt, City senate and municipal council, Stadtwerke	asp - 2030	Nature-based and other innovative solutions	Compensation of 20000t GHG emissions	Details to be elaborated

6 Outlook and next steps

This section should draw any necessary conclusions on the Action Plan above and highlight next steps and plans for further refining the Action Plan as part of the Climate City Contract.

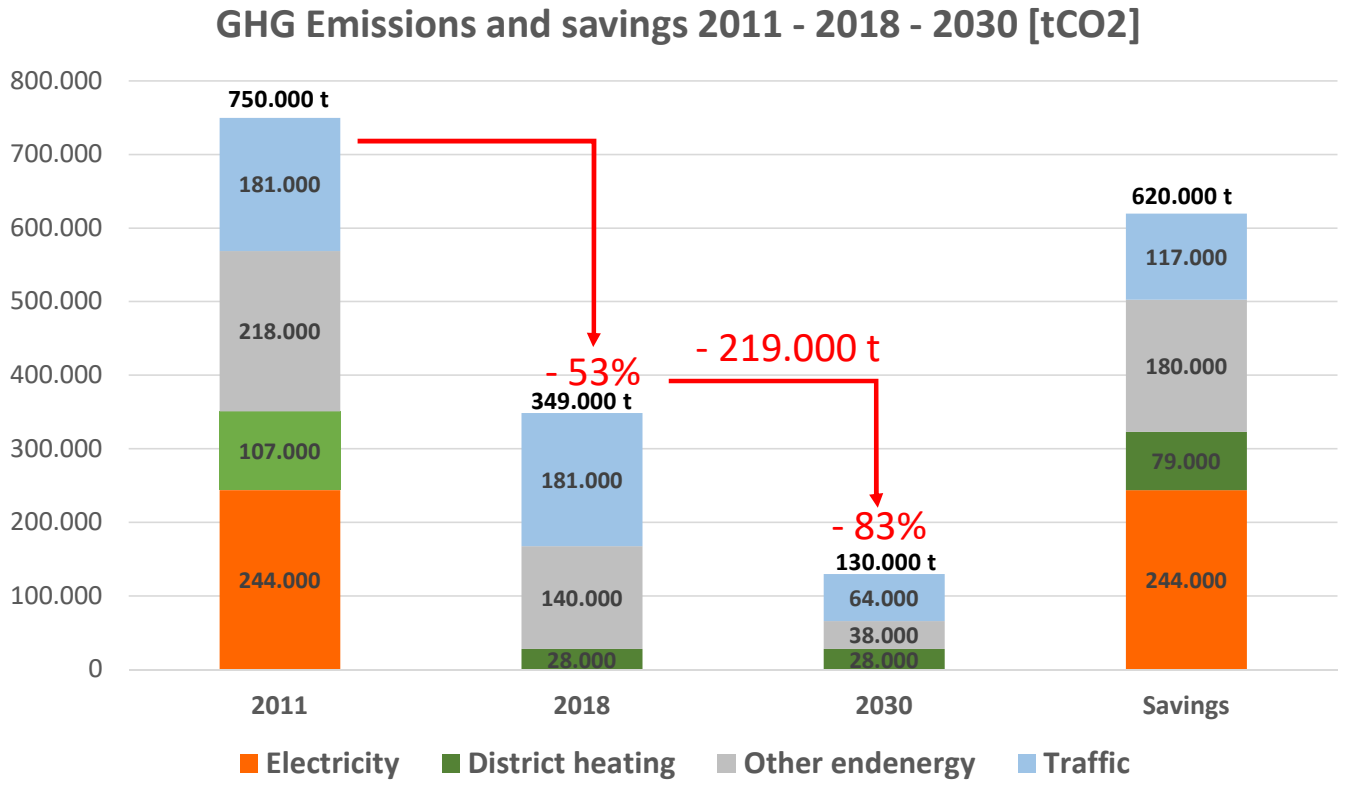
Plans for next CCC and Action Plan iteration – textual elements
As general circumstances, climate and social challenges may be subject to unforeseeable changes, the climate city contract is a “living document”. This means that single envisaged climate actions may be modified due to the given circumstances. The overall goal of climate neutrality by 2030 however remains the strict focus of all relevant stakeholders. Targeting this strict focus means that the city of Klagenfurt and relevant stakeholders work together on concretizing the above-described climate actions will in the following years.

7 Annexes

Add any textual or **visual material** to the 2030 Climate Neutrality Action Plan in the ANNEX as necessary.

