

RECOVERY AND RESILIENCE FACILITY – STATE AID

Guiding template: District heating/cooling generation and distribution infrastructure

Link to European Flagships: Renovate and Power Up

Disclaimer: this is a working document drafted by the services of the European Commission for information purposes and it does not express an official position of the Commission on this issue, nor does it anticipate such a position. It is not intended to constitute a statement of the law and is without prejudice to the interpretation of the Treaty provisions on State aid by the Union Courts. In any case, the services of the Directorate General for Competition (DG Competition) are available to provide further guidance to Member States on the issues below in the context of their respective Recovery and Resilience Plans and amendments thereto.

I. Objective of the guiding template

1. The coronavirus pandemic has changed the economic outlook for the years to come in the European Union. Investments and reforms in the context of the Recovery and Resilience Facility (the “Facility”) are contributing to convergence and a sustainable economic recovery. Carrying out reforms and investing in the EU’s common priorities, notably green, digital and social resilience will help create jobs and sustainable growth, while modernising our economies, and allow the EU to recover in a balanced, forward-looking and sustained manner.
2. The Facility aims at mitigating the economic and social impact of the coronavirus pandemic and at making the EU economies and societies more sustainable, resilient and better prepared for the challenges and opportunities of the twin green and digital transitions. . The Facility is also at the heart of the implementation of the REPowerEU Plan,¹ the Commission’s response to the socio-economic hardships and global energy market disruption caused by Russia's invasion of Ukraine. Therefore, if Member States want to obtain additional financing for key investments and reforms that will help achieve the REPowerEU objectives, they must add a REPowerEU chapter to their national recovery and resilience plans.²
3. The objectives of REPowerEU are, amongst others, to increase the resilience, security and sustainability of the EU’s energy system through the needed decrease of dependence on fossil fuels and diversification of energy supplies at EU level, including by increasing the uptake of renewables, energy efficiency and energy storage capacity.
4. State aid rules apply in the framework of the Facility. Member States should therefore ensure that all investments comply with EU State aid rules and follow all regular procedures and rules³.

¹ Commission staff working document, REPowerEU Plan, COM(2022) 230 final, 18.5.2022

² See Regulation (EU) 2023/435 of the European Parliament and of the Council of 27 February 2023 amending Regulation (EU) 2021/241 as regards REPowerEU chapters in recovery and resilience plans and amending Regulations (EU) No 1303/2013, (EU) 2021/1060 and (EU) 2021/1755, and Directive 2003/87/EC, OJ L 63, 28.2.2023, p. 1.

³ See Commission staff working document - Guidance to Member States Recovery and Resilience Plans - Part 1, SWD(2021) 12 final, published 22.1.2021 (https://commission.europa.eu/document/7c55aadf-6b8d-4d9c-a930-bc7ef8656de1_en) and Commission Notice- Guidance on Recovery and Resilience Plans in the context of REPowerEU, 2023/C 80/01 published on 3 March 2023 (<https://eur-lex.europa.eu/legal->

5. With this guiding template, DG Competition aims at assisting Member States with the State aid elements of their recovery plans and the dedicated REPowerEU chapters, and to provide guidance on the State aid-related aspects of those investments which are expected to be most common.
6. The investments covered by this guiding template have been chosen in line with the European flagships of the Commission's Annual Sustainable Growth Strategy 2021⁴. The template has been updated because of its relevance for investments and reforms contributing to REPowerEU objectives.
7. The guiding template follows a uniform structure, providing sector-specific guidance as to when:
 - a. Instances in which the existence of State aid may be excluded, and therefore prior notification to the Commission is not necessary.
 - b. State aid would be involved but no notification is necessary, and specific rules may apply (in case of aid exempted from the notification obligation); and
 - c. State aid would be involved and a notification is necessary, with reference to the main applicable State aid rules.
8. The guiding template also contains 'boxes' with examples of the State aid assessment of the investments and reforms contained in the components published by the Commission,⁵ per flagship. The aim is merely illustrative, to provide additional clarifications to Member States on the State aid assessment contained in those components.

II. Description of the investment

9. This guiding template refers to investments in the construction, upgrade and operation of district heating systems, consisting of *heating and/or cooling generation facilities, thermal storage solutions and distribution networks* (both "primary" and "secondary" network of pipelines to supply heat to consumers). Reference to district heating is to be interpreted as district heating and/or cooling systems (DH/CS), depending on whether the networks supply heat or cooling jointly or separately.
10. In line with the *Renovate* flagship, district heating investments are needed to allow for modern, efficient district heating and cooling networks with minimum losses in communities supplying households and commercial users. In addition, under the *Power Up* flagship, development of district heating networks based on renewable energy and waste heat would help to switch from fossil fuels-based district heating systems to systems supplied locally from various local renewable and waste heat sources, increasing the share of renewable energy in the heating and cooling sector and helping reducing greenhouse gas (GHG) and other pollution.

content/EN/TXT/PDF/?uri=CELEX:52023XC0303(01)&from=EN). Also, the relevant public procurement rules must be respected, where applicable.

