



Regional Action Plan for Energy Storage and Sector Coupling Baden-Württemberg, Germany

Version Final

A stream of cooperation



The CSSC Lab project summary

The CSSC LAB project is being funded within the third call of the INTERREG DANUBE TRANSNATIONAL Programme of the European Commission, under the specific objective SO 3.2: Improve energy security and energy efficiency. It aims to contribute to the energy security and energy efficiency of the region by supporting the development of joint regional storage and distribution solutions and strategies for increasing energy efficiency and renewable energy usage.

The CSSC project targets medium-sized and smaller target cities in the Danube area, aiming to accelerate the up-take of energy storage and sector coupling solutions. To build up the capacities of municipalities and related city actors to assess, define and implement concrete implementation projects, the CSSC Lab project will:

- develop a set of model solution for typical urban CSSC use cases, together with a toolkit for the assessment of potential CSSC applications in terms of energy efficiency indicators, operational requirements, related business models and financing solutions
- a comprehensive capacity building programme for municipalities with local basic and advanced trainings, complementary webinars and individual city coaching sessions will be developed and piloted
- pilot investments will be established in four demo-centers in different locations in the project region to demonstrate the feasibility and performance of typical CSSC solutions
- a series of study visits and demo sessions will allow city representatives from all parts of the project region to learn from practical demo-cases implemented under Danube region framework conditions.

About this document

This document is part of OT.1 within T1.1 of the CSSC Lab project and will contribute to SO3. This document was prepared by by Lake Constance Foundation (LCF) – Work package Leader 2 and Energy Agency Freiburg in cooperation with regional partners and Alba Local Energy Agency - ALEA – work package lead partner.

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1. General Information

Country:	Germany
Region:	Baden-Württemberg
Responsible partner(s):	Lake Constance Foundation

2. Aim of the Regional Action Plan

This document is meant to be a strategic guideline for the region of Baden-Württemberg on how to implement CSSC solutions to support the energy transition on a municipal level. Focus is to facilitate the decision-making process in local authorities and municipal councils. The CSSC lab offers various options for CSSC solutions and different issues. To adapt them to the needs in a regional context first a better understanding of the opportunities CSSC solutions offer must be understood by the decision-makers and introduced in their everyday work.

The effort is to awaken interest for a non-professional audience, who is in charge of the success of the energy transition and who must transfer governmental objectives on the local level.

The manual helps implementation and discusses how to start projects in the urban planning processes. Beside legislation on different levels and various opportunities for support and fundings in Germany, the complexity and in some cases the overload of support, makes it very difficult for small and medium sized municipalities to go beyond the installation of only RES and to identify the advantages of a structured implementation with the advantages of CSSC. However the RAP not only provides guidelines for the implementation, but also identifies necessities on a local level. These findings reflected to the stakeholders offers a great opportunity to adapt and program structural fundings at a long term.

Being aware of this component of the RAP several stakeholders from different fields of actions are involved.

Finally, with the peer review sessions with two other countries a very valuable view from outside to the challenges faced, help to facilitate the task and increase the success of CSSC in the municipal context and the CSSC lab in Germany.

3. CHAPTER 1: European, national and regional context

Sector coupling has emerged as a new concept in energy and climate policy in recent years. The high political priority given to sector coupling in today's energy policy discussion is reflected in the Climate Protection Plan 2050, which summarizes the climate protection policy principles and goals of the German government and describes the path to a largely greenhouse gas-neutral Germany by 2050, and the Green Paper on Energy Efficiency. Sector coupling is intended to make a decisive contribution to achieving ambitious climate protection targets by increasing the use of renewable electricity in the demand sectors of transport, heat and industry to substitute fossil energy sources.

One of the most important sector coupling principles in the building sector is converting power to heat. The Gebäudeenergiegesetz (GEG, Building Energy Law) establishes guidelines for the substitution of fossil fuel powered heating systems with for example heating pumps as well as a therefore required insulation of the building.

Another important technology within sector coupling is combined heat and power generation. The Kraft-Wärme-Kopplungsgesetz (KWKG, Combined heat and power law) is a guideline aimed to regulate the funding of such technology, as it is extremely efficient to create heat and power simultaneously, although being still dependent on gas.