- Figure 01: GHG emissions and saving 2011 – 2018 – 2030
- Figure 02: Key measures for GHG reductions
- Figure 03: Key measures for compensation

GHG emissions and savings 2011-2018-2030



Calculations according to the method of the COM (Covenant of Mayors)

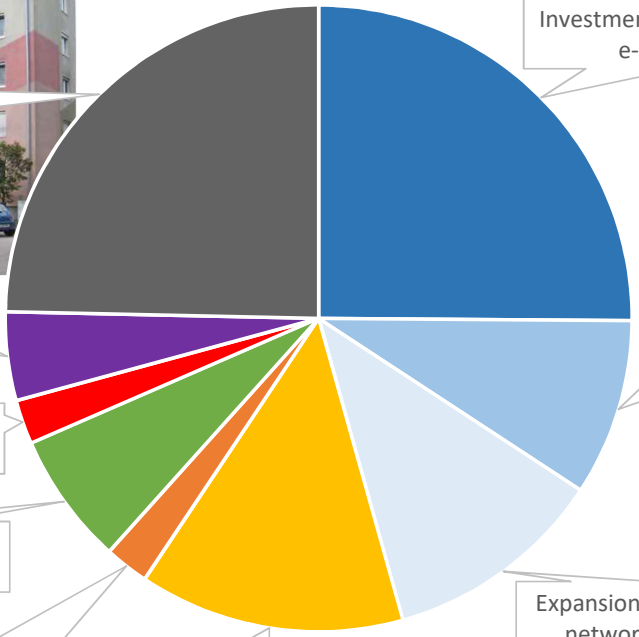
Key projects to achieve climate neutrality (83%)

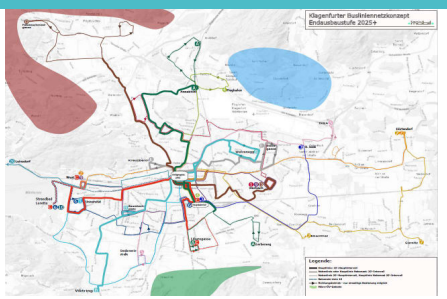
Stadtwerke Klagenfurt

KLAGENFURT AM WÖRTHERSEE

Abteilung Klima- und Umweltschutz

-219.000 t CO_2



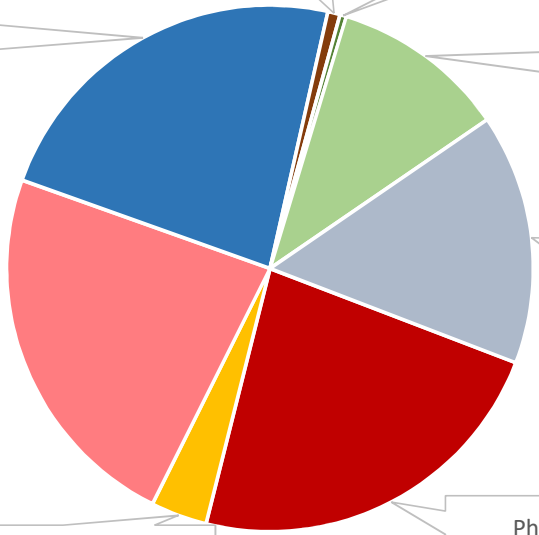


Compensation measures to achieve climate neutrality(17%)

Stadtwerke Klagenfurt

KLAGENFURT AM WÖRTHERSEE

-130.000 t CO_2



Use of renewable raw materials (wood) in the building industry; 1000 t

Forestation of open spaces; 500 t

Change of mobility behavior in the central area of Carinthia (commuters); 30000 t

Climate projects in the central area of Carinthia; 14000 t

Pilot projects for the production of synthetic natural gas; 20000 t

PV-Projects in the central area of Carinthia; 30000 t

Energy storage; 4500 t

Photovoltaic projects on municipality projects; 30000 t

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Climate City Contract

2030 Climate Neutrality Commitments

Climate Neutrality Commitments of the City of Klagenfurt

KLAGENFURT AM WÖRTHERSEE

NetZeroCities has received funding from the H2020 Research and Innovation Programme under the grant agreement n°101036519.

Disclaimer

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Table of Contents

1 Introduction

Explain your city's motivation to join the EU Mission "100 climate-neutral and smart cities by 2030" and highlight your city's present commitments to climate action. You may also want to include the aims of this document.

Your text

The city of Klagenfurt has been a member of the European Climate Alliance Network since 1996. By joining the Covenant of Mayors through a unanimous municipal council and city senate resolution in 2011, Klagenfurt committed itself for the first time to meeting climate targets, voluntarily increasing energy efficiency and using sustainable energy sources. By joining the new Covenant of Mayors for Climate and Energy through a unanimous city senate resolution in 2016, this process was strengthened and measures to adapt to climate change were taken into account.
Additionally, a Smart City Strategy was developed together with Stadtwerke Klagenfurt AG and adopted by the city senate in November 2018. It includes all previous concepts on climate protection and sustainability. Progress is reported annually to the City Senate in the course of monitoring report. The goal is to reduce GHG emissions by 40% by 2030 and 90% by 2050, both relative to the baseline year 2011 while maintaining a good quality of life for the current population or enabling it for future generations.
As an interim result, the city senate decided in May 2021 to bring forward the previously mentioned targets: the new goal of the Smart City Strategy is to reduce GHG emissions by 70% by 2030 and 90% by 2040, relative to the baseline year of 2011, while incorporating the Sustainable Developments Goals (SDGs) as important indicators in the Smart City Strategy. By participating in the "EU Cities Mission" as one of 112 European cities aiming to become climate neutral by 2030, the already ambitious targets were further advanced to achieve this ambitious goal. This means that climate measures already implemented and/or planned in Klagenfurt will be intensified and new measures will be developed.
The City of Klagenfurt has identified various climate measures to be implemented in the following years until 2030 and beyond. These include both direct GHG emission reductions and GHG offsets. By participating in the EU Cities Mission, the ambitious goal of achieving climate neutrality by 2030 has been set. To achieve this, 83% of greenhouse gases are to be directly saved compared to the base year 2011 and 17% of the remaining emissions are to be compensated through climate protection measures in Klagenfurt and the central are of Carinthia.
The EU Cities Mission enables the exchange of experience and ideas with more than 100 other European cities and Klagenfurt expects to receive further inspiring ideas for climate measures. In addition, one of the central goals of the EU mission is to promote cooperation between stakeholders, which is essential for the successful path to climate neutrality. Based on this strengthened stakeholder cooperation, the city of Klagenfurt has the opportunity to apply for special "EU Cities Mission" calls and thus receive financial support for pioneering climate measures to achieve the 2030 target.