⁴ Communication from the Commission to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank — Annual Sustainable Growth Strategy 2021, COM/2020/575 final.

⁵ Available at https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en#example-of-component-of-reforms-and-investments.

11. Investments that are the object of this guiding template would typically relate to the construction, upgrade and operation of generation units using renewable energy including heat pumps, waste heat or high-efficiency cogeneration, investments in thermal storage solutions, or in the distribution network to reduce losses and increase efficiency, including through smart and digital solutions.

III. Instances in which the existence of State aid may be excluded

12. The following sections present a comprehensive, but not exhaustive, number of separate instances in which the application of State aid rules or the existence of State aid may be excluded. Given the cumulative nature of the criteria of Article 107(1) TFEU, if one of the following criteria is not met, the presence of State aid can be excluded and therefore there is no need to notify the measure to the Commission prior to its implementation.

A. No economic activity

13. Provision of district heating, both heat generation and supply, and the operation of the distribution network are normally economic activities, as heat services are offered on the market in exchange for remuneration through tariffs. The circumstance that the service is offered on a ‘non-profit’ basis (because revenues from tariffs are set administratively and do not enable covering all costs or earning a profit) cannot change the qualification of the activity as economic⁶, as the (district heating) service is offered on a market, in competition with other forms of heating solutions.
14. In specific instances, support for activities which are not of an economic nature, i.e. are not used for offering goods or services on the market, is not considered aid.
15. With regard to district heating networks, this is for example the case of direct support to public authorities for district heating systems exclusively for state-owned/public buildings in which no economic activities are conducted.
16. In such scenario, the upgrade/renovation of district heating solutions will not be deemed an economic activity provided that (i) the installation is used for self-consumption only (with the possibility to sell up to maximum 20% of the production of that specific heating installation to the grid or a third party), and (ii) the capacity of that installation has been dimensioned for self-consumption.⁷
17. Also, Member States may have in place measures to provide direct economic support for consumers in situation of “energy poverty”. Provided that such measures are targeted at users, not exercising any economic activity and in situation of “energy poverty”, and that such measures do not grant any indirect advantage to any heating provider, they shall in principle fall out of State aid rules.

B. No State resources

⁶ See also paragraph 9 of the Commission Notice on the notion of State aid as referred to in Article 107(1) of the Treaty on the Functioning of the European Union, OJ C 262, 19.7.2016, p. 1 (“Notice on the notion of State aid”).

⁷ For further details on whether an activity is or is not an economic activity, see the Notice on the notion of State aid. See, in particular Section 2, for example on health care and education, relevant in cases of district heating networks serving public entities/municipalities as well as schooling and health services.

18. Measures that do not involve the transfer of public resources⁸ exclude the existence of State aid⁹.
19. Despite this general principle, it appears unlikely that there would be no State resources in cases of support measures for district heating investments, both for generation and distribution network. It could however not be excluded that a Member State would render connection to district heating system mandatory for users, and/or oblige co-owners in a multi-apartment building (covered by the service) to pay part of the heat service, even in absence of an individual contract¹⁰. Should this be financed exclusively through private resources and not through a levy, and in absence of control of the State over the resources, such type of measures would typically not entail a transfer of State resources. Such measures would however need to comply with EU law on internal market, consumer protection as well as RED II, notably on the right of disconnection of district heating users in case of alternative sustainable heating systems¹¹.

See the State aid assessment of the additional examples of investments and reforms contained in the [component – Renovation wave aimed at enhancing energy and resource efficiency](#)

Reform 1: One-stop shops: *to address administrative barriers in providing permits, certification and to support households and businesses with legal, technical (including energy audits) and financial advice.*

Reform 4: Supportive legislative package for energy and resource efficiency in buildings: *To further incentivise energy efficiency measures in residential, commercial and public buildings, and social infrastructures with a particular focus on multi-apartment buildings, the national government will introduce revisions to the building legislation.*

See the State aid assessment of the additional examples of investments and reforms contained

⁸ The concept of ‘transfer of public resources’ covers many forms, such as direct grants, loans, guarantees, direct investment in the capital of companies and benefits in kind. A positive transfer of funds does not have to occur; foregoing State revenue is sufficient. In addition, the measure must be imputable to the State. See Notice on the notion of State aid, section 3. Note that funds under the Facility constitute State resources for the purposes of Article 107(1) TFEU.

