

Interreg
Alpine Space



DELIVERABLE D.T1.3.1

*VADEMECUM ON THE ECONOMIC AND
FINANCIAL TOOLS USED IN THE ALPINE REGION
FOR DOMESTIC HEATING SYSTEMS*

Edited by PP6 E-Zavod 25. 11. 2019

INDEX

1. Biomass burning effects in the Alpine Region	3
2. Tools supporting deployment of clean biomass burning in the Alpine Region.....	3
3. Analysis of available Economic and financial instruments to support biomass burning in the Alpine Region	8
3.1 AUSTRIA	8
3.2 ITALY	18
3.3 SLOVENIA	26
3.4 FRANCE	30
3.5 GERMANY	34
4. References	44

1. Biomass burning effects in the Alpine Region

The emission of particulate matter (PM) from the residential burning of biomass for space and water heating have a significant impact on air quality across Europe, especially in Alpine countries, where domestic wood burning is most widespread. Modern automatic pellet and wood chip appliances are significantly more energy efficient and have lower emissions than traditional fireplaces and wood log stoves, but most biomass burning is likely to take place in inefficient and polluting appliances thus contributing to exceedances of the EU limit values.

2. Tools supporting deployment of clean biomass burning in the Alpine Region

National and regional governments should support replacement/retrofit programmes to encourage households to replace older appliances with safer, more efficient, cleaner burning technologies. Financial incentives are necessary to assist with the capital costs of replacement or retrofitting appliances.

The European Commission has defined a framework – a set of guidelines on State aid for environmental protection and energy in which Member States can design appropriate support schemes for renewable energy. Within this framework Member States can use different kinds of incentives and market tools to support the deployment of biomass sources in the heating market.

Table 1 summarizes supporting tools for domestic biomass use in participating project countries.

Table 1: Summary of available economic and financial tools used in Alpine Region for domestic heating systems

Country	Target group	Tools
Austria	Private households Local Public building managers: municipalities, Community-owned enterprises, other commercially active organisations, public institutions, associations, religious denominations, enterprises and energy companies.	<p>Support is granted for newly installed pellet- and wood chip-fired central heating that replaces one or several existing fossil fuel boilers. Support is also available for replacing wood-fired heating systems which are at least 15 years old with pellet- and wood-chip fired central heating or for reducing the fuel consumption and emissions. The construction or densification of biomass fired district heating is also supported, for the reduction of CO₂-emission.</p> <p>Funding is granted in the form of a non-repayable investment grant for pellet- or wood-chip fired central heating to replace existing fossil fuel boilers as well as biomass district heating. The amount of funding is varying depending on the size of the boiler and reduction of CO₂-emission. For small boilers up to 50 and 100 kW, the funding is payed as a lump sum. Bigger boilers and district heating projects can be funded by 25% if the investment, this can be increased by 5% sustainability surcharge is possible if regional wood chips from forestry's is used.</p> <p>In the Climate and energy model regions extra support is provided as a non-repayable net investment subsidy depending on the installed system capacity up to 400kW</p>

Country		Target group	Tools
Italy	Conto Termico	Public Administrations and private subjects.	Direct incentive calculated at a flat rate based on renewable thermal energy that can be produced by the new plant, on average 30-40% of the investment, repaid in 1-2 or 5 years.
	Ecobonus and Bonus Casa	Private subjects and companies: business income holders, who own, for whatever reason, the property subject to intervention.	For biomass appliances: tax deduction of 50% of the investment that is returned in 10 years.
	Lombardy	Lombardy Municipalities	Energetic renovation of public buildings of municipalities: contribution from 75% to 90% to costs for each building. Main objectives: <ul style="list-style-type: none"> • “nearly zero energy buildings” complying from 2016; • small Municipalities public buildings renovation
	Veneto	Veneto private subjects	2019 call for subsidies Approval, to grant for domestic biomass heating appliances scrapping, not exceeding 35 kW Main objectives: <ul style="list-style-type: none"> •energy-efficient plants •particulate emissions reduction
		Feltre citizens, resident for at least two years	50'000 €, combinable with other national and regional incentives, to: <ul style="list-style-type: none"> •Substitution of existing boilers and stoves by 4 and 5-star appliances, with 85% min thermal efficiency. •chimney upgrading and securing
Aosta Valley	Existing buildings related to: <ul style="list-style-type: none"> • local authorities • private individuals • energy saving and management companies (ESCOs). 	Law 13/2015 The intervention must start after the application submission and must be completed by maximum five years from the granting loan	

		<p>Construction companies not allowed.</p>	<p>date.</p> <p>The total amount of eligible expenses for the operations from 10,000 € to 400,000.</p> <p>Loans:</p> <ul style="list-style-type: none"> •can be granted up to 100% of the amount, fees and taxes excluded; •cannot be combined with any other contribution or public fund granted to realize the same interventions. <p>Mortgages cannot last more than thirty years. The Regional Government Council establishes every year the total yearly loan amount.</p>
	<p>Aosta Valley</p>	<p>Rural companies and related entities</p>	<p>Law 17/2016 providing aid by:</p> <ul style="list-style-type: none"> •low-interest loans •leasing contracts with a subsidized fees. <p>Local authorities and their associative forms, consortia and private entities will be granted by low- interest loans focused on village and rural heritage protection and redevelopment, including the tourist activities.</p> <p>Costs aimed to plant construction for biofuels or energy from renewable sources are considered eligible up to the average company fuel yearly consumption, including charges to cover:</p> <ul style="list-style-type: none"> •architects, engineers and consultants' fees; •consulting on environmental and economic sustainability fees, including feasibility studies; •notary fees for mortgages processing.

Country	Target group	Tools
Slovenia	Households	<p>The Eco Fund provides non-repayable financial incentives for investments in the use of RES in residential buildings, including wood biomass combustion installations.</p> <p>Support for biomass use in heating and cooling is provided within different streams targeting specific subcategories: wood biomass boilers in households, wood biomass and geothermal district heating systems and wood biomass boiler equipment.</p> <p>Eco Fund also published a public tender for non-repayable financial incentives for the replacement of old solid fuel combustion installations in residential buildings, intended for socially disadvantaged individuals.</p>
Country	Target group	Tools
Germany	Private Households; SMEs; governmental institutions	<p>In Germany there are two main types of support schemes: the loan program »Renewable Energies – Premium« by KfW and the grant "Market Incentive Programme (MAP)" by BAFA.</p> <p>1) »Renewable Energies – Premium« by KfW Loans up to 25 million € at very attractive conditions, application via a normal private bank, who takes the financing risk.</p> <p>2) "Market Incentive Programme (MAP)" by BAFA. Grant up to 5.250€ per installation (basis 80€ per KW heating performance) for particle reduction systems. Non-refundable. Depending on specific technical factors of the new heating systems and only selected approaches (list available online)</p>