To achieve a fast expansion of Germany's charging infrastructure, the Gebäude-Elektromobilitätsinfrastruktur-Gesetz (GEIG, Building Electric Mobility Infrastructure Law) came into force. It regulates the erection of charging stations in newly constructed buildings and those which undergo major renovation.

At the regional level in Baden-Wuerttemberg (BW), the so-called Klimaschutzgesetz (climate protection law) aims to achieve the climate protection goals of a carbon neutral BW by 2040 and a carbon neutral state administration by 2030. One of many concrete measures are for example a monitored communal heat planning and the obligation to add on solar panels to newly constructed and/or renovated buildings.

In the mobility sector Landesgemeindevverkehrsfinanzierungsgesetz (LGVFG, State Community Transportation Finance Law) funds a large variety of projects regarding all forms of sustainable transportation. Communes, districts but also special purpose associations can apply for subsidies of up to 50% of the eligible construction and land acquisition costs and subsidies of up to 75% if the project is particularly climate friendly.

There are many funding programs for cities, communes, and municipalities to encourage investment in more efficient, sustainable forms of energy distribution. They are directed by programs both on a federal and nationwide level.

One of the more important institutions dealing with Germany's energy infrastructure is the Bundesamt für Wirtschaft und Ausfuhrkontrolle (BAFA). It provides several funding programs for communal non-residential buildings.

BAFA funds energy audits (module 1, DIN EN 16247), energy consulting (module 2, DIN V 18599) for non-residential building and (heating) systems as well as consulting for contracting models (with a contractual savings guarantee) regarding the energy efficiency of buildings.

The funding is not only applicable for communes but for private citizens, companies, and homeowner associations as well.

Another highly important bank institution that is funding district concepts is the Kreditanstalt für Wiederaufbau (KfW). Communes can get a subsidy of up to 75% of the costs for setting up an integrated neighborhood concept (quartierskonzept) and establishing a renovation management. The KfW functions as a bank by providing cheap loans to climate projects like green heating grids for communes and city districts.

The introduction and implementation of regional networks for resource efficiency, climate protection concepts, and many other strategic and investment climate protection grants are funded under the National Climate Protection Initiative.

Funding programs Baden -Wuerttemberg

Klimaschutz-plus assists cities and municipalities who are willing to renovate their own administration buildings by providing financial support, as well as optimizing infrastructure and handing out information. It is intertwined with the so-called Nationale Klimaschutzinitiative (national climate protection initiative) which addresses a broad spectrum of climate protection measures such as mobility stations or environmental management systems being financially aided by the state government.

Furthermore, there is the Funding program for voluntary municipal heat planning targeting municipalities not affected by the Klimaschutzgesetz and with a population of at least 5000 citizens. The funded heat planning can apply to single municipalities as well as whole regions. The subsidy amounts to a maximum of 80 percent of the eligible expenses.

4. CHAPTER 2: Engagement of decision makers and other key stakeholders in the region

Small and medium sized municipalities are facing several challenges in everyday work. One of the newest tasks they have to manage is to describe a roadmap to a carbon free building sector. Legislation (see chapter 1) in Baden-Württemberg says that. A CO₂ neutral building sector has to be achieved by 2040.

Small municipalities do neither have the manpower and capacities to elaborate new ways nor the financial resources. The conflict is clear. On the one hand we have the federal administration that asks to achieve the climate goals and we have the decision-makers in municipal councils and on the other hand we have a lack of financial resources and we do not have enough manpower.

Decision makers in municipalities, regional parliaments or on the federal level know the goal but the pathway how to achieve the goals is not clear. Another problem is the fact that all energy sectors work in most of the cases independent from each other on a regional and municipal level. That causes a main problem in the communication and in the involvement of different stakeholders to elaborate overall solutions. The problem gets even bigger if the task is to connect different sectors.

Decision-makers to address:

- municipal administration with the focus on small and medium sized municipalities.
- members of regional parliaments, city councils
- administration on federal level, ministries and members of the federal parliament.

The introduction of CSSC solutions on a regional level needs the support of several key stakeholders. It is important to differentiate the role they play in a regional context.

- Regional Energy Agencies have a multitude of organization forms in the region and different focus.
- Chamber of commerce and chamber of crafts both play an important role in the decision-making process for regional orientation, due to a strong position of medium sized companies in the rural areas.
- Association of municipalities are a strong network of municipalities that must be members in the association. The top-down organization of the association is an obstacle to implementing new RES technologies or CSSC solutions. The association is strongly

lobbying for a moderate way of modernization of the infrastructure because of the financial problems of municipalities.

- Civil-society actors like environmental NGOs play an important role to introduce RES and CSSC solutions. They are organized in local groups and have a long tradition. They are also institutional embedded for regional plans.
- Local energy suppliers are often directly attached to municipalities and in charge of implementing energy solutions. They are acting in an open market and the competition is important. There is a structural change going on and energy suppliers are more and more looking for new fields of actions and new business models.
- Community energy associations like energy cooperatives have the full acceptance of citizens. They are in many cases the guarantor for participation and acceptance for the introduction of new technologies. Unfortunately, many of these energy cooperatives suffered an economic downturn during the pandemic and have old members.

Objectives for CSSC - digression community energy

Introducing CSSC solution for Community Energy associations

Community energy is one of the most important energy producers in Germany. Nowadays, approximately one third of the energy produced is issued from citizen business models. Considering that farms also provide 10 percent of the energy production, the total share of citizen energy is very important. The share was once higher. Reasons for the decrease were an aging member structure in the cooperatives and missing new investment options and a difficult pandemic situation starting in 2019.

CSSC solutions can offer new investment options for community energy and community energies can help to introduce new technologies and guarantee a high acceptance in the municipality. A regional action plan for the region helps to elaborate a guideline how CSSC and community come together and how stakeholders in the region can contribute to the success. This can be considered as a booster for Community energy to find new business models, fight energy poverty and contribute to the reduction of CO₂ emissions. By mid-2022, a regional action plan will be developed that describes how to introduce CSSC solutions and highlights the role of citizens.

For that the Regional Action Plan also focuses on the opportunities for energy communities to support the implementation of CSSC. Municipalities for their part have the benefit of experienced energy communities to help them to implement CSSC solutions.

How to organize a strategic approach?

Actually, in the region of Baden-Württemberg the legislation and fundings are favorable to implement CSSC solutions for municipalities.

As described in this document the challenges are to transfer the federal and regional objectives to reduce CO2 emissions to a coordinated action. The understanding of the advantages of sector coupling and the important role energy storage plays are low in the non-professional workers and members of councils in small and medium sized cities. Proposed approach:

- elaboration of CSSC solutions → Interreg DTP CSS lab
- presentation and transfer to special needs in the regional context
- interlink and check actual fundings and legislation to support CSSC solutions
- check propositions with experts
- determine business areas for CSSC solutions for municipalities
- identify possible operators and adapt technical CSSC solutions, focus on citizen-based business models (e.g., cooperatives)
- scale CSSC solutions
- implementation of CSSC

5. CHAPTER 3: SWOT analysis of the regional context/ expert interviews

PARTICIPATORY SWOT ANALYSIS OF THE REGIONAL CONTEXT IN BRINGING CSSC APPLICATIONS INTO REAL CASES	
INTERNAL FACTORS	
Strengths	Weaknesses
<ul style="list-style-type: none"> ● High potential for solar power and solar heat in BW. ● Many actors are located in the region that can strengthen sector coupling: research institutes, companies, population, politics. ● Initiatives from the political side to promote CSSC technologies, e.g. networking platform SmartGridsBW, establishment of a "Competence Center Smart Neighborhoods" by the state of BW. ● BW is a region with a strong innovative potential on a European scale. ● CSSC technologies are tested or used in numerous pilot projects in BW. ● Implementation initiated: Private PV systems are increasingly combined with storage tanks and heat pumps, partial use of electric cars. 	<ul style="list-style-type: none"> ● Data security risk: population sensitive to disclosure consumption data. ● Low level of digitization in private households (smart homes). ● BW will not be able to cover its energy needs regionally from renewable energy sources, and will be dependent on imports. ● Certain sectors, such as the BW-based automobile industry, chemical industry, etc., have tended to stick to conventional technologies and have a strong lobby. ● Some inertia in implementing the energy turnaround. ● Slow RES expansion slow in recent years, BW has a rather low share of RES compared to other countries (RES share of electricity supply in Germany (2019): 42%, BW 30%, gross final energy consumption (2019) in Germany: 17%, in BW 15%). ● Especially slow expansion of wind power in BW: potential exists, but conflict with nature conservation and acceptance problems prevent many projects.

EXTERNAL FACTORS	
Opportunities	Threats
<ul style="list-style-type: none"> Population in BW financially well positioned compared to other German states, good opportunities to acquire/participate in RE plants and CSSC technologies. Reorientation through corona and climate crisis as a possibility to push innovations, also in the field of sector coupling? 	<ul style="list-style-type: none"> Traffic as a Special Challenge for the Car Country BW. Dependence on import electricity (see Table 3.2.1 Energy system stability). Renewable energy law: Decline in feed-in tariffs has led to a decline in the expansion of renewable energies in recent years. Uncertainties and the question of how to deal with old existing plants that are no longer subsidized.

Expert interviews

The topics were discussed in the explorative expert talks, and in-depth interviews. The only guideline for the exchange was the introduction question that asked the experts to describe the actual opportunities for community energies to implement CSSC solutions. The interviews were not recorded. Next is the summary and the recommendations derived.

Nico Storz - “Bürgerwerke”

Largest association of energy cooperatives in Germany.

CSSC solutions offer a great opportunity to achieve regional climate goals. Through the establishment of renewable energy communities and their joint local use of energy, previously excluded target groups can be activated to participate. Local use of energy hitherto excluded target groups can be activated to participate, too and again. This creates new, self-accelerating dynamics that get the energy transition moving again. In addition, these actors open up small-scale, previously unattractive areas in CSSC.

Most important is to strengthen municipalities as cooperation partners. Renewable energy communities can develop municipal land and generate areas and generate additional income for the municipalities. In this way, municipal decision-makers become advocates of the energy transition and ensure broad acceptance in the municipality.

Jörg Dürr-Pucher - “Plattform erneuerbare Energien - Baden-Württemberg”

Chairman for the RES platform in Baden-Württemberg

The energy transition plays an important role for municipalities. Many cities employ climate protection managers to develop climate protection strategies for the municipalities. Often, they are in direct contact with the mayors and report to them. This underlines the importance of the issue. The difficulty is that climate protection managers are professionals and aware of technical solutions and can propose them also interfacing projects between different authorities. However, municipalities do not work in projects but in separated fields of actions. CSSC could be the great opportunity to understand the energy transition as an overarching process for various infrastructures in the municipality, but small municipalities need support and have to recognize the advantages even at a small scale. From the energy efficiency point of view CSSC is very important.

Tobias Bacher - “Energieagentur Schwarzwald-Baar-Heuberg”

Managing Director - Regionale Energy Agency

CSSC technologies appear to be complicated for villages and small cities. Mayors are more often considering financial or economic aspects in their municipalities. There is no real understanding of the advantages to link all sectors. Especially for these municipalities it could be much more efficient. However, we see an interest in citizenship in the small cities around. Many energy cooperatives were founded and developed RES projects. The role of the municipality could offer new investment opportunities for these existing cooperatives. It's important that the responsible persons in the administration in the villages and cities learn of CSSC, that they recognize the advantages that may emerge from CSSC solutions. For the village and the citizens it is important to have the same knowledge level.

Laws, deadlines and funding programs for municipal climate protection in Baden-Württemberg based on the summary of “Endura-kommunal”

Planning compass climate protection 2022

The planning compass is a brief description of the most important standards and funding guidelines for municipal climate protection measures in Baden-Württemberg (and Bavaria). The information is clearly arranged to facilitate action and budget planning.

Nationwide funding programs

1. Federal funding for energy-efficient buildings (BEG NWG)

Why is that important?

The supply of heat to buildings still causes the lion's share of CO₂ emissions in Germany. Energetic refurbishment reduces the heating requirement permanently. And the remaining demand should also be covered in a renewable way, if possible even emission-free.

Legal basis:

"Guideline for federal funding for efficient buildings - non-residential buildings (BEG NWG)" of the Ministry

That's what it says:

Subsidies are not only available for the holistic renovation of a non-residential building (school, town hall, gymnasium, building yard ...) into an efficient house, but also for individual measures, specialist planning and construction supervision.

Compulsory or optional Energy-efficient refurbishment is voluntary, but it lowers energy costs over the long term – and thus counteracts rising prices (keyword: CO₂ tax).

What does this mean for the municipality?

The municipalities have a perfect tool with which they or their public utilities can achieve the goal of climate neutrality and at the same time remain competitive.

Budget requirements:

This depends on the number, size and state of renovation of the buildings.

2. Federal funding for energy-efficient heating networks (BEW)

Why is that important?

The BEW contributes to the economical operation of climate-neutral heating networks.

Legal basis:

Draft of the "Guideline for federal funding for efficient heating networks - BEW"

That's what it says:

Heating network operators receive:

- 50% funding for feasibility studies and transformation plans (incl. planning services)
- 40% investment cost grants for the construction and conversion of networks and generation plants
- Operating cost subsidies per kWh, especially for solar thermal systems and electric heat pumps.

Mandatory or optional:

Working on a climate-neutral supply is not (yet) mandatory.

What does this mean for the municipality?

She has a tool that she or her public utility can use to achieve the goal of carbon neutrality while remaining competitive. Municipalities have a perfect tool with which they or their municipal utilities can achieve the goal of climate neutrality while remaining competitive.

The CO₂ tax will increase in the future. If you take care of it now, you will save more money.

Budget requirement Depends on the size of the heating network

3. New funding module: Contracting orientation advice (BAFA)

Why is that important?

Energy costs for municipal buildings often weigh heavily on municipal budgets – and they will continue to rise. Contracting offers a quick solution for this because the contractor gives the municipality a savings guarantee that immediately relieves the municipal budget.

Legal basis:

Announcement of the directive "Energy advice for non-residential buildings, installations and systems" (EBN) of the BMWi from November 13, 2020

That's what it says:

The funding rate is 80% of the eligible consulting fee. Are the annual energy costs of a building / building pool

- below €300,000, the maximum funding amount is €7,000.
- over €300,000, the maximum funding amount is €10,000.

Mandatory or optional:

Advice on energy saving contracting is useful, but of course voluntary.

What does this mean for the municipality?

Energy saving contracting projects bind the municipality and the contractor together in the long term. The orientation consultation informs the municipality in a neutral and non-binding manner about the opportunities and risks of the procedure.

Budget requirement:

€1,500 – €5,000 for the orientation consultation. This does not include advice on the subsequent implementation.

4. Subsidy quota “Energy-efficient urban redevelopment” increased to 75%

Why is that important?

For municipalities, the energy analysis of districts is now even easier to finance. KfW has increased the funding rates. The municipal share is only 25%. Energy costs for municipal buildings are often a significant burden on municipal budgets, and they will continue to rise.

Legal basis:

KfW leaflet 432 "Energy-efficient urban redevelopment - subsidy for climate protection and climate adaptation in the district", as of 04/2021

That's what it says:

Funding is provided for identifying potential and measures to reduce CO₂ emissions in existing and new areas. Scope of investigation: buildings, energy production, mobility and climate change adaptation.

Mandatory or optional:

Optional, but with great possibilities!

What does this mean for the municipality?

Neighborhood concepts remain the best way to analyze the existence of a neighborhood and to plan its development towards climate neutrality.

Budget requirements:

Depending on the size of the quarter, €10,000 – €20,000 own contribution.

Important: The municipality can forward the funding to its municipal utility.

This can result in sales tax benefits.

5. Self-sufficiency: More returns from municipal PV systems

Why is that important?

A PV rooftop system whose electricity is used in the building for self-sufficiency (subject to VAT) generates a higher return than one whose electricity is fully fed into the grid. This is particularly important for systems that are more than 20 years old and no longer receive a fixed feed-in tariff.

Legal basis:

- Regulation on PV
- Sales tax regulations

That's what it says:

- Amount of the feed-in tariff
- Municipalities are given the same status as companies if they are entrepreneurial or if there is a distortion of competition.

Mandatory or optional:

The payment of sales tax for certain municipal income has been mandatory since January 1st, 2017, but a transitional period up to December 31st, 2022, can be applied for.

What does this mean for the municipality?

Municipalities that shy away from operating their own PV systems (subject to VAT) miss out on lucrative projects.

Why should you take care of it now...

The obligation to change over comes on January 1st, 2023 - if you take care of it now, you can benefit earlier.

Budget requirement:

This depends on the size of the municipality.

6. Building Electromobility Infrastructure Act (GEIG)

Why is that important?

The charging infrastructure for e-vehicles is still insufficient. The law regulates when and where charging facilities and preparations for this must be created.

Legal basis:

Building Electromobility Infrastructure Act of March 18, 2021

That's what it says:

The regulations of the GEIG concern:

1. New buildings

- Non-residential building with more than six parking spaces
- Residential building with more than five parking spaces

2. All existing buildings ...

with more than ten parking spaces in or on the building that are undergoing major renovations.

From January 1st, 2025, a charging point must be created for existing non-residential buildings with more than 20 parking spaces, regardless of renovations.

Mandatory or optional:

Mandatory

What does this mean for the municipality?

The specifications of the GEIG apply to the refurbishment/renovation of municipal buildings (including old people's and nursing homes) and the planning of new development areas.

Budget requirement:

Depends on the scope of the measure.

Funding programs for municipal climate protection in Baden-Württemberg

1. Municipal heat planning - also for small municipalities!

Why is that important?

Municipal heating planning became mandatory for municipalities with 20,000 or more inhabitants from autumn 2020. The instrument provides an initial overview: How much heat is generated and consumed where in the municipality? Which renewable energy sources can be used for this in the future? The heat plan provides a valid and neutral basis for decision-making on the way to climate neutrality by 2040.

Legal basis:

Law on the further development of climate protection in Baden-Württemberg, as of October 14th, 2020

That's what it says:

Municipalities must become climate neutral by 2040. Heat planning should show the way there.

Mandatory or optional:

Heat planning is mandatory for all municipalities with more than 20,000 inhabitants and voluntary for all others, but it is well supported!

What does this mean for the municipality?

Municipalities have to think about how they want to become climate-neutral by 2040. Because this obligation affects all municipalities, heat planning makes sense for all municipalities.

Why you should worry about it now...

Anyone who oversleeps the start now will have to put in even more effort later to achieve the goal of climate neutrality.

Budget requirement:

Municipalities with more than 20,000 inhabitants receive a connectivity payment. Municipalities with less than 20,000 inhabitants receive a subsidy of a maximum of 80%

2. Funding “Stadt & Land” program to implement measures from KSK/traffic/cycling concepts

Why is that important?

We need to rethink the role of the car in the mobility mix. Investments are needed to reduce motorized private transport and to give all road users appropriate space.

Legal basis:

Administrative regulation on the State Municipal Transport Financing Act

That's what it says:

If the application is submitted by December 31, 2021, a bonus of 15% will be paid for the costs of the transport project. There is a bonus of 10% for later projects.

In combination with the special program city and country, a total funding of up to 90% is possible!

Mandatory or optional:

The measure is voluntary.

What does this mean for the municipality?

The municipality receives funding for projects that serve municipal mobility and climate protection, e.g., bicycle parking spaces, parking spaces for car-sharing vehicles or electric vehicles, mobility stations, cycle paths, cycle lanes or protective lanes,

B+R facilities and much more

Budget requirement:

Depends on the scope of the measure.

3. Promotion of municipal networks for the purpose of climate protection

Why is that important?

In the network, communities benefit from each other's experiences. You can avoid unnecessary costs and share planning costs at the same time.

Legal basis:

Guideline for the promotion of climate protection projects in the municipal environment "Municipal Guideline" of the Federal environment Ministry (BMU) from July 22, 2020, point 2.5

That's what it says:

Development and operation of municipal networks with at least 6 actors in the areas of climate protection, energy efficiency, resource efficiency or mobility

- in the acquisition phase (= network construction) with 100% of the costs for network management,
- in the network phase (= substantive work), 60% of the costs for network management are funded.

If you apply between August 1st, 2020, and December 21st, 2021, the funding rate increases linearly by 10 percentage points.

Mandatory or optional:

The measure is voluntary.

What does this mean for the municipality?

Networks facilitate internal knowledge building. Jointly planned measures are usually cheaper for everyone.

Climate protection, energy efficiency and mobility are key factors for the development of the community. The higher the efficiency, the lower your long-term energy costs. The increased funding for the network phase is an additional incentive.

budget requirement:

- In the acquisition phase: 0 € (since 100% funding)
- In the three-year network phase: €10,000 – €30,000 pa depending on the type and size of the network (of which 60% – 70% is funded, depending on the application date).

4. Climate Protection Plus promotes sustainable, energy-efficient schools

Why is that important?

Many schools are due for long-term refurbishment in the next few years. In view of the climate neutrality targeted for the year 2040, a high level of energy efficiency should already be aimed for: This will avoid costly renovations later!

Legal basis:

Climate Protection Plus (funding) 2021 from December 21, 2020

That's in there

Projects that achieve the KfW (federal funding institute) efficiency house standard 70 (or 55) are additionally funded with 50 €/m² (or 150 €/m²).

Mandatory or optional:

The measure is voluntary.

What does this mean for the municipality?

Energy efficiency targets should be set very ambitiously when a school is renovated. Consultation with relevant experts is encouraged.

Municipalities that are already renovating in an energy-efficient manner will save on costly subsequent renovations later and fulfill their role model function.

budget requirement:

Depending on the project size. The funding amounts to a maximum of €1,200,000.

6. CHAPTER 4: ACTIONS

Action 1	Removing Barriers in accessing promotions
Brief description	The work and time needed to get access to promotions from the federal state or else is too much hassle for smaller communities. Sometimes the costs are higher to access the promotion than the money they get.
Activities/ Implementation steps	Promotion of cooperations between small communities. A specialized company could do this work and remove the burden from small communities. Even better but much more complicated: Removing the need for the complicated procedures
Timeframe	1-5 Years
Milestones	First working corporations
Estimated costs	Not known
Financing sources	Not known
Estimated impact/results	More granted promotions
Actors involved	LCF, local actors from the cities, consulting service...

Action 2	CSSC Training methods for stakeholders
Brief description	The plus of the CSSC training documents elaborated in WP3 is the detailed description of how to implement CSSC solutions. The task in this action is to adapt and to transfer the knowledge for German stakeholders that may use the materials in their coaching for cities.
Activities/ Implementation steps	Workshop with various stakeholders for CSSC including SmartGrids BW, KEA Klimaschutz- und Energieagentur Baden-Württemberg GmbH (regionale energy agency), PV-Network BW (regional network for PV), Städtebund

	(association of cities) and association for cooperatives BW Focus on technical, administration and operator
Timeframe	1 Years
Milestones	Workshop Working paper for each focus theme
Estimated costs	Not known
Financing sources	Not known
Estimated impact/results	More granted promotions
Actors involved	organization by LCF, Ministry for Environment and Energy Transition Baden-Württemberg

Action 3	Recovery plan for citizen energy in Baden-Württemberg
Brief description	During the pandemic and due to various energy crisis like the Ukraine war cooperatives play an important role to accelerate the regional energy transition. The acceptance for citizen energy projects is high. Cooperatives have the problem of not finding enough project opportunities. CSSC solutions offer on the one hand new fields of actions for cooperatives and on the other hand operator models for small and medium sized cities that don't have the capacity to implement CSSC solutions with municipal operators.
Activities/ Implementation steps	Training session with the association for cooperatives BW Focus on technical, administration and operator
Timeframe	1 Years
Milestones	Workshop Working paper for each focus theme
Estimated costs	Not known
Financing sources	Not known
Estimated impact/results	More granted promotions

Actors involved	organization by LCF, Ministry for Environment and Energy Transition Baden-Württemberg
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