⁹ The proposal for a Regulation of the European Parliament and of the Council establishing a Recovery and Resilience Facility (COM/2020/408 final) does not exclude the possibility for Member States to channel part of their non-repayable contribution from the RRF through the Renewable Energy Financing Mechanism (Commission Implementing Regulation (EU) 2020/1294 of 15 September 2020 on the Union renewable energy financing mechanism. OJ L 303, 17.9.2020, p. 1, ‘REFM’), established under the Governance Regulation. Moreover, the Guidance to Member States on recovery and resilience plans explicitly refers to this possibility (SWD (2020) 205 final. 17.9.2020, see page 14). If a Member State uses (part of) its non-repayable contribution to make an unconditional payment to the REFM, the amount paid enters the Union budget and is allocated by the REFM to specific projects selected by the Commission on the basis of a grant award procedure. Therefore, the Member State does not have control over the disbursement of the funds by the REFM, and the link between the Member State and the selection and allocation of the beneficiary of support is broken. Therefore, the support by the REFM using the funds received from the Member State would no longer be imputable to the State and would not constitute State aid. As a consequence, the contributions to projects that are financed through the REFM would not be subject to State aid rules.

¹⁰ For case-law on the compatibility with EU law for the possibility for MS to oblige owners of apartments in a multi-apartment building to pay part of the charges of the district heating service see Judgment of the Court of Justice of 5 December 2019, *EVN Bulgaria Toplofikatsia, Toplofikatsia Sofia*, C-708/17 and C-725/17, ECLI:EU:C:2019:1049.

¹¹ See Article 24 of RED II.

in the [component – Power Up](#)

Reform 2: Accelerating permitting of new renewables installations, including simplified procedures for re-powering: *This reform will be achieved through the revision of the national legislation governing the installation of renewables installation. While some of these actions contribute to the implementation of the revised Renewable Energy Directive (Directive (EU) 2018/2001), a number of them are also meant to address the specific national barriers identified, including through contacts with stakeholders. [...] In addition [...], procedures underpinning the permitting process will be made fully digital, and training courses will be provided for project holders. The country will also keep under review any additional needs for administrative, financial and human resources for permitting authorities at national, regional and local level, and take action if a need is identified to increase their capacities. [...] This measure has not been identified as raising concerns regarding State aid rules.*

C. No selectivity

20. Measures that are of general application and do not favour certain undertakings, or the production of certain goods, are not selective and do not constitute State aid .
21. This can be the case, for example, of a general reform of a tax or of the social security contributions under certain conditions.
22. However, this possibility appears difficult to conceive for the investments at stake, as support under this guiding template would typically be based on measures, either *ad hoc* or based on a scheme, which typically select beneficiaries, targeting undertakings providing district heating generation or operating the heat distribution network or energy-efficiency investments.

D. No advantage

23. Measures that do not entail an economic advantage exclude the existence of State aid. The presence of advantage needs to be examined at the level of the owner/developer of the infrastructure, as well as at the level of the operator and the end-user.

a. No economic advantage at the level of the owner/developer

24. If it is proven that the State acted under the same terms and conditions as a private investor in a comparable situation when providing the necessary funding for the development/acquisition or upgrade of a district heating distribution network, then State aid is not involved¹². This can be assessed on the basis of: (i) significant *pari passu* investments of private operators, i.e. investments made on the same terms and conditions (and therefore with the same level of risks and rewards) as the public authorities who are in a comparable situation¹³; and/or (ii) an *ex ante* sound business plan, preferably validated by external experts, demonstrating that the investment provides an adequate return for the investor(s), in line with the normal market return

¹² For a precedent case where a Member State re-acquired the ownership of the district heating system and this was qualified as not entailing State aid, see Commission decision of 15.4.2019 in case SA.52390 (2019/N) – Germany – *Reacquisition of the Hamburg District Heating Network*.

¹³ For more details, see the Notice on the notion of State aid, paragraphs 86 to 88.

that would be reasonably expected by operators on similar projects taking into account the level of risk and future expectations¹⁴.

25. Note, however, that the existence of consecutive State interventions concerning the same district heating network project might invalidate the conclusion that a similar measure would also have been undertaken by a market economy investor¹⁵.

b. No economic advantage at the level of the operator

26. Undertakings operating the aided infrastructure to provide services to end-users receive an advantage if the operation of the infrastructure provides them with an economic benefit that they would not have obtained under normal market conditions. This normally applies if what they pay for the right to exploit the district heating network is less than what they would have had to pay for a comparable infrastructure under normal market conditions. For instance, in cases where, under normal market conditions, operators would have to increase their tariffs/remuneration to a level not covered by demand, or would simply not enter the market in the first place, it is considered that the aid confers an advantage on operators by allowing them to offer their services.