3. Analysis of available Economic and financial instruments to support biomass burning in the Alpine Region

3.1 AUSTRIA

4. Title of financial instrument	
Responsible authority	KOMMUNALKREDIT PUBLIC CONSULTING GMBH
Contact details from responsible authority:	Address: Türkenstraße 9, 1090 Wien Phone: +43(0)1-31 6 31 E-mail: kpc@kommunalkredit.at Web site: https://www.umweltfoerderung.at/
<p>Overall objectives of the instrument</p> <p><i>- should clearly present the overall objective of the policy document -</i></p>	<p>On behalf of the Federal Ministry for Sustainability and Tourism, KPC – Kommunalkredit Public Consulting handles grants in the fields of energy, climate and environment. The motto is "Consulting. Funding. Protecting the environment".</p> <p>KPC sees itself as a specialist for climate and environmental protection projects in the fields of renewable energy, energy efficiency, mobility management, urban water management, protection water management and remediation of contaminated sites.</p>
<p>Timeframe</p> <p><i>- should state the life period of the instrument document -</i></p>	Submission is possible on an ongoing basis.
<p>Specific objectives/priority areas</p> <p><i>- should clearly present the specific objectives and/or priority areas of the policy document -</i></p>	<p>"UFI – Umweltförderung im Inland" stands for environmental subsidies within Austria. It comprises climate, energy and environmental subsidies for topics like renewable energy, energy efficiency, mobility management, urban water management, water protection management and remediation of contaminated sites.</p>

Specific Measures with financial impact			
Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects: <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
<p>Wood heating Private Households <50 kW</p> <p>https://www.umweltfoerderung.at/fileadmin/user_upload/media/umweltfoerderung/Dokumente/Private/Holzheizungen_2019/leitfaden_holzheizungen_2019.pdf</p>	<p>The incentive right is granted to replace an old wood combustion plant with a construction year before 2005 that provides heat to the building's central heating system with a new pellet or wood chips combustion system. Pellet combustion systems also receive subsidies if they reduce the fuel consumption of an existing fossil or wood fired heating system with a construction year before 2005.</p>	<p>Private households: The subsidised system must be used mainly privately. Therefore, the living area must be more than 50% of the total building.</p>	<p>1. 800 € for a new pellet or wood chips central heating system that replaces an old wood combustion plant with a construction year before 2005</p> <p>2. 500 € for a pellet combustion system</p> <p>“RAUS aus Öl-Bonus”, subsidies can go up to 5.000 € for replacement of oil heating systems</p> <p>The maximum subsidy can be 35% of the eligible investment costs.</p> <p>Registration for funding after the planning, application at the latest 12 weeks after the registration (installation and billing completed)</p> <p>Additional subsidies from the Provinces and Municipalities are possible!</p>

Dependent on the province in Austria there are also different subsidies available for households as part of the housing subsidy or as a loan etc.

Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
<p>“Raus aus Öl” Companies Wood heating < 100 kW</p> <p>https://www.umweltfoerderung.at/fileadmin/user_upload/media/umweltfoerderung/Dokumente/Betriebe/Raus_aus_Oel_Erneuerbare_Waermeerzeugung_100_kW/UFI_Infoblatt_WAERMERZEUGER_PAU.pdf</p>	<p>The incentive right is granted for the new installation of a pellet, wood chip or wood log central heating system. It is also granted for the replacement of an existing fossil or non-fossil fueled heating system with a pellet, wood chip or wood log central heating system.</p>	<ol style="list-style-type: none"> 1. Companies 2. Entrepreneurial organizations 3. Societies 4. Confessional institutions 	<p>1. replacement of a fossil heating system: < 50 kW 5.000€ ≥ 50kW and < 100kW 8.000 €</p> <p>2. new installation or replacement of a non-fossil fuel system: < 50 kW: 4.000 € ≥ 50kW and < 100kW 7.000€</p> <p>The maximum subsidy can be 35% of the investment costs.</p> <p>The application for funding must be after the realisation of the project but at the latest 6 months after accounting.</p>
<p>“Raus aus Öl” Companies Local/district heating < 100 kW</p> <p>https://www.umweltfoerderung.at/fileadmin/user_upload/media/umweltfoerderung/Dokumente/Betriebe/Raus_aus_Oel_Erneuerbare_Waermeerzeugung_100_kW/UFI_Infoblatt_WAERMERZEUGER_PAU.pdf</p>	<p>The connection to a highly efficient local or district heating system is subsidised if more than 80% of the generated energy comes from renewable sources.</p>	<ol style="list-style-type: none"> 1. Companies 2. Entrepreneurial organizations 3. Societies 4. Confessional institutions 	<p>1. replacement of a fossil heating system: < 50 kW 5.000€ ≥ 50kW and < 100kW 8.000 €</p> <p>2. new installation or replacement of a non-fossil fuel system: < 50 kW: 4.000 € ≥ 50kW and < 100kW 7.000€</p> <p>The maximum subsidy can be 35% of the investment</p>

			costs. The application for funding must be after the realisation of the project but at the latest 6 months after accounting.
<p>Replacement of boilers</p> <p>https://www.umweltfoerderung.at/fileadmin/user_upload/media/umweltfoerderung/Dokumente/Betriebe/Nahwaermerversorgung/ufi_standardfall_infoblatt_biofern.pdf</p>	<p>Replacement of fully functioning biomass boilers that were in operation for a minimum of 15 years by an equal or smaller one.</p> <p>Minimum investment costs 10.000€.</p>	<ol style="list-style-type: none"> 1. Companies 2. Entrepreneurial organizations 3. Societies 4. Confessional institutions 	<p>15% of the basis investment costs 20% for projects that comply to the EU co-financing criteria</p> <p>Basis: additional investment costs for the environment, fundable costs minus the costs for an equal fossil heating system</p> <p>Additional funding 5% (max. 10.000€) for EMAS certified companies) 5% sustainability funding for >80% wood chips from regional (50km) sources</p> <p>The application for funding must be handed in before the first binding step (contract, order, etc.) of the project.</p>

Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
<p>“Raus aus Öl” Companies Wood heating >100 kW</p> <p>https://www.umweltfoerderung.at/fileadmin/user_upload/media/umweltfoerderung/Dokumente/Betriebe/Holzheizungen_groesser_400_kW/UFI_Standardfall_Infoblatt_BIOMASS_E.pdf</p>	<p>The incentive right is granted for the new installation of a pellet, wood chip or wood log central heating system. It is also granted for the replacement of an existing fossil or non-fossil fueled heating system with a pellet, wood chip or wood log central heating system.</p> <p>The minimum investment costs have to be 10.000€ and the minimum CO₂ saving 4 tons per year.</p> <p>Installations are eligible only in areas where there is no possibility of connection to a highly efficient district heating supply. Exceptions are possible if the district heating operator confirms that a connection is not possible for the object in question.</p>	<ol style="list-style-type: none"> 1. Companies 2. Entrepreneurial organizations 3. Societies 4. Confessional institutions 	<p>30% of the basis investment costs</p> <p>Basis: additional investment costs for the environment, fundable costs minus the costs for an equal fossil heating system</p> <p>Maximum funding 900€ per saved ton of CO₂</p> <p>Additional funding 5% (max. 10.000€) for EMAS certified companies) 5% sustainability funding for >80% wood chips from regional (50km) sources</p> <p>The application for funding must be handed in before the first binding step (contract, order, etc.) of the project.</p>
<p>Companies Local and district heating >100kW</p> <p>https://www.umweltfoerderung.at/fileadmin/user_upload/media/umweltfoerd</p>	<p>The connection to a highly efficient local or district heating system is subsidised if more than 80% of the generated energy comes from renewable sources. The minimum</p>	<ol style="list-style-type: none"> 1. Companies 2. Entrepreneurial organizations 3. Societies 4. Confessional institutions 	<p>30% of the basis investment costs</p> <p>Basis: additional investment costs for the environment, fundable costs minus the costs for an equal fossil heating</p>