Achieving climate neutrality already by 2030 is a major organizational and budgetary challenge for a city, which in the case of the City of Klagenfurt requires close cooperation with the public utility provider (Stadtwerke Klagenfurt AG), the provincial government of Carinthia and the federal government - in particular the Federal Ministry for Climate Protection, Environment, Energy, Mobility, Innovation and Technology (German short: BMK).

The main goal of this document is to inform stakeholder groups about the city's overall climate goals as well as planned climate action. Since circumstances, technologies, etc. may change on the path to climate neutrality by 2030, the Climate Roadmap can be considered a "living document." For this reason, stakeholders do not commit to fixed climate measures, but to their general support for Klagenfurt's climate neutrality goal.

2 Goal: Climate neutrality by 2030

Articulate your 2030 climate neutrality ambition, as expressed and defined in your Cities Mission Expression of Interest (EoI). This should include your ambition and commitment to a 2030 horizon as a whole city, as well as describe any exclusion areas and summarise how these areas would be addressed beyond 2030. (A more detailed plan for exclusion areas should be included in the 2030 Climate Neutrality Action Plan.) Your 2030 ambition should be supported at a minimum by a Council decision, and it is recommended that it is also supported by a wider stakeholder group. We also recommend you to list other co-benefits you aim to achieve when working towards the climate neutrality goal, like well-being, health, equity, justice, financial savings.

Your text
Klagenfurt has already made significant progress towards climate neutrality. By participating in the EU mission "100 climate-neutral and smart cities by 2030", Klagenfurt aims to build on this success and strives for climate neutrality by 2030 (83% GHG emission reduction and compensation of the remaining 17% GHG emissions). The necessary climate measures will lead to several positive side effects, such as a more livable city/neighborhood, increased urban biodiversity or better social cohesion (especially between different social groups). Closer and more intensive cooperation between different stakeholders is not only important for successful climate protection measures but also for many other challenges we are currently facing (and will face in the coming years). As the only Austrian city participating in the EU Cities Mission " 100 climate-neutral and smart cities by 2030", Klagenfurt takes a pioneering role on the way to climate neutrality in Austria and thus avoids the upcoming European emission penalties.

3 Key priorities and strategic interventions

This is the core section of the Commitments document that should summarise at least 3 or 4 systemic strategic priorities that need to be implemented for your city to become climate neutral by 2030. These should be meaningful changes that will have a profound impact on reducing GHG emissions in your city, like decarbonizing the heating system in the city or generating 100% energy from renewables. The individual commitments between your city and other stakeholders should address these key priorities and contribute to reaching them. The annexed 2030 Climate Neutrality Action Plan should describe the all interventions, including those to reach your priorities as well as all further actions, in detail and describe how your city plans to implement them.

Your text
To achieve climate neutrality, many measures, including behavioral changes and the use of innovative technologies, are necessary. Klagenfurt's priorities can be summarized in the following four key areas: 1) **Energy systems**: an expansion of the district heating network and the introduction of a district cooling system are planned. In addition, the remaining GHG emissions in the district heating network need to be further reduced. For sectors where natural gas cannot be replaced by other green energy sources, the production and availability of green synthetic natural gas (green SNG) will be essential. In addition, the generation of green electricity (especially photovoltaics) must be intensified and smart storage systems installed. **2) Mobility and transport**: a fundamental aspect in the field of mobility will be the electrification of public and private transport. The electrification of the bus fleet goes hand in hand with an increase in bus frequencies and represents a central approach in the field of mobility. In addition, a general change in mobility behavior (towards public transport, bicycle use, car sharing and other environmentally friendly mobility solutions) is envisaged for which various measures will be required. For a successful mobility change, the support of different stakeholder groups is necessary.

3) Building facilities and housing: This area mainly includes thermal building renovations, which are accompanied by a conversion of installed heating systems to more climate-friendly heating alternatives (e.g., replacement of oil heating systems with district heating). In addition, this area also includes the gradual introduction of renewable and more climate-friendly raw materials in the construction industry (e.g., replacing cement with wood).

4) **Nature-based and other innovative solutions**: This area is primarily concerned with innovative compensation measures within the city of Klagenfurt and in the central are of Carinthia. These measures pursue the goal of binding greenhouse gas emissions and additionally contribute to further positive environmental effects (biodiversity). Furthermore, innovative CCU pilot projects belong to this area. Cooperation with companies inside and outside the city is elementary.