i. Selection of operator through a tender or fees that are otherwise in compliance with the Market Economy Operator Principle

27. Where the operation of the district heating network is assigned **for a positive price** to an operator/concessionaire on the basis of a competitive, transparent, non-discriminatory and unconditional tender¹⁶ in line with the principles of the TFEU on public procurement¹⁷, an advantage can be excluded at the level of the operator. In such a case, it can be presumed that the fee the operator pays for the right to exploit the district heating network is in line with market conditions. This conclusion does **not apply** when the competitive bidding process only aims at allocating support to the operator and determining the level of support (negative price).
28. If the operator/concessionaire has not been selected through a tender in line with the above conditions, it may also be possible to establish that the fees paid by the operator/concessionaire are in line with normal market conditions through (i) benchmarking with comparable situations¹⁸, or (ii) on the basis of a generally-accepted standard assessment methodology¹⁹.

c. No economic advantage at the level of the end-user

29. If the operator of the district heating network has received State aid or if its resources constitute State resources, it is in a position to grant an economic advantage to the users of the infrastructure, if they are undertakings²⁰.

¹⁴ For more information see in this respect the Notice on the notion of State aid, chapter 4.2 and in particular paragraphs 101 to 105.

¹⁵ See in this respect also the Notice on the notion of State aid, paragraph 81.

¹⁶ As described in the Notice on the notion of State aid, paragraphs 89 to 94.

¹⁷ Provided that the appropriate selection criteria as set out in the Notice on the notion of State aid, paragraphs 95 and 96, have been used.

¹⁸ See the Notice on the notion of State aid, paragraphs 97 to 100.

¹⁹ See the Notice on the notion of State aid, paragraphs 101 to 105.

²⁰ See the Notice on the notion of State aid, paragraph 225.

30. An economic advantage at the level of the user(s) can be excluded if (i) the district heating network is not dedicated to the use of a specific user, (ii) all users enjoy equal and non-discriminatory access to the infrastructure, and (iii) the infrastructure pricing policy for users is established on market terms²¹.

E. No effect on trade between Member States and no distortion of competition

31. Where an aid measure strengthens the competitive position of the benefitting undertakings compared to that of actual or potential competitors that are not eligible for the aid, it is considered to have potentially distorting effects on competition.²²
32. Support for the construction or upgrade of district heating systems in principle threatens to distort competition with the European Union, given the competitive and liberalised context of energy markets across the EU.
33. Aid measures are considered capable of affecting trade between Member States where the aid strengthens the position of an undertaking as compared with other undertakings competing in intra-Union trade.²³ In principle, aid for the construction, upgrade or operation of district heating systems is capable of affecting trade between Member States, as it concerns a sector where undertakings from any Member State can operate.
34. However, in very specific circumstances described below, the Commission may find that an aid measure is unlikely to distort competition or affect trade between Member States, in particular in light of the limited amounts of aid. That said, the relatively small amount of aid or the relatively small size of the undertaking which receives it does not as such exclude the possibility that trade between Member States might be affected.²⁴

a. De minimis aid

35. The distortion of competition and effect on trade can be excluded in cases of very limited amounts of aid (“*de minimis* aid”). *De minimis* aid is not considered State aid, and therefore there is no need for prior approval from the Commission and Member States do not even have to inform the Commission of such aid.

²¹ See the Notice on the notion of State aid, paragraphs 225 to 228 and section 4.2. Paragraphs 226 to 228 present three scenarios in which an advantage to users can be excluded. First, users do not receive an advantage where the fees for use of the infrastructure have been set through a tender that meets all the relevant conditions set out in points 90 to 96. Second, where such specific evidence is not available, aid to users can be excluded where the terms and condition for use of the infrastructure are in line with those under which the use of comparable infrastructure is granted by comparable private operators in comparable situations (benchmarking), provided such a comparison is possible. Third, if none of the above assessment criteria can be applied, the fact that a transaction is in line with market conditions can be established on the basis of a generally accepted, standard assessment methodology. The Commission considers that the market economy operator test can be satisfied for public funding of open infrastructures not dedicated to any specific user(s) where their users incrementally contribute, from an ex ante viewpoint, to the profitability of the project/operator. This is the case where the operator of the infrastructure establishes commercial arrangements with individual users that allow covering all costs stemming from such arrangements, including a reasonable profit margin on the basis of sound medium-term prospect. This assessment should take into account all incremental revenues and expected incremental costs incurred by the operator in relation to the activity of the specific user.

²² Notice on the notion of State aid, paragraph 187.

²³ Notice on the notion of State aid, paragraph 190.

²⁴ Notice on the notion of State aid, paragraph 192.