<http://www.alpine-space.eu/projects/bb-clean>

This project is co-financed by the European Regional Development Fund through the Interreg Alpine Space programme

<p>erung/Dokumente Betriebe/Fernwaerm eanschluss groesser 400 kW/UFI Standardfall Infoblatt FE RNW.pdf</p>	<p>investment costs have to be 10.000€ and the minimum CO₂ saving 4 tons per year.</p>		<p>system</p> <p>Maximum funding 675€ per saved ton of CO₂</p> <p>Additional funding 5% (max. 10.000€) for EMAS certified companies)</p> <p>The application for funding must be handed in before the first binding step (contract, order, etc.) of the project.</p>
<p>Companies Biomass local heating >400kW</p> <p>https://www.umweltfoerderung.at/fileadmin/user_upload/media/umweltfoerderung/Dokumente/Betriebe/Nahwaermerversorgung/ufi_standardfall_infoblatt_biofern.pdf</p>	<p>Biomass combined heat and power plants and biomass local heating systems for a minimum of 2 separate objects. The minimum investment costs have to be 10.000€ and the minimum CO₂ saving 4 tons per year.</p>	<ol style="list-style-type: none"> 1. Companies 2. Entrepreneurial organizations 3. Societies 4. Confessional institutions 	<p>25% of the basis investment costs</p> <p>30% for projects that comply to the criteria for the EU co-financing</p> <p>Basis: additional investment costs for the environment, fundable costs minus the costs for an equal fossil heating system</p> <p>Maximum funding 900€ per saved ton of CO₂</p> <p>Additional funding 5% (max. 10.000€) for EMAS certified companies)</p> <p>5% sustainability funding for >80% wood chips from regional (50km) sources</p>

			The application for funding must be handed in before the first binding step (contract, order, etc.) of the project.
<p>Companies Biomass-CHP</p> <p>https://www.umweltfoerderung.at/fileadmin/user_upload/media/umweltfoerderung/Dokumente/Betriebe/Nahwaermerversorgung/ufi_standardfall_infoblatt_biofern.pdf</p>	<p>Biomass combined heat and power plants</p> <p>The minimum investment costs have to be 10.000€ and the minimum CO₂ saving 4 tons per year.</p>	<p>1. Companies 2. Entrepreneurial organizations 3. Societies 4. Confessional institutions</p>	<p>20% of the basis investment costs, if 100% of the technical usable heat are used, otherwise proportionally less</p> <p>Basis: additional investment costs for the environment, fundable costs minus the costs for an equal fossil heating system</p> <p>Maximum funding 675€ per saved ton of CO₂</p> <p>Additional funding 5% (max. 10.000€) for EMAS certified companies) 5% sustainability funding for >80% wood chips from regional (50km) sources</p> <p>The application for funding must be handed in before the first binding step (contract, order, etc.) of the project.</p>
<p>“Raus aus Öl” Communities Wood heating < 100 kW</p>	<p>The incentive right is granted for the new installation of a pellet, wood chip or wood log central</p>	<p>Austrian communities</p>	<p>1. replacement of a fossil heating system: < 50 kW 3.000€ ≥ 50kW and < 100kW</p>

<p>https://www.umweltfoerderung.at/fileadmin/user_upload/media/umweltfoerderung/Dokumente/Gemeinden/Raus_aus_Oel_Erneuerbare_Waermeerzeugung_100_kW/UFI_Infoblatt_WAERMERZEUGER_PAU_Gemeinden.pdf</p>	<p>heating system. It is also granted for the replacement of an existing fossil or non-fossil fueled heating system with a pellet, wood chip or wood log central heating system.</p>		<p>4.800 €</p> <p>2. new installation or replacement of a non-fossil fuel system: < 50 kW: 2.400 € ≥ 50kW and < 100kW 4.200€</p> <p>The maximum subsidy can be 21% of the investment costs.</p> <p>The application for funding must be after the realisation of the project but at the latest 6 months after accounting.</p>
<p>“Raus aus Öl” Communities Wood heating ≥100 kW</p> <p>https://www.umweltfoerderung.at/fileadmin/user_upload/media/umweltfoerderung/Dokumente/Gemeinden/Holzheizungen_Mikronetze/UFI_Standardfall_Infoblatt_BIOMASSE_Gemeinden.pdf</p>	<p>The incentive right is granted for the new installation of a pellet, wood chip or wood log central heating system. It is also granted for the replacement of an existing fossil or non-fossil fueled heating system with a pellet, wood chip or wood log central heating system.</p> <p>The minimum investment costs have to be 10.000€ and the minimum CO₂ saving 4 tons per year.</p>	<p>Austrian communities</p>	<p>18% of the basis investment costs</p> <p>Basis: additional investment costs for the environment, fundable costs minus the costs for an equal fossil heating system</p>

Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
<p>Climate and energy model regions Wood heating <400kW</p>	<p>Pellet, wood chip or wood log central heating system with a thermal power lower than 400 kW in financeable locations. Only applicable if the object can't be connected to district heating.</p> <p>Financeable locations: Social facilities Education facilities Society buildings Public buildings Public infrastructure</p>	<p>In climate and energy model regions: Communities Community owned companies Societies Public institutions Small and medium companies</p>	<p>Subsidy dependent on the installed power (kW): 155 €/kW for the first 50kW (0–50 kW) and 70 €/kW for every extra kW (51–399).</p> <p>For systems with the Austrian Ecolabel and the simultaneous installation of a thermal solar system an additional 10 €/kW can be granted.</p> <p>The maximum subsidy can be 30% of the investment costs.</p>
<p>Communities Local and district heating <100kW</p>	<p>The connection to a highly efficient local or district heating system is subsidised if more than 80% of the generated energy comes from renewable sources.</p>	<p>Austrian communities</p>	<p>1. replacement of a fossil heating system: < 50 kW 3.000€ ≥ 50kW and < 100kW 4.800 €</p> <p>2. new installation or replacement of a non-fossil fuel system: < 50 kW 2.400 € ≥ 50kW and < 100kW 4.200€</p> <p>The maximum subsidy can be 21% of the investment costs.</p>

			<p>The application for funding must be after the realisation of the project but at the latest 6 months after accounting.</p>
<p>Communities Local and district heating ≥100kW</p>	<p>The connection to a highly efficient local or district heating system is subsidised if more than 80% of the generated energy comes from renewable sources. The minimum investment costs have to be 10.000€ and the minimum CO₂ saving 4 tons per year.</p>	<p>Austrian communities</p>	<p>18% of the basis investment costs</p> <p>Basis: additional investment costs for the environment, fundable costs minus the costs for an equal fossil heating system</p> <p>Maximum funding 675€ per saved ton of CO₂</p> <p>Additional funding 3% (max. 10.000€) for EMAS certified companies)</p> <p>The application for funding must be handed in before the first binding step (contract, order, etc.) of the project.</p>