4 Principles and process

Highlight the key principles that will guide your city as it implements its Climate City Contract, like accountability, transparency, or an open attitude to new approaches. The process should encompass principles like **co-creation, innovation, multi-actor and citizen engagement, and should be systemic and demand-driven in nature**. It should also be based on **monitoring and joint learning**. The Commitments Guidance document provides more specific guidance on how integrate these principles into your own process.

Your text

A fundamental guiding document for achieving climate neutrality by 2030 is the Smart City Strategy of the City of Klagenfurt. It was first adopted by the city senate in November 2018 and the status of implementation is now submitted to it annually as a monitoring report. In the course of the Smart City Strategy, various workshops are held together with the public utility provider (Stadtwerke Klagenfurt AG), which leads to an ongoing update of the strategy. Regular monitoring of greenhouse gas emissions takes place. It is planned to shorten the monitoring intervals to 2-3 years in order to better identify progress and gaps on the way to climate neutrality.

Klagenfurt is part of several topic-relevant national and international platforms, missions and initiatives, such as the "Austrian Smart Cities Networking Platform" or the Austrian Association of Cities, which enable an exchange of experience and learning as well as interesting inputs on a national level. As one of 50 cities on a global level, Klagenfurt participates in the "Urban Transition Mission" group within the “Mission Innovation” initiative. In addition, Klagenfurt is involved in several national and international projects that enable innovative climate protection measures to be developed and tested in practice. Cooperations with social organizations such as Diakonie or Caritas are intended to ensure that all social groups are included in the path to climate neutrality.

An essential step towards achieving climate neutrality by 2030 is the active involvement of citizens. For this purpose, a Smart City Lab will be installed as a citizens' office in the center of Klagenfurt, which will be the contact and information point for topics and projects of the city's Smart City Strategy and EU Cities Mission. In addition, a Youth Council has already been installed, which is considered and consulted as an Advisory Board in political decision-making.

Existing cooperations and relationships with various stakeholders will be further expanded and new partnerships will be established. With the provincial governnment of Carinthia, the installation of a working group for the implementation of the EU Cities Mission is planned. The Federal Ministry for Climate Protection, Environment, Energy, Mobility, Innovation and Technology (German short: BMK) has already set a focus through the national mission "Klimaneutrale Stadt - climate-neutral city", which has an impact beyond RTI funding. An elementary part of the mission is also to support the city of Klagenfurt in achieving the goals set in the course of the EU Cities Mission. For this purpose, the BMK is developing both the demand-oriented programming of RTI funding for climate-neutral cities

and the linking of RTI funding with investment funding. BMK, FFG (Austrian Research Promotion Agency) and the Austrian Climate Fund are in a position to offer funding portfolios that can empower highly ambitious cities such as the EU Cities Mission City of Klagenfurt to demonstrate the achievement of urban climate neutrality in an exemplary manner.

5 Signatories

Include a list of stakeholders who have committed to help your city achieve its goal to reach climate neutrality by 2030. Detailed commitments and agreements between individuals or groups of stakeholders should be appended to this Commitments document. This list will likely increase over time.

Name of the institution	Sector/area	Legal form	Name of responsible person	Position of the responsible person
City of Klagenfurt	City	Public sector	Christian Scheider	Mayor of the provincial capital Klagenfurt at lake Wörthersee
Carinthian Provincial Government	Provincial government	Public sector	Dr. Peter Kaiser	Provincial governor of Carinthia
Federal Ministry for Climate Protection, Environment, Energy, Mobility, Innovation and Technology	Federal government	Public sector	Henriette Spyra, MA	Head of section III „Innovation und Technologie“
Stadtwerke Klagenfurt AG	Public utility provider	Stock corporation	Dipl.-Ing. Erwin Smole MBA Ing. Mag. Harald Tschurnig	Board of directors Stadtwerke Klagenfurt AG

6 Contract with signatures

Express joint commitment / agreement for all stakeholders who sign this 2030 Climate Neutrality Commitments document.

We, the undersigned, commit ourselves to support the city of Klagenfurt to reach the goal of climate neutrality by 2030. We agree with the common goals and commitments as formulated in the Climate Roadmap of the City of Klagenfurt.

Name	**Date**	**Signature**
	Signature: see German version	

Christian Scheider, mayor of the city of Klagenfurt

6 Contract with signatures

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Name	**Date**	**Signature**

Please note: the provincial governor of Carinthia will sign the document as well, as soon as the government formation phase after the recent election will be finalized.

Dr. Peter Kaiser, provincial governor of Carinthia

6 Contract with signatures

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Name	**Date**	**Signature**

Signature: see German version

Leonore Gewessler BA, Federal Minister for Climate Protection, Environment, Energy, Mobility, Innovation and Technology has signed the Memorandum of Understanding

---

Henriette Spyra, MA, Head of Section III "Innovation and Technology" of the Federal Ministry for Climate Protection, Environment, Energy, Mobility, Innovation and Technology

6 Contract with signatures

Express joint commitment / agreement for all stakeholders who sign this 2030 Climate Neutrality Commitments document.