36. Aid is considered to be *de minimis* if the total amount of aid granted per Member State to a single undertaking does not exceed EUR 200 000 over any period of three fiscal years and the other conditions laid down in the *de minimis* Regulation are respected²⁵. Notably, the aid must be “transparent” within the meaning of Article 4 of the *de minimis* Regulation (i.e. it must be possible to calculate precisely the gross grant equivalent of the aid *ex ante* without a risk assessment), the EUR 200 000 threshold must be respected in case of cumulation with any other public support granted to the same beneficiaries under the *de minimis* Regulation, and the cumulation rules set out in the *de minimis* Regulation must be complied with.

b. No potential effect on trade: purely local impact

37. There may be in principle instances of support measures that have a purely local impact and consequently have no effect on trade between Member States.

38. This could be the case if the support is granted directly to the district heating provider in a very limited area within a Member State and which is unlikely to attract customers or investors from other Member States. In this very exceptional situation – given the high degree of liberalisation in energy markets –, effect on trade could be excluded only if it can be foreseen that the measure will not have more than a marginal effect on the conditions of cross-border investments or establishments (i.e. if it is unlikely to have a material bearing on the decision of investors to establish an outlet in the relevant region/Member State). Evidence to demonstrate that there is no effect on trade could include data showing that there is only limited use of the infrastructure from outside the Member State and that cross-border investments in the relevant market are minimal or unlikely to be adversely affected.²⁶ This last circumstance is hard to show in cases of district heating networks, as well as for competing alternative heating systems, which are normally based on technological solutions capable of attracting participation of investors specialised in the energy sector.

c. No distortion of competition (legal or natural monopoly)

39. District heating generation is traditionally integrated and operated jointly with the distribution network by one single undertaking. However, based on sectorial legislation (RED II) and competition policy, district heating generation is increasingly managed separately from the distribution network.

40. In principle, district heating (heat) generation and distribution are market activities in competition with individual heating solutions for residential and commercial customers. While this holds true in all cases of fully integrated activity of both heat provision and distribution network, in some cases the operation of the heat distribution network may be subject to a special status, with significant consequences on the State aid treatment.

41. As regards investments for the upgrade of the distribution network (i.e. the heat pipelines), the Communication on the Sustainable Europe Investment Plan²⁷ (SEIP

²⁵ Commission Regulation (EU) No 1407/2013 of 18 December 2013 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to *de minimis* aid, OJ L352, 24.12.2013, p. 9.

²⁶ See the Notice on the notion of State aid, paragraph 197.

²⁷ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Sustainable Europe Investment Plan European Green Deal Investment Plan, 14.1.2020, COM(2020) 21 final.

Communication) clarified that “*support, which is limited to district heating distribution networks, can under certain circumstances be considered to fall outside of State aid control as an infrastructure measure which does not affect competition and trade*”.

42. This would in particular be the case when “*district heating networks are run in the same way as other energy infrastructure through separation from the heating generation, third-party access and regulated tariffs*”. This relates to situations where the heating distribution network is run as a separate activity from the district heating heat services. In such a case, in order not to distort competition and trade, heat distribution infrastructure would need to be operated by an entity in a situation of legal monopoly and to meet the following requirements:²⁸

- a) the construction and operation of the infrastructure is subject to a legal monopoly (established in compliance with EU law, and in particular with the Treaty rules on competition). This is the case where the district heating distribution network operator is legally the only entity entitled to make a certain type of investment and no other entity can operate an alternative network;
- b) the legal monopoly not only excludes competition on the market, but also for the market, in that it excludes any possible competitor to become the exclusive operator of the infrastructure in question;²⁹
- c) the service is not in competition with other services; and
- d) if the operator of the energy infrastructure is active in another (geographical or product) market that is open to competition, cross-subsidisation has to be excluded. This requires that separate accounts are used, costs and revenues are allocated in an appropriate way and public funding provided for the service subject to the legal monopoly cannot benefit other activities.

43. A similar scenario would occur in case of the district heating distribution network run in a situation of “natural monopoly” and in presence of the following simultaneous requirements:

- a) an infrastructure typically faces no direct competition, which would be the case where the distribution network of a district heating network cannot be replicated for economic reasons and hence where no operators other than the distribution network operator are involved;
- b) alternative financing in the network infrastructure, in addition to the distribution network financing is insignificant in the sector and Member State concerned; and
- c) the infrastructure is not designed to selectively favour a specific undertaking or sector but provides benefits for society at large, which is normally the case for district heating distribution networks, when operated by distinct entities as compared to the heating generation and supply service.

²⁸ See paragraphs 211-212 of the Notice on the notion of State aid as well as the analytical grid for Energy, sections II.1 and II.2. (https://ec.europa.eu/competition/state_aid/modernisation/grid_energy_en.pdf).