3.2 ITALY

Title of financial instrument			
Responsible authority	GSE – Gestore Servizi Energetici		
Contact details from responsible authority:	Address: Phone: E-mail: Web site: www.gse.it		
Overall objectives of the instrument	Conto Termico: incentives for small interventions for the increase in energy efficiency and for the production of thermal energy from renewable sources. With reference to biomass appliances (Interventions 2B), only the replacement of an existing biomass or heating oil plant, except for a few exceptions, is incentivized.		
Timeframe	There is no deadline, but a maximum annual cumulative expenditure is set, equal to 200 M € for Public Administrations and 700 M € for private individuals.		
Specific objectives/priority areas	No priority area.		
Specific Measures with financial impact			
Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects: <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
Title of the action	For interventions related to biomass see: Regole Applicative GSE	Public Administrations and private subjects	Direct incentive calculated at a flat rate based on renewable thermal energy that can be produced by the new plant, on average 30-40% of the investment, repaid in 1-2 or 5 years.

Title of financial instrument			
Responsible authority	ENEA		
Contact details from responsible authority:	Address: Phone: E-mail: Web site: www.acs.enea.it		
Overall objectives of the instrument	Ecobonus and Bonus Casa: respectively energy efficiency upgrading of buildings and renovation of buildings with the aim of reducing the primary energy consumption of the building and replacing fossil fuels with renewable energy sources.		
Timeframe	These mechanisms are updated annually with the State Budget Law.		
Specific objectives/priority areas	No priority area.		
Specific Measures with financial impact			
Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects <i>- how many funds, for whom, % of co-financing, timeframe, etc...</i>
Title of the action	<p>Details are published in the Revenue Agency Guides: Ecobonus http://www.acs.enea.it/tecnodoc/Guida_Agevolazioni_Risparmio_energetico.pdf</p> <p>Bonus Casa http://www.acs.enea.it/doc/ristrutturazioni.pdf</p>	Private subjects and companies: business income holders, who own, for whatever reason, the property subject to intervention.	For biomass appliances: tax deduction of 50% of the investment that is returned in 10 years.

LOMBARDY REGION

Title of financial instrument	POR FESR 2014 – 2020 ASSE IV		
Responsible authority	Lombardy Region		
Contact details from responsible authority:	<p>Address: Piazza Città di Lombardia 1 – Milano Phone: +39 02 6765 5461 E-mail: gian_luca_gurrieri@regione.lombardia.it Web site: https://www.regione.lombardia.it/wps/portal/istituzionale/HP/DettaglioRedazionale/istituzione/direzioni-general/direzione-generale-ambiente-e-clima/organizzazione-e-uffici/uo-clima-e-qualita-aria</p>		
Overall objectives of the instrument	<p>The Lombardy Region Environmental energy program aims to reduce the greenhouse gases for the entire region, not only for the Alpine Region. The program has included measures to reduce energy consumption resulting from heating of buildings. There were the main objectives:</p> <ul style="list-style-type: none"> - obligation to comply the standard “nearly zero energy buildings” from 2016 and not from 2021; - economic incentives for the renovation of public buildings of the small Municipalities (many small municipalities are located in alpine areas). 		
Timeframe	<p>The first measure for economic incentives was approved in July 2015, the second in May 2016. The measures for internal areas was approved from 2016 to 2018. Part of the work is still being completed but 102 municipalities have already been financed. The total reduction is expected around 21,75 GWh/year.</p>		
Specific objectives/priority areas	<p>Reduction of energy consumption and development of renewable sources.</p> <p>The first actions allowed the installation of biomass plants, providing they were particularly efficient. Since 2018 the installation of biomass plants has been excluded</p>		
Specific Measures with financial impact			
Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
Title of the action	energetic renovation of public buildings of municipalities with up to 1,000 inhabitants, or their associations (1° measure)	17 municipalities Energy saving 2.033.473 KWh/year	90% contribution to costs for each building; Total contribution: 3.912.212 eur

Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
Title of the action	energetic renovation of public buildings of municipalities with up to 1,000 inhabitants, or their associations (2° measure)	85 municipalities Energy saving 10.953.044 KWh/year	90% contribution to costs for each building; Total contribution: 16.840.132 eur
Title of the action	energetic renovation of public buildings for the internal areas municipalities.	27 municipalities Energy saving 8.755.651 KWh/year	Contribution from 75% to 90% to costs for each building; Total contribution: 6.655.000 eur

VENETO REGION 1

Title of financial instrument	Activities relating to environmental measures planning (Article 73, art 112/1998)		
Responsible authority	Veneto Region		
Contact details from responsible authority:	Address: Palazzo Linetti, Calle Priuli, Venezia Phone: +39 041 2792442 E-mail: ambiente@pec.regione.veneto.it Web site: http://www.regione.veneto.it/web/guest/area-tutela-e-sviluppo-del-territorio		
Overall objectives of the instrument	Environment improvement interventions		
Timeframe	Veneto: 2019		
Specific objectives/priority areas	Plan for Protection and Rehabilitation of the Atmosphere - A2.2 Action implementation: subsidies granting to foster the scrapping of traditional stoves with more energy-efficient plants, biased on particulate emissions reduction		
Specific Measures with financial impact			
Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
call for subsidies granting - domestic biomass heating appliances scrapping	Approval of the 2019 call for subsidies granting for the scrapping of domestic biomass heating appliances not exceeding 35 kW	Citizens resident in Veneto Region	500'000 €

VENETO REGION 2

Title of financial instrument	Border Municipalities Fund (Regional Law 191/2009)		
Responsible authority	Feltre Municipality (Environment Councillor: Dr. Valter Bonan)		
Contact details from responsible authority:	Address: via Vignole 21, Feltre Phone: +39 0439 885340 E-mail: Web site: http://ambiente.comune.feltre.bl.it/feltre.rinnova		
Overall objectives of the instrument	Project for promotion, awareness and citizen involvement - action plan for energy efficiency and air quality improvement in Feltre		
Timeframe	2017-2019		
Specific objectives/priority areas	"Feltre rinnova": stimulation of equipment renewal projects and maintenance of wood biomass plants		
Specific Measures with financial impact			
Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
Call for grants for the scrapping of highly polluting biomass stoves, boilers and kitchen stoves http://ambiente.comune.feltre.bl.it/sites/ambiente.comune.feltre.bl.it/files/allegati/Comune%20di%20Feltre_FR_Bando%20rottamazione%20stufe_signed.pdf	Substitution of existing boilers and stoves by 4 and 5-star appliances, according to Ministry of the Environment Decree 186/2017 classification, having 85% min thermal efficiency.	Feltre citizens, resident for at least two years	50'000 €, combinable with other State and regional incentives
Call for grants for chimney appliance related to biomass stoves, boilers and kitchen stoves http://ambiente.comune.feltre.bl.it/sites/ambiente.comune.feltre.bl.it/files/allegati/ComuneFeltre_FR_BandoCannaFumaria_aprile2019.pdf	updating of existing chimneys related to wood biomass domestic heating generators, biased on "chimney upgrading and securing", realized by an approved and qualified ERF installer or maintainer, who issues a conformity declaration, according with the law once completed the installation.	Feltre citizens, resident for at least two years	50'000 €, combinable with other State and regional incentives