We, the undersigned, commit ourselves to support the city of Klagenfurt to reach the goal of climate neutrality by 2030. We agree with the common goals and commitments as formulated in the Climate Roadmap of the City of Klagenfurt.

Name	**Date**	**Signature**
	Signature: see German version	

Dipl.-Ing. Erwin Smole MBA, board of directors Stadtwerke Klagenfurt AG

Signature: see German version

Ing. Mag. Harald Tschurnig, board of directors Stadtwerke Klagenfurt AG

7 Appendix: Individual Signatory Commitments (LOIs)

Specific agreements that articulate the details of the climate action(s) between the municipality and other stakeholders (individual or groups) can be added to the Commitments document appendix.

For the implementation of the Austrian participation in the EU Mission "100 climate neutral and smart cities by 2030" a **Memorandum of Understanding (MoU)** was signed between (see appendix):

- the provincial capital Klagenfurt at lake Wörthersee,
- the Federal Ministry for Climate Protection, Environment, Energy, Mobility, Innovation and Technology (German short: BMK) and

Please note: the provincial governor of Carinthia will sign the MoU as well, as soon as the government formation phase after the recent election will be finalized.

In addition, several letters of intent (LOI) have been signed or requested to be signed by key stakeholders. Further relevant stakeholders will be contacted and asked for LOIs.

Overview: Letters of Intent (LOIs, received or requested)

Position and company of the responsible person	**Name**
CEO Bioenergie Kärnten	*Ing. Johann Moser*
Board of directors Diakonie de La Tour Kärnten	*Mag. Walter Pansi (board of directors)* *MMag.a. Susanne Prentner-Vitek (board of directors)*
Director Caritas Kärnten	*Mag. Ernst Sandriesser*
Rector Universität Klagenfurt	*Univ.-Prof. Mag. Dr. Oliver Vitouch*
Managing director University of Applied science Carinthia	*DI Siegfried Spanz*
Managing Director Lakeside Science & Technology Park Klagenfurt	*Mag. (FH) Bernhard Lamprecht*
Managing Director KMG – Klagenfurt Mobil GmbH	*Dipl. Ing. Erwin Smole* *Dr. Wolfgang Hafner*
Managing Director Minimundus Klagenfurt	*Mag. (FH) Hannes Guggenberger*
Association of Carinthian Industries	

Chamber of Commerce Carinthia	*Jürgen Mandl, MBA (Präsident)* *MMag. Dr. Meinrad Höfferer*
Managing Director Joanneum Research	*DI Dr. Heinz Mayer*

NET ZERO CITIES

EU MISSION PLATFORM | CLIMATE NEUTRAL AND SMART CITIES

Climate City Contract

2030 Klimaneutralität Commitments

Klimaneutralität Commitments der Landeshauptstadt Klagenfurt

KLAGENFURT AM WÖRTHERSEE

NetZeroCities has received funding from the H2020 Research and Innovation Programme under the grant agreement n°101036519.

Haftungsausschluss

Der Inhalt dieses Dokuments gibt ausschließlich die Meinung der Autoren wieder. Die Europäische Kommission ist nicht verantwortlich für die Verwendung der darin enthaltenen Informationen.

Inhaltsverzeichnis

1 Einleitung

Erläutern Sie die Motivation Ihrer Stadt, sich der EU-Mission " 100 climate-neutral and smart cities by 2030" anzuschließen, und heben Sie die derzeitigen Maßnahmen Ihrer Stadt zum Klimaschutz hervor. Ebenfalls können Sie die Ziele dieses Dokuments erwähnen.