²⁹ In that regard, see also Case C-385/18 *Arriva Italia and Others* EU:C:2019:1121, paragraphs 57–58; Case C-659/17 *Azienda Napoletana Mobilità* EU:C:2019:633, paragraph. 38.

44. With regard to this last requirement, in order for the distribution network to be considered as a facility open to ‘users’ and not designed to selectively favour a specific undertaking or be dedicated to one single customer, the district heating network must be ‘open to access’ to heat providers. This can take place only in cases where the heat supply to final users – through the use of the distribution network – by more than one entity is technically and legally possible or when the company providing the heating service has been selected through a competitive process. In this sense, the qualification of the district heating distribution network as ‘infrastructure’ operated in condition of natural monopoly requires (at least potential) competition at the level of the activity of district heating generation or supply.
45. Furthermore, in order to prevent distortion of competition and cross-subsidisation of other activities, in the absence of internal market rules for the heating sector, local/national rules in place shall either prevent the distribution network operator from being active in other markets or require at least separate accounting between the infrastructure operation and the heating generation³⁰. In order to make sure that the distribution network is run genuinely as a facility open to users, in line with the SEIP Communication (see points ~~4136~~ and ~~42 above~~^{37 above}), normally – in analogy with internal market rules for the energy sector, notably gas or electricity – specific rules would need to be in place (mandating third party access, unbundling and regulated tariffs), beyond mere ‘separate accounting’.
46. While in the above cases support to district heating distribution infrastructure falls out of State aid rules (subject to specific conditions), any support to district heating generation activity would remain subject to State aid rules.

IV. Instances in which there is no need to notify for State aid clearance, but other requirements may apply

47. If a given investment meets the cumulative conditions of Article 107(1) TFEU and thus entails State aid, it may be considered compatible with the internal market and can be granted without notification in the following instances:
 - A. *Aid covered by an existing State aid scheme (conditions for no notification)*
48. If a Member State plans to grant State aid under an aid scheme already approved by Commission decision, it does not need to notify again the scheme to the Commission for approval and can directly provide the support to the beneficiary, as long as the conditions of the authorisation decision are complied with.
49. Moreover, any increase of up to 20% of the original budget of an aid scheme already approved by Commission decision is not considered an alteration to existing aid. If this is the only change to a scheme already authorised by the Commission, it does not need to be re-notified to the Commission for approval³¹.

³⁰ In line with paragraph 212 of the Notice on the notion of State aid.

³¹ In case of budget increases to already authorised schemes exceeding 20% and/or their prolongation up to 6 years, the so-called simplified notification procedure under Article 4 of the Implementing Regulation (Commission Regulation (EC) No 794/2004 of 21 April 2004 implementing Council Regulation (EC) No 659/1999 laying down detailed rules for the application of Article 93 of the EC Treaty, OJ L 140, 30.4.2004, p. 1) can be used, whereby the Commission aims to complete the assessment of notified State aid measures within one month.

50. In any event, full compliance with Regulation (EU) 2021/241 of the European Parliament and of the Council of 12 February 2021 establishing the Recovery and Resilience Facility³² should be ensured (see in particular Article 17(2)).

B. General Block Exemption Regulation (GBER)³³

51. In cases where the Commission has gained sufficient experience with a given kind of State aid, it may block exempt such State aids, i.e. the Member States do not have to notify them. They only have to inform the Commission thereof.

52. The GBER provisions on aid in the field of climate, environmental protection and energy recently underwent a targeted revision aimed at further facilitating support for green projects, without the need for prior approval from the Commission. An amending GBER text was endorsed by the Commission on 9 March 2023.³⁴ The amended GBER will apply as of the day following its publication in the Official Journal. However, once the amended GBER provisions enter into force, they will apply retroactively to individual aid granted before their entry into force. For existing aid measures, Member States would need to adapt any schemes to comply with the amended GBER within 6 months following its entry into force. For a full picture of the transitional provisions, please see Article 58 GBER. Subsequent references to the GBER refer to the GBER as amended in the endorsed text.

a. Investment aid for energy efficient district heating and cooling

53. Article 46 GBER on efficient district heating and cooling details the rules applicable to investments on the construction, extension or upgrade of district heating and/ or cooling systems. In addition, the general provisions of Chapter I must also be complied with in order for the measure to be covered by the GBER.

54. First of all, aid shall only be granted for investments in the construction, extension or upgrade of district heating and/or cooling systems that are or are to become energy efficient as defined in Article 2, point (41), of Directive 2012/27/EU. This provision specifies that in order to qualify as an efficient district heating and cooling system, the investment must meet the conditions set out in Article 2(41) of Directive 2012/27/EU (EED): a district heating or cooling system using at least 50% renewable energy, 50% waste heat, 75% cogenerated heat or 50% of a combination of such energy and heat.

55. Based on GBER, support is allowed for upgrading the distribution network, even if the overall district heating system is not yet fully energy-efficient, subject to the condition that additional upgrades which are subject to the aid to render the system “energy-efficient” commence within three years from the start of the works for the upgrade of the distribution network.

56. The rules on energy-efficient district heating typically cover investments on construction or upgrade of generation facilities based on the above-mentioned sources which enable the overall system to be or become energy-efficient, thus typically RES powered, including heat-pumps³⁵, using waste heat, or based on highly-efficient

³² OJ L 57, 18.2.2021, p. 17.

³³ Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty, OJ L 187, 26.6.2014, p. 1.

³⁴ The full text endorsed by the Commission is available here: https://competition-policy.ec.europa.eu/document/8d68e6c3-763a-41db-9e34-42f90bc5e892_en.

³⁵ Compliant with Annex VII of Directive 2018/2001.

cogeneration, also using waste^{36,37}. Investments for thermal storage solutions can also be supported.

57. Aid shall not be granted for the construction or upgrade of fossil fuel based generation facilities, except for natural gas. Aid for the construction or upgrade of natural gas based generation facilities may be granted only where compliance with the 2030 and 2050 climate targets is ensured in line with Annex 1, section 4.30 of Delegated Regulation (EU) 2022/1214.
58. Under GBER, aid for upgrades of storage and distribution networks that transmit heating and cooling generated based on fossil fuels may only be granted where all of the following conditions are met:
 - a. the distribution network is or becomes suitable for the transmission of heating or cooling generated from renewable energy sources and/or waste heat;
 - b. the upgrade does not result in an increased generation of energy from fossil fuels except for natural gas. In case of an upgrade to the storage or network distributing heating and cooling generated from natural gas, in as far as the upgrade results in an increased generation of energy from natural gas, those generation facilities need to be in compliance with the 2030 and 2050 climate targets, in line with Annex 1, section 4.31 of Delegated Regulation (EU) 2022/1214.
59. The threshold applying to investments to be covered by the GBER is maximum EUR 50 million per undertaking per project.
60. The eligible costs³⁸ shall be the total investment costs for the construction, expansion and refurbishment of the energy efficient district heating and/or cooling system.
61. The aid intensity cannot not exceed 30% of the eligible costs. The aid intensity may be increased by 20 percentage points for aid granted to small undertakings and by 10 percentage points for aid granted to medium-sized undertakings and by 15 percentage points for investments using only renewable energy sources, waste heat, or a combination of the two, including renewable cogeneration.
62. As an alternative to the above, the aid intensity may reach up to 100 % of the funding gap³⁹. The aid shall be limited to the minimum needed for carrying out the aided project

³⁶ For details on the characteristics of a “cogenerated heat” production plant and technical requirements in case of upgrade of existing plants, reference is to be done to the applicable EED provisions, notably Article 2(41) and (42) as well as Article 14 which requires that new cogeneration investments need to comply with “high-efficiency” cogeneration features. High-efficiency cogeneration means cogeneration which satisfies the definition of high efficiency cogeneration as set out in Article 2(34) of Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC. For high-efficiency cogeneration investments, not necessarily linked to district heating networks, Article 40 GBER is applicable.

³⁷ Aid for energy generation based on waste may be based either on waste that meets the definition of renewable energy sources or waste used to fuel installations that meet the definition of high-efficiency cogeneration. Waste used as input fuel must not circumvent the waste hierarchy principle as defined in Article 4, point (1), of Directive 2008/98/EC.

³⁸ Please note that the references to ‘eligible costs’ in this guiding template are to be understood exclusively for the purposes of State aid. Therefore, they have no bearing on whether a particular measure and its associated cost can be financed or not by the Facility.

³⁹ ‘funding gap’ means the net extra cost determined by the difference between the economic revenues and costs (including the investment and operation) of the aided project and those of the alternative project

or activity. This condition is fulfilled if the aid corresponds to the funding. A detailed assessment of the funding gap is not required if the aid amounts are determined through a competitive bidding process⁴⁰, because the latter provides a reliable estimate of the minimum aid required by potential beneficiaries.

63. In addition, if supported **investments on generation facilities** – within a district heating network – are based exclusively on **renewable energy sources**⁴¹, these measures may – in alternative to article 46 – be covered by other GBER rules, covering investment aid for renewable energy (Article 41 GBER) as well as Chapter I.