<http://www.alpine-space.eu/projects/bb-clean>

This project is co-financed by the European Regional Development Fund through the Interreg Alpine Space programme

AOSTA VALLEY 1

Title of financial instrument	Regional law 25 May 2015, n. 13		
Responsible authority	Regione Valle d'Aosta – Aosta Valley Region FINANCES, PRODUCTION ACTIVITIES AND CRAFTS Department –Energy savings, renewable energy sources development, sustainable mobility office		
Contact details from responsible authority:	Address: 15, Piazza della Repubblica – IT-11100 Aosta (AO) Phone: +39 0165 274506 / 274755 / 274572 E-mail: infoenergia@regione.vda.it Web sites: http://www.regione.vda.it/energia/default_i.asp Regional law 25 May 2015, n. 13: http://www.consiglio.regione.vda.it/app/leggieregolamenti/dettaglio?pk_lr=8001 Deliberation 641/2019: http://www.regione.vda.it/energia/notiziario_i.asp?pk=344		
Overall objectives of the instrument	Building refurbishment – Public Authority contributions		
Timeframe	25 May 2015		
Specific objectives/priority areas	Building energy efficiency improvement, also by renewable sources implementation		
Specific Measures with financial impact			
Measure/Action :	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
Regional law 25 May 2015, n. 13	Granting of loans	Only interventions on existing buildings are eligible, related to: <ul style="list-style-type: none"> – local authorities – private individuals – energy saving and management companies (ESCOs). Interventions carried out by construction or sales companies are not financed.	The intervention must start after the application submission and must be completed by maximum five years from the granting loan date, related to the intervention complexity. The total amount of eligible expenses for the operations must be between a minimum of 10,000 euros and a maximum of 400,000 euros, net of tax charges. Any surplus is not included in the calculation of the loan amount. Loans: <ul style="list-style-type: none"> – can be granted up to 100% of the amount, that doesn't include fees and taxes, paid by the borrower; – cannot be combined with any other contribution or public fund granted to realize the same interventions.

Mortgages cannot last more than thirty years.
The Regional Government Council establishes every year the total yearly loan amount.

AOSTA VALLEY 2

Title of financial instrument	Regional law 3 August 2016, n. 17		
Responsible authority	Regione Valle d'Aosta – Aosta Valley Region TOURISM, SPORT, TRADE, AGRICULTURE AND CULTURAL HERITAGE DEPARTMENT		
Contact details from responsible authority:	Address: Rue de la Maladière, 39 – IT-11020 Saint-Christophe (AO) Phone: +39 0165 - 275410 E-mail: ass-agricoltura@regione.vda.it Web sites: Introduction – brief: http://www.regione.vda.it/agricoltura/l_r_17_2016/default_i.aspx Regional law 3 August 2016, n. 17: http://www.consiglio.regione.vda.it/app/leggieregolamenti/dettaglio?pk_lr=8382		
Overall objectives of the instrument	regulation of regional sustain policy for agriculture and rural development.		
Timeframe	3 August 2016		
Specific objectives/priority areas	This law provides aid, in the form of low-interest loans, for investments in the sector of primary production, processing and marketing of agricultural products.		
Specific Measures with financial impact			
Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
Regional law 3 August 2016, n. 17	Granting of loans	Agriculture, rural companies, related entities	<p>The law 17/2016 provides aid in two forms:</p> <ul style="list-style-type: none"> – low-interest loans – leasing contracts with a subsidized fees. <p>More, local authorities and their associative forms, consortia and private entities will be granted by low- interest loans focused on village and rural heritage protection and redevelopment, including the tourist activities (articles 14 and 15). Among several other, costs aimed to plant construction for biofuels or energy from renewable sources are considered eligible up to the average company fuel yearly consumption, including charges to cover:</p> <ul style="list-style-type: none"> – architects, engineers and consultants' fees; – consulting on environmental and economic sustainability fees, including feasibility studies; <p>notary fees for mortgages processing.</p>

3.3 SLOVENIA

Title of financial instrument	Eco Found – Slovenian Environmental Public Fund
Responsible authority	Eco Found – Slovenian Environmental Public Fund
Contact details from responsible authority:	Address: Bleiweisova cesta 30, 1000 Ljubljana Phone: + 386 (0)1 241 48 20 E-mail: ijz@ekosklad.si Web site: https://www.ekosklad.si/
Overall objectives of the instrument <i>- should clearly present the overall objective of the policy document -</i>	The transition to renewable energy sources, efficient use of energy, waste management, wastewater treatment, sustainable mobility and public awareness are challenges for the Eco Fund.
Timeframe <i>- should state the life period of the instrument document -</i>	Applicants may apply for a public invitation from the day of their publication in the Official Gazette of the Republic of Slovenia. The public invitation is valid until the announcement of the conclusion of the public invitation in the Official Gazette of the Republic of Slovenia, pending the allocation of all funds (from 21. 6. 2019).
Specific objectives/priority areas <i>- should clearly present the specific objectives and/or priority areas of the policy document -</i>	A new investment is an investment for the implementation of one or more of the following actions, which has not yet been completed at the time of the submission of the application for an incentive (hereinafter: the application) following this public call: A - thermal insulation of the facade B - Thermal insulation of ground or ground above unheated space / basement C - thermal insulation of a roof or ceiling against an unheated space D - replacement of exterior joinery E - installation of heat pump for central heating of the building F - installation of wood biomass combustion plant for central heating of the building G - replacement of the heat station or installation of a heat station for connection to the district heating system H - installation of solar heating system I - installation of ventilation by returning the heat of the exhaust air in the buildings J - Installation of an energy efficient lighting system K - optimization of the heating system L - installation of gas condensing boiler for central

heating
M - construction of almost zero-energy building
N - utilization of excess heat from processes and / or installations
O - Installation of energy efficient electric motors and / or installation of frequency converters
P - introduction of an energy management system
R - energy optimization measure in technological process
S - investments in cogeneration plants

Specific Measures with financial impact

Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
<p>Title of the action</p> <p>Wood biomass combustion plants: Credit Link: https://ekosklad.si/gospodarstvo/pridobite-spodbudo/seznam-spodbud/kurilne-naprave-na-lesno-biomaso-3/kurilne-naprave-na-lesno-biomaso-kredit-2</p>	<p>Wood biomass combustion plants: Credit</p> <p>The incentive right is granted to purchase and install or replace an old combustion plant that provides heat to the building's central heating system.</p>	<ol style="list-style-type: none"> 1. local communities 2. legal persons, sole proprietors and other natural persons carrying out registered activities, or by a regulation or an act establishing a certain activity, all of which are entered in the business register in the Republic of Slovenia, with the exception of their branches abroad 3. public-law legal entities owning tangible 	<p>The amount of funds for the payment of grants and cover the costs of the subsidized interest rate is EUR 7,000,000.00.</p> <p>The amount of funds allocated for loans amounts to EUR 5,000,000.00.</p> <p>The amount of the grant is up to 20%, the amount of the credit is 80% of the eligible investment costs, excluding VAT.</p> <p>For local communities, the amount of the grant is up</p>

Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
<p>Title of the action</p> <p>Wood biomass combustion plants: Subsidy</p> <p>Link: https://ekosklad.si/gospodarstvo/pridobite-spodbudo/seznam-spodbud/kurilne-naprave-na-lesno-biomaso-3/kurilne-naprave-na-lesno-biomaso-subvencija-2</p>	<p>Wood biomass combustion plants: Subsidy</p> <p>The incentive right is granted for the purchase and installation or for replacement of an old combustion plant providing heat to the building's central heating system with a new wood biomass firing plant.</p>	<p>1. local communities</p> <p>2. legal persons, sole proprietors and other natural persons carrying out registered activities, or by a regulation or an act establishing a certain activity, all of which are entered in the business register in the Republic of Slovenia, with the exception of their branches abroad</p> <p>3. public-law legal entities owning tangible property other than direct users of the</p>	<p>to 20% and the amount of the loan is up to 80% of the eligible investment costs, including VAT.</p> <p>The amount of funds for the payment of grants and cover the costs of the subsidized interest rate is EUR 7,000,000.00.</p> <p>The amount of funds allocated for loans amounts to EUR 5,000,000.00.</p> <p>The amount of the grant is up to 20%, the amount of the credit is 80% of the eligible investment costs, excluding VAT. For local communities, the amount of the grant is up to 20% and the amount of the loan is up to</p>

		state budget.	<p>80% of the eligible investment costs, including VAT.</p> <p>100% subsidy for replacement of combustion plants: The Eco Fund reimburses the full cost of replacing the old combustion plants to socially-disadvantaged individuals.</p>
--	--	---------------	---

3.4 FRANCE

Note:

- the instruments described below mainly concern low-power appliances for domestic heating in the Auvergne-Rhône-Alpes region, whether specific to the region or of national application; high-power appliances (> 500 KW) are covered by other financial instruments (National Heat Fund administered by ADEME) and are not described.
- there may be other instruments for low-power devices in other regions at the initiative of local authorities, but they are not described here.

Title of financial instrument	Local Wood-Air Fund for the modernization of individual wood heating
Responsible authority	ADEME
Contact details from responsible authority:	https://auvergne-rhone-alpes.ademe.fr/lademe-en-region/trouver-votre-contact
Overall objectives of the instrument	Accelerate the replacement of individual wood-burning appliances prior to 2002 in main residences compared to spontaneous replacement (around 4%/year), by awarding a flat-rate bonus to individuals in the context of group operations conducted in a territory sensitive to fine particulate pollution, which are carried out by a local authority on its territory and which are accompanied by specific and intense animation.
Timeframe	Operations generally deployed over 5 years; instrument in existence since 2015, after an experiment in the Arve Valley launched in 2013. Currently, there are 8 Wood-Air funds: <ul style="list-style-type: none"> - Arve Valley - Agglomeration of Annemasse - Community of municipalities of Arve and Salève - Grand Annecy - Grenoble Alpes métropole - Voironnais countries - Grésivaudan Country - Lyon Metropolis And several will start in 2020 (without ADEME): <ul style="list-style-type: none"> - Metropolis of Saint Etienne - Metropolis of Clermont-Ferrand - Grand Chambery
Specific objectives/priority areas	Financing of ADEME from a national Air Fund. This tool is particularly used in PPPs where PM10 from residential heating is the majority in winter. When ADEME finances with the Air Fund, it covers about 50% of the expenses and the rest is provided by local authorities and the Region in variable proportions. Operations are negotiated and conducted independently of each other, with common elements. Amount of premiums that vary from one fund to another (from €500 to €2000), subject to resources or not. Objectives related to the replacement of equipment: <ul style="list-style-type: none"> - improving the quality of the territory's wood-log supply chain - dissemination of good practices for individual heating (ignition, chimney sweeping, etc.) - awareness of pollution from wood burning - mobilization of local professionals (charters, technical and collective communication activities, etc.)

<http://www.alpine-space.eu/projects/bb-clean>

This project is co-financed by the European Regional Development Fund through the Interreg Alpine Space programme

Title of financial instrument	National aid for individual wood heating
Responsible authority	Ministry of Ecological and Solidarity Transition
Contact details from responsible authority:	https://www.economie.gouv.fr/particuliers/aides-renovation-energetique
Overall objectives of the instrument	Tax and financial incentives for individuals to accelerate the energy renovation of the residential stock
Timeframe	31/12/2019 for tax incentives which are defined annually in each Finance Act
Specific objectives/priority areas	Works and investments concerning energy renovation: heating and cooling appliances, thermal insulation of dwellings The modernization of individual wood-burning appliances leads to a significant reduction in pollutant emissions, although it is often accompanied by an increase in wood-burning as a main objective: the national ambition for individual wood-burning is to maintain constant energy production in MWh while reducing emissions and heating more homes: this involves replacing old appliances with high-efficiency and lower emissions/KWh appliances (double reduction effect), improving fuel quality (actions towards professionals) and uses (actions towards individuals). The strong growth of wood pellet fuel is also a very good response to this ambition.

Specific Measures with financial impact

Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
Energy Transition Tax Credit (CITE)	Deduction from income tax of a portion of the expenses incurred in the main dwelling by the tenant or owner-occupier.	All households, taxable or not, without means test	30% on the amount including VAT of the device; The tax reduction is recovered in year n+1 of the works. Obligation to use a professional with EGR certification
Zero interest PTZ eco-loan https://www.service-public.fr/particuliers/vosdroits/F19905	finance the supply and installation, by a qualified EGM professional, of the materials and equipment necessary for the energy improvement of housing on condition that it achieves a high energy performance as attested by a thermal study by a design office (gain after consumption work in	Dwellings occupied as principal residence and built for more than 2 years. Occupant owners or lessors and co-owners in collective.	Amount from 7000 to 30000 €. Since March 1 st 2016, cumulation with ISCED possible without resource conditions Loan granted until 31.12.2021

<http://www.alpine-space.eu/projects/bb-clean>

This project is co-financed by the European Regional Development Fund through the Interreg Alpine Space programme

	primary energy > 35%)		
Energy Saving Certificate	Aid paid by obligated energy suppliers for energy saving work carried out by qualified EGM companies	All owners and tenants, primary and secondary residences. The aid may take the form of purchase vouchers or soft loans	System not very readable because many modalities and companies are not always well informed; can be complex to implement
VAT at reduced rate	Work to improve the energy quality of homes over two years old benefits from the 5.5% VAT rate	Professional invoices only, no self-construction	Immediate gain
ANAH's "Living Better" program	The National Housing Agency (ANAH) provides additional financial assistance to other assistance	Homeowners with modest and very modest incomes for energy renovation (boiler replacement, insulation...)	Coverage of 35 to 60% of the work according to energy savings and income level, with a work ceiling of €20,000 excluding VAT. Can be combined with CITE