Ihr Text

Die Stadt Klagenfurt ist seit 1996 Mitglied im europäischen Climate Alliance Network. Mit dem Beitritt zum Konvent der BürgermeisterInnen durch einen einstimmigen Gemeinderats- und Stadtsenatsbeschluss im Jahr 2011 verpflichtete sich Klagenfurt erstmals zur Einhaltung der Klimaziele, der freiwilligen Steigerung der Energieeffizienz und zur Nutzung nachhaltiger Energieträger. Mit dem Beitritt zum neuen Konvent der BürgermeisterInnen für Klima und Energie durch einen einstimmigen Gemeinderatsbeschluss im Jahr 2016 wurde dieser Prozess gestärkt und Maßnahmen zur Anpassung an den Klimawandel wurden berücksichtigt.
Ebenfalls wurde gemeinsam mit der Stadtwerken Klagenfurt AG eine Smart City Strategie entwickelt und im November 2018 vom Stadtsenat beschlossen. Sie beinhaltet alle bisherigen Konzepte zu Klimaschutz und Nachhaltigkeit. Über die Fortschritte werden dem Stadtsenat jährlich im Zuge eines Monitorings berichtet. Ziel ist es, die THG-Emissionen bis 2030 um 40 % und bis 2050 um 90 % zu reduzieren, jeweils bezogen auf das Basisjahr 2011. Gleichzeitig soll eine gute Lebensqualität für die aktuelle Bevölkerung erhalten bleiben bzw. für zukünftige Generationen ermöglicht werden.
Als Zwischenergebnis beschloss der Stadtsenat im Mai 2021, die zuvor genannten Ziele vorzuziehen: Das neue Ziel der Smart-City-Strategie ist es, die THG-Emissionen bis 2030 um 70 % und bis 2040 um 90 % zu reduzieren, bezogen auf das Basisjahr 2011. Gleichzeitig wurden die Sustainable Developments Goals (SDGs) als wichtige Indikatoren in die Smart-City-Strategie aufgenommen. Durch die Teilnahme an der "EU-Cities Mission" als eine von 112 europäischen Städten, die sich zum Ziel gesetzt haben, bis 2030 klimaneutral zu werden, wurden die bereits ehrgeizigen Ziele weiter vorangetrieben, um dieses ambitionierte Ziel zu erreichen. Dies bedeutet, dass bereits umgesetzte und/oder geplante Klimamaßnahmen in Klagenfurt intensiviert und neue Maßnahmen entwickelt werden.
Die Stadt Klagenfurt hat verschiedene Klimamaßnahmen festgelegt, die in den folgenden Jahren bis 2030 und darüber hinaus umgesetzt werden sollen. Diese beinhalten sowohl direkte THG-Emissionsreduktionen als auch THG-Kompensationen. Durch die Teilnahme an der EU-Cities Mission wurde das ehrgeizige Ziel gesetzt, bis 2030 Klimaneutralität zu erreichen. Dazu sollen 83% der Treibhausgase im Vergleich zum Basisjahr 2011 direkt eingespart und 17% der verbleibenden Emissionen durch Klimaschutzmaßnahmen in Klagenfurt und im Kärntner Zentralraum kompensiert werden.
Die EU-Cities Mission ermöglicht den Erfahrungs- und Ideenaustausch mit mehr als 100 anderen europäischen Städten und Klagenfurt erwartet sich weitere inspirierende Ideen für Klimamaßnahmen. Darüber hinaus ist es eines der zentralen Ziele der EU-Mission, die Zusammenarbeit zwischen den Stakeholdern zu fördern, die für den erfolgreichen Weg zur Klimaneutralität von grundlegender Bedeutung ist. Auf Basis dieser gestärkten Stakeholder-Zusammenarbeit hat die Stadt Klagenfurt die Möglichkeit, sich bei speziellen "EU-Cities Mission"-Ausschreibungen zu bewerben und so finanzielle Unterstützung für wegweisende Klimamaßnahmen zur Erreichung des 2030-Ziels zu erhalten.

Klimaneutralität schon bis 2030 zu erreichen, ist für eine Stadt eine große organisatorische und haushaltstechnische Herausforderung, welche im Falle der Stadt Klagenfurt eine enge Kooperation mit den Stadtwerken, dem Land Kärnten und dem Bund - insbesondere dem Bundesministerium für Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie (BMK) - bedarf.

Das Hauptziel dieses Dokuments ist es, den Stakeholdergruppen über die allgemeinen Klimaziele der Stadt sowie über die geplanten Klimaschutzmaßnahmen zu informieren. Da sich die Gegebenheiten, Technologien, etc. auf dem Weg zur Klimaneutralität bis 2030 ändern können, kann der Klimafahrplan als "lebendes Dokument" betrachtet werden. Aus diesem Grund verpflichten sich die Stakeholder nicht zu festgelegten Klimamaßnahmen, sondern zu ihrer allgemeinen Unterstützung für Klagenfurts Klimaneutralitätsziel.

2 Ziel: Klimaneutralität bis 2030

Legen Sie Ihr Ziel der Klimaneutralität bis 2030 dar, wie es in Ihrer Interessensbekundung für die EU-Cities Mission (Expression of Interest - EoI) zum Ausdruck gebracht und definiert wurde. Dies soll ebenfalls Ihren Ehrgeiz und Ihr Engagement für einen 2030-Horizont als ganze Stadt einschließen, sowie alle Ausschlussbereiche beschreiben und zusammenfassen, wie diese Bereiche nach 2030 angegangen werden sollen. (Ein detaillierterer Plan für Ausschlussberieche sollen in den Action Plan zur Klimaneutralität 2030 aufgenommen werden). Ihr Ziel für 2030 sollte mindestens durch einen Ratsbeschluss unterstützt werden, und es wird empfohlen, dass es auch von einer breiteren Interessengruppe unterstützt wird. Wir empfehlen Ihnen auch, andere Zusatznutzen aufzulisten, die Sie mit der Erreichung des Klimaneutralitätsziels anstreben, wie Wohlbefinden, Gesundheit, Gerechtigkeit, finanzielle Einsparungen.