See the State aid assessment of the additional examples of investments and reforms contained in the [component – Power Up](#)

Investment 1: Supporting the development of district heating systems based on renewable energy and waste heat: *This measure will first of all support the necessary installations to produce and store the heat which will be used in district heating systems, based on renewable energy and waste sources, by providing financial support to investments; [...] the support will take the form of investment aid [...] investments may be covered by the General Block Exemption regulation for investment aid for renewable energy (Article 46) [...]. The existing national renewable energy support scheme has already been notified and complies with the State aid rules.*

V. Instances in which notifying for State aid clearance is necessary

64. If the measure constitutes State aid and does not meet the conditions allowing an exemption from notification, a notification to the Commission for State aid clearance is required under the Guidelines on State aid for climate, environmental protection and energy 2022⁴² (“CEEAG”). The aim of the present section is to assist Member States in identifying and providing the necessary and relevant information to the Commission in the context of pre-notifications and notifications, bearing in mind that the Commission will assess all State aid notifications received from Member States in the context of the Facility as a matter of priority.

A. Procedure for pre-notification and notification

which the aid beneficiary would credibly carry out in the absence of aid. To determine the funding gap, the Member State must quantify, for the factual scenario and a credible counterfactual scenario, all main costs and revenues, the estimated weighted average cost of capital (‘WACC’) of the beneficiaries to discount future cash flows, as well as the net present value (‘NPV’) for the factual and counterfactual scenarios, over the lifetime of the project. The typical net extra cost can be estimated as the difference between the NPV for the factual scenario and for the counterfactual scenario over the lifetime of the reference project. For investments in the distribution network, the counterfactual scenario is assumed to be no alternative investment (NPV=0).

⁴⁰ Please see point 49c CEEAG for the conditions to ensure the bidding process is competitive. Please note that a bidding process will only be competitive if there are sufficient different project promoters which can effectively compete with each other.

⁴¹ As defined in Article 2(109) energy produced by plants using only renewable energy sources, as well as the share in terms of calorific value of energy produced from renewable energy sources in hybrid plants which also use conventional energy sources. It includes renewable electricity used for filling storage systems, but excludes electricity produced as a result of storage systems.

⁴² Communication from the Commission – Guidelines on State aid for climate, environmental protection and energy 2022, OJ C 80, 8.2.2022, p. 1.

65. In case the planned investment entails State aid and is not exempt from notification, the Member State should, in compliance with Article 108(3) TFEU, proceed to notify the measure to the Commission for approval before implementation.
66. For measures that must be notified, the Commission is committed to assess and treat those cases as a matter of priority and to engage with national authorities early on, in order to address problems in ‘real time’ in the context of the preparation of their Recovery and Resilience Plans. Therefore, informal contacts and pre-notifications are encouraged as soon as possible.
67. The Commission aims to complete the assessment of notified State aid measures within six weeks of receiving complete notification from the Member State.

B. Relevant legal bases for compatibility with the Treaty

68. On the basis of Article 107(3)(c) TFEU, the Commission may consider compatible with the internal market State aid to facilitate the development of certain economic activities within the European Union, where such aid does not adversely affect trading conditions to an extent contrary to the common interest.
69. To assess whether State aid for district heating generation, thermal storage and distribution can be considered compatible with the internal market, the Commission analyses whether the design of the aid measure ensures that the positive effect of the aid on the development of the supported economic activity (positive condition) exceeds its potential negative effects on trade and competition (negative condition).
70. In its compatibility assessment, the Commission will check whether the conditions of Article 107(3)(c) TFEU in conjunction with the applicable relevant guidelines are met. In particular:
 - The aid measure needs to facilitate the development of economic activities and have an incentive effect without resulting in an infringement of relevant EU law affecting the compatibility test.
 - The aid measure must not unduly affect trading conditions to an extent contrary to the common interest. For those purposes the Commission will check whether the State intervention is needed, appropriate and proportionate and addresses a market failure to achieve the objectives pursued by the measure. The Commission will also verify that transparency of the aid is ensured. Together, these conditions ensure that the distortive effects of the aid are as far as possible limited.
 - The Commission will assess the negative effects of the aid measure in terms of distortions of competition and impact on trade between Member States against the common interest. In particular, the Commission will in this step not only consider the benefits of the aid for the beneficiary’s economic activity, but also take into account the positive effects of the aid for the community at large.
 - The Commission will finally balance the positive effects with the negative effects of the aid on competition and trade.
71. Support for investments in district heating systems (including generation facilities, thermal storage and the distribution network) is covered by the CEEAG. For support of investments in district heating systems exceeding EUR 50 million, a notification is needed to the Commission under section 4.10 of the CEEAG for the support of energy efficiency, in particular district heating and cooling.

72. In order for investments to be supported under the CEEAG, the district heating/cooling system needs to be energy efficient per the provisions of the Energy Efficiency Directive, as set out in Article 2, point (41) of Directive 2012/27/EU, or the Member State must