Title of financial instrument	Regional aid for small and medium-sized collective wood-fired boilers (wood chips, pellets, logs)		
Responsible authority	Auvergne-Rhône-Alpes Region		
Contact details from responsible authority:	https://www.auvergnerhonealpes.fr/aide/99/289-appel-a-projets-bois-energie-environnement-energie.htm		
Overall objectives of the instrument	<p>The Auvergne-Rhône-Alpes Region wishes to encourage collective wood-burning projects:</p> <ul style="list-style-type: none"> - Small and medium powers with or without a heating network, - Supplied by local supply chains, - Energy and environmental performance (PM10 emission ceilings), - Ensuring the heat requirements of better insulated buildings 		
Timeframe	Continuous since 2017.		
Specific objectives/priority areas	Ambition projected until 2030 to support the objectives of SRADDET and SRB (regional biomass scheme) to increase heat production from wood energy by 42% and to create 1200 additional boiler rooms, half of which are less than 500 KW		
Specific Measures with financial impact			
Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects: <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
Title of the action	Investment aid for the works and project management after a feasibility study. See the rules downloadable from the website	Small to medium boiler rooms (Power: 30 to 500 KW and Heat production: less than 100 TOE)	Up to 40% of eligible investments

3.5 GERMANY

Title of financial instrument			
Responsible authority	KfW – Kreditanstalt für Wiederaufbau		
Contact details from responsible authority:	Address: Phone: E-mail: Web site: www.kfw.de		
Overall objectives of the instrument	KfW-Erneuerbare Energien im Programmteil 'Premium', Biomasseanlagen (Nr. 271. 281) (Förderkredit): Loans to increase energy efficiency and the production of thermal energy from renewable sources. Application for the program via normal private banks. With reference to biomass heating appliances, the replacement of an existing biomass or heating oil plant, except for a few exceptions, is incentivized.		
Timeframe	There is no deadline		
Specific objectives/priority areas	No priority area.		
Specific Measures with financial impact			
Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects - <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
Title of the action	Focussing on efficient wood-based heating systems For details see: https://www.kfw.de/Download-Center/F%C3%B6rderprogramm-(Inlandsf%C3%B6rderung)/PDF-Dokumente/6000002410-Merkblatt-271-281-272-282.pdf https://www.kfw.de/inlandsforderung/Privatpersonen/Bestandsimmobilie/ (basic infos in english available)	Companies, Private subjects, Governmental institutions	Loan with very attractive conditions (time and interest rate) that has to be reimbursed by 100%. Application via the local private bank. The investment can be 100% financed by this tool.

Title of financial instrument	
Responsible authority	KFW – Kreditanstalt für Wiederaufbau
Contact details from responsible authority:	Address: Phone: E-mail: Web site: www.kfw.de
Overall objectives of the instrument	KFW-Erneuerbare Energien im Programmteil 'Premium', Biomasseanlagen (Nr. 271. 281) (Tilgungszuschuss): Redemption payment grant for the increase in energy efficiency and for the production of thermal energy from renewable sources. All types of wood heating systems to replace existing low-efficient heatings
Timeframe	There is no deadline
Specific objectives/priority areas	No priority area.

Specific Measures with financial impact			
Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects <i>- how many funds, for whom, % of co-financing, timeframe, etc...</i>
Title of the action	Details can be found here: https://www.kfw.de/Download-Center/F%C3%B6rderprogramme-(Inlandsf%C3%B6rderung)/PDF-Dokumente/6000002410-Merkblatt-271-281-272-282.pdf https://www.kfw.de/inlandsfoerderung/Privatpersonen/Bestandsimmobilie/ (basic infos in english available)	<ol style="list-style-type: none"> 1. Companies, 2. Private subjects, 3. Governmental institutions 	For biomass appliances: <ol style="list-style-type: none"> 1) Support up to 100.000€ redemption payment grants 2) 50.000€ (up to 20€ per kW heating performance) depending on different efficiency factors like emissions 3) Bonus for very efficient heating systems 4) Bonus for an efficient heating buffer storage solution

Title of financial instrument	
Responsible authority	KfW – Kreditanstalt für Wiederaufbau
Contact details from responsible authority:	Address: Phone: E-mail: Web site: www.kfw.de
Overall objectives of the instrument	KfW - Energieeffizient Bauen und Sanieren – Energieeffizient Bauen und Sanieren - Zuschuss Baubegleitung (Nr. 431) (Zuschuss) – non-refundable grant for expert consulting for private households (focus) in energy efficiency and for the production of thermal energy from renewable sources.
Timeframe	There is no deadline
Specific objectives/priority areas	No priority area.

Specific Measures with financial impact			
Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
Title of the action	<p>Details can be found here: https://www.kfw.de/PDF/Download-Center/F%C3%B6rderprogramme-(Inlandsf%C3%B6rderung)/PDF-Dokumente/6000003901_M_431_ES_Baubegleitung.pdf https://www.kfw.de/inlandsfoerderung/Privatpersonen/Bestandsimmobilie/ (basic infos in english available)</p>	Private subjects, beneficiaries of specific other support programs	For biomass appliances: <ol style="list-style-type: none"> 50% of the consulting costs; up to 4.000€ per optimization investment as a non-refundable grant.

Title of financial instrument	
Responsible authority	KfW – Kreditanstalt für Wiederaufbau
Contact details from responsible authority:	Address: Phone: E-mail: Web site: www.kfw.de
Overall objectives of the instrument	KfW - Energieeffizient Sanieren Ergänzungskredit, Heizungsanlagen auf Basis erneuerbarer Energien (Nr. 167) (Förderkredit) Complemental loans for the increase of energy efficiency heating systems from renewable sources. With reference to biomass appliances, only the replacement of an existing biomass or heating oil plant, except for a few exceptions, is incentivized.
Timeframe	There is no deadline
Specific objectives/priority areas	No priority area.

Specific Measures with financial impact

Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects <i>- how many funds, for whom, % of co-financing, timeframe, etc...</i>
Title of the action	Focussing on efficient wood-based heating systems For details see: https://www.kfw.de/PDF/Download-Center/F%C3%B6rderprogramme-(Inlandsf%C3%B6rderung)/PDF-Dokumente/6000003615_M_167_EES_Ergaenzungskredit.pdf	<ol style="list-style-type: none"> 1. Companies, 2. Private subjects, 3. Governmental institutions 	<ol style="list-style-type: none"> 1) Loan with very attractive conditions (time and interest rate) that has to be reimbursed by 100%. 2) Application via the local private bank. 3) The investment can be 100% financed by this tool.