Ihr Text
Klagenfurt hat bereits bedeutende Fortschritte in Richtung Klimaneutralität gemacht. Durch die Teilnahme an der EU-Mission "100 climate-neutral and smart cities by 2030" will Klagenfurt auf diesem Erfolg aufbauen und strebt die Klimaneutralität bis 2030 an (83% THG Emissionsreduktion und Kompensation der restlichen 17% THG Emissionen). Die notwendigen Klimamaßnahmen werden zu mehreren positiven Nebeneffekten führen, wie z.B. einer lebenswerteren Stadt/Nachbarschaft, einer erhöhten städtischen Biodiversität oder einem besseren sozialen Zusammenhalt (insbesondere zwischen verschiedenen sozialen Gruppen). Eine engere und intensivere Zusammenarbeit zwischen verschiedenen Stakeholdern ist nicht nur für erfolgreiche Klimaschutzmaßnahmen von Bedeutung, sondern auch für viele andere Herausforderungen, mit denen wir derzeit konfrontiert sind (und in den kommenden Jahren konfrontiert sein werden). Als einzige österreichische Stadt, die an der EU-Cities Mission " 100 climate-neutral and smart cities by 2030" teilnimmt, nimmt Klagenfurt eine Vorreiterrolle auf dem Weg zur Klimaneutralität in Österreich ein und vermeidet so die anstehenden europäischen Emissionsstrafen.

3 Schlüsselprioritäten und strategische Interventionen

Dies ist der zentrale Abschnitt des Commitment-Dokuments, der **mindestens drei oder vier systemische strategische Prioritäten** zusammenfassen sollte, die umgesetzt werden müssen, damit Ihre Stadt bis 2030 klimaneutral wird. Dabei sollte es sich um bedeutsame Veränderungen handeln, die einen tiefgreifenden Einfluss auf die Reduzierung der THG-Emissionen in Ihrer Stadt haben, wie die Dekarbonisierung des Heizsystems in der Stadt oder die Erzeugung von 100 % Energie aus erneuerbaren Quellen. Die individuellen Verpflichtungen Ihrer Stadt und anderer Interessengruppen sollten sich auf diese Schlüsselprioritäten beziehen und dazu beitragen, sie zu erreichen. Der beigefügte Action Plan zur Klimaneutralität 2030 sollte alle Maßnahmen, einschließlich der Maßnahmen zur Erreichung Ihrer Prioritäten, sowie alle weiteren Maßnahmen im Detail beschreiben und darlegen, wie Ihre Stadt diese umzusetzen plant.

Ihr Text
Um Klimaneutralität zu erreichen, sind viele Maßnahmen, einschließlich Verhaltensänderungen und der Einsatz innovativer Technologien, notwendig. Die Prioritäten Klagenfurts lassen sich in den folgenden vier Schlüsselbereichen zusammenfassen: **1) Energiesysteme:** Es ist ein Ausbau des Fernwärmenetzes und die Einführung eines Fernkältesystems geplant. Außerdem müssen die verbleibenden THG-Emissionen im Fernwärmenetz weiter reduziert werden. Für Sektoren, in denen Erdgas nicht durch andere grüne Energieträger ersetzt werden kann, wird die Erzeugung und Verfügbarkeit von grünem synthetischem Erdgas (green SNG) von grundlegender Bedeutung sein. Darüber hinaus muss die Erzeugung von

Ökostrom (insbesondere Photovoltaik) intensiviert und intelligente Speichersysteme installiert werden.

2) Mobilität und Verkehr: Ein grundlegender Aspekt im Bereich der Mobilität wird die Elektrifizierung des öffentlichen und privaten Verkehrs sein. Die Elektrifizierung der Busflotte geht mit einer Erhöhung der Busfrequenzen einher und stellt einen zentralen Ansatz im Bereich der Mobilität dar. Darüber hinaus ist eine generelle Änderung des Mobilitätsverhaltens (hin zu öffentlichen Verkehrsmitteln, Fahrradnutzung, Carsharing und anderen umweltfreundlichen Mobilitätslösungen) vorgesehen für die verschiedene Maßnahmen erforderlich sein werden. Für einen erfolgreichen Mobilitätswandel ist die Unterstützung verschiedener Stakeholdergruppen notwendig.

3) Bauliche Anlagen und Wohnungen: Dieser Bereich umfasst vor allem thermische Gebäudesanierungen, die mit einer Umstellung der installierten Heizungssysteme auf klimafreundlichere Heizungsalternativen einhergehen (z.B. Ersatz von Ölheizungen durch Fernwärme). Darüber hinaus umfasst dieser Bereich auch die schrittweise Einführung erneuerbarer und klimafreundlicherer Rohstoffe in der Bauindustrie (z. B. Ersatz von Zement durch Holz).

4) Naturbezogene und sonstige innovative Lösungen: In diesem Bereich geht es in erster Linie um innovative Kompensationsmaßnahmen innerhalb der Stadt Klagenfurt und im Zentralraum Kärntens. Diese Maßnahmen verfolgen das Ziel, Treibhausgasemissionen zu binden und tragen zusätzlich zu weiteren positiven Umwelteffekten (Biodiversität) bei. Weiters gehören innovative CCU-Pilotprojekte zu diesem Bereich. Die Zusammenarbeit mit Unternehmen innerhalb und außerhalb der Stadt ist elementar.

4 Prinzipien und Ablauf

Heben Sie die wichtigsten Grundsätze hervor, die Ihre Stadt bei der Umsetzung ihrer Klimastadt-Aktionen leiten werden, wie z. B. Verantwortlichkeit, Transparenz oder eine offene Haltung gegenüber neuen Ansätzen. Der Prozess sollte Prinzipien wie **Co-Creation, Innovation, Multi-Akteure- und Bürgerbeteiligung** umfassen und ebenfalls **systemisch und bedarfsorientiert** sein. Er sollte sich auch auf **Monitoring** und **gemeinsames Lernen** stützen. Das Dokument "Commitments Guidance" enthält spezifischere Hinweise zur Integration dieser Grundsätze in Ihren eigenen Prozess.

Ihr Text

Ein grundsätzliches Leitdokument zur Erreichung der Klimaneutralität bis 2030 ist die Smart City Strategie der Stadt Klagenfurt. Sie wurde im November 2018 erstmals vom Stadtsenat beschlossen und wird ihm nun jährlich der Stand der Umsetzung als Monitoring Bericht vorgelegt. Im Zuge der Smart City Strategie werden verschiedene Workshops gemeinsam mit den Stadtwerken abgehalten, die zu einer laufenden Aktualisierung der Strategie führen. Es findet ein regelmäßiges Monitoring der Treibhausgasemissionen statt. Es ist geplant, die Monitoring-Intervalle auf 2-3 Jahre zu verkürzen, um Fortschritte und Lücken auf dem Weg zur Klimaneutralität besser erkennen zu können.

Klagenfurt ist Teil mehrerer themenrelevanter nationaler und internationaler Plattformen, Missionen und Initiativen, wie z.B. der "Österreichischen Smart Cities Networking Plattform" oder des Österreichischen Städtebundes, die einen Erfahrungs- und Lernaustausch sowie interessante Inputs auf nationaler Ebene ermöglichen. Als eine von 50 Städten auf globaler Ebene nimmt Klagenfurt im Rahmen der Initiative Mission Innovation in der Gruppe "Urban Transition Mission" teil. Darüber hinaus ist Klagenfurt in mehreren nationalen und internationalen Projekten involviert, die es ermöglichen, innovative Klimaschutzmaßnahmen zu entwickeln und in der Praxis zu testen. Kooperationen mit sozialen Organisationen wie der Diakonie oder der Caritas sollen sicherstellen, dass alle gesellschaftlichen Gruppen in den Weg zur Klimaneutralität einbezogen werden.

Ein wesentlicher Schritt zur Erreichung der Klimaneutralität bis 2030 ist die aktive Einbindung der Bürgerinnen und Bürger. Zu diesem Zweck wird ein Smart City Lab als BürgerInnenbüro in der Klagenfurter Innenstadt eingerichtet, welches Anlauf- und Auskunftsstelle für Themen und Projekte der städtischen Smart City Strategie und EU-Cities Mission ist. Zusätzlich wurde bereits ein Jugendrat installiert, der als Advisory Board in der politischen Entscheidungsfindung berücksichtigt und konsultiert wird.

Bestehende Kooperationen und Beziehungen mit verschiedenen Stakeholdern werden weiter ausgebaut und neue Partnerschaften etabliert. Mit dem Land Kärnten ist die Installierung einer Arbeitsgruppe zur Umsetzung der EU-Cities-Mission geplant. Das BMK hat durch die nationale Mission „klimaneutrale Stadt“ bereits einen Schwerpunkt gesetzt, welcher über die FTI-Förderung hinauswirkt. Elementarer Teil der Mission ist hierbei auch die Unterstützung der Stadt Klagenfurt in der Erreichung der gesetzten Ziele im Zuge der EU-Cities-Mission. Hierfür wird vom BMK sowohl die bedarfsorientierte Programmierung der FTI-Förderungen für klimaneutrale Städte, als auch die Verknüpfung von FTI-Förderungen mit Investitions-Förderungen erarbeitet. BMK, FFG (österreichische Forschungsförderungsgesellschaft) und der österreichische Klimafonds sind hierbei in der Lage Förderportfolios anzubieten, welche höchst ambitionierte Städte wie die EU-Cities-Mission Stadt Klagenfurt dabei ermächtigen kann beispielhaft das Erreichen der urbanen Klimaneutralität zu demonstrieren.

5 Unterschriften

Fügen Sie eine Liste von Akteuren ein, die sich bereit erklärt haben, Ihre Stadt dabei zu unterstützen, ihr Ziel der Klimaneutralität bis 2030 zu erreichen. Detaillierte Commitments und Vereinbarungen zwischen Einzelpersonen oder Gruppen von Interessenvertretern sollten diesem Verpflichtungsdokument beigefügt werden. Diese Liste wird sich im Laufe der Zeit wahrscheinlich erweitern.

Name der Institution	Sektor/Bereich	Rechtsform	Name der Person	Position der verantwortlichen Person
Stadt Klagenfurt	Stadt	Öffentlicher Bereich	Christian Scheider	Bürgermeister der Landeshauptstadt
Kärntner Landesregierung	Landesregierung	Öffentlicher Bereich	Dr. Peter Kaiser	Landeshauptmann Kärnten
Bundesministerium für Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie	Bundesregierung	Öffentlicher Bereich	Henriette Spyra, MA	Leiterin Sektion III „Innovation und Technologie“
Stadtwerke Klagenfurt	Öffentlicher Versorgungsdienstleister	Aktiengesellschaft	Dipl.-Ing. Erwin Smole MBA Ing. Mag. Harald Tschurnig	Vorstand Stadtwerke Klagenfurt AG