Title of financial instrument	
Responsible authority	Bundesministerium für Umwelt, Naturschutz Bau und Reaktorsicherheit (BMUB)
Contact details from responsible authority:	Bundesamt für Wirtschaft und Ausfuhrkontrolle (BAFA) Erneuerbare Energien Frankfurter Straße 29 - 35 65760 Eschborn Telefon: 06196/908-1625 Fax: 06196/908-1800 Internet: www.bafa.de
Overall objectives of the instrument	BAFA - Marktanreizprogramm Erneuerbare Energien: Biomasseanlagen (Zuschuss) Grant for the increase of energy efficiency heating systems from renewable sources. Focus on wood heating systems.
Timeframe	There is no deadline
Specific objectives/priority areas	No priority area.

Specific Measures with financial impact

Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
Title of the action	Focussing on efficient wood-based heating systems, For details see: http://www.bafa.de/DE/Energie/Heizen_mit_Erneuerbaren_Energien/Biomasse/biomasse_node.html	Companies, Private subjects, Governmental institutions	Grants up to 3.500€ per new installation (basis 80€ per KW heating performance). Non-refundable. Depending on specific technical factors of the new heating systems and only selected approaches (list available online)

Title of financial instrument	
Responsible authority	Bundesministerium für Umwelt, Naturschutz Bau und Reaktorsicherheit (BMUB)
Contact details from responsible authority:	Bundesamt für Wirtschaft und Ausfuhrkontrolle (BAFA) Erneuerbare Energien Frankfurter Straße 29 - 35 65760 Eschborn Telefon: 06196/908-1625 Fax: 06196/908-1800 Internet: www.bafa.de
Overall objectives of the instrument	BAFA - Marktanzreizprogramm Erneuerbare Energien: Biomasse, Innovationsförderung (Zuschuss) (Market incentive Program) Grant for the increase of energy efficiency heating systems from renewable sources. Focus on very innovative wood heating systems and particle reduction systems
Timeframe	There is no deadline
Specific objectives/priority areas	No priority area.

Specific Measures with financial impact

Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
Title of the action	Focussing on efficient wood-based heating systems, For details see: http://www.bafa.de/DE/Energie/Heizen_mit_Erneuerbaren_Energien/Biomasse/biomasse_node.html	<ol style="list-style-type: none"> 1) Companies, 2) private subjects, 3) contractors 	<ol style="list-style-type: none"> 1) Grant up to 5.250€ per installation (basis 80€ per KW heating performance) for particle reduction systems. 2) Non-refundable. 3) Depending on specific technical factors of the new heating systems and only selected approaches (list available online)

Title of financial instrument	
Responsible authority	Bundesministerium für Umwelt, Naturschutz Bau und Reaktorsicherheit (BMUB)
Contact details from responsible authority:	Bundesamt für Wirtschaft und Ausfuhrkontrolle (BAFA) Erneuerbare Energien Frankfurter Straße 29 - 35 65760 Eschborn Telefon: 06196/908-1625 Fax: 06196/908-1800 Internet: www.bafa.de
Overall objectives of the instrument	BAFA - Anreizprogramm Energieeffizienz (APEE) - Biomasseanlage / Wärmepumpe (Zuschuss) – Incentive Program Grant for consulting services on energy efficiency and innovative heating systems
Timeframe	There is no deadline
Specific objectives/priority areas	No priority area.

Specific Measures with financial impact

Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects – <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
Title of the action	All type of energy efficiency consulting For details see: http://www.bafa.de/DE/Energie/Energieberatung/Energieberatung_Wohngebaeude/energieberatung_wohngebaeude_node.html	private subjects	<ol style="list-style-type: none"> 1) Grant up to 60% (max 1.100€) of consulting costs. 2) Non-refundable. 3) Only for houses with more than three apartments.

Title of financial instrument			
Responsible authority	Bundesministerium für Wirtschaft und Technologie		
Contact details from responsible authority:	Verbraucherzentrale Telefon: 0800 809 802 400 (kostenfrei) Internet: www.verbraucherzentrale-energieberatung.de		
Overall objectives of the instrument	Energieberatung der Verbraucherzentralen Free consulting services in the context of energy efficiency checks (with different detail levels)		
Timeframe	There is no deadline		
Specific objectives/priority areas	No priority area.		
Specific Measures with financial impact			
Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
Title of the action	All type of energy efficiency consulting For details see: https://verbraucherzentrale-energieberatung.de/beratung/	private subjects	Basic consulting services of the “Verbraucherzentralen” (Information Centers on energy-consulting for the public) are free of charge.

Bavaria 1

Title of financial instrument			
Responsible authority		Bayern Labo	
Contact details from responsible authority:		BayernLabo Brienner Straße 18 80333 München E-Mail-Adresse wohnungsgesellschaften@bayernlabo.de Internet: www.wohnen.bayern.de	
Overall objectives of the instrument		Land Bayern - Bayerisches Modernisierungsprogramm (BayModR) modernization of existing buildings related to all efficiency aspects also wood heating systems related to KfW-support schemes with focus on Bavaria	
Timeframe		There is no deadline	
Specific objectives/priority areas		No priority area.	
Specific Measures with financial impact			
Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
Title of the action	For details see: https://bayernlabo.de/fileadmin/user_upload/Mietwohnraum/Bayerisches_Modernisierungsprogramm/BayModR_20180517_Richtlinien.pdf	private subjects	1) Loan up to 100% of the modernisation investments (min. 5.000€ investment costs per apartment), 2) very attractive conditions related to KfW-support Loan, 3) only for buildings with more than three apartments as rental apartments.

Bavaria 2

Title of financial instrument			
Responsible authority	Bayrisches Staatsministerium des Inneren		
Contact details from responsible authority:	Bayrisches Staatsministerium des Inneren Franz-Josef-Strauß-Ring 4 80539 München Telefon: 089/2192-01 Fax: 089/2192-12721 E-Mail-Adresse poststelle@stmi-obb.bayern.de Internet: www.wohnen.bayern.de		
Overall objectives of the instrument	Land Bayern - Förderung von Modernisierung von Mietwohnungen sowie von Pflegeplätzen in stationären Altenpflegeeinrichtungen (Förderkredit) modernization of existing buildings related to all efficiency aspects also wood heating systems		
Timeframe	There is no deadline		
Specific objectives/priority areas	No priority area.		
Specific Measures with financial impact			
Measure/Action:	Description of measure/action	Target group: <i>List and explain target groups</i>	Financial aspects <i>how many funds, for whom, % of co-financing, timeframe, etc...</i>
Title of the action	For details see: https://www.stmb.bayern.de/assets/stmi/wohnen/foerderung/iic1_modernisierungen_merkbl_baymod.pdf	private subjects	<ol style="list-style-type: none"> 1) Loan up to 100% of the modernisation investments (min. 5.000€ investment costs per apartment), 2) very attractive conditions, 3) only for buildings with more than three apartments as rental apartments.

4. References

[1] LIFE11/ENV/ES/584 AIRUSE. Testing and development of air quality mitigation measures in Southern Europe.

[2] Monforti-Ferrario, F, Belis C, Sustainable use of biomass in residential sector - A report prepared in support of the European Union Strategy for the Danube Region (EUSDR), EUR 29542 EN, Publications Office of the European Union, Luxembourg. 2018, ISBN 978-92-79-98348-1, doi:10.2760/908058, JRC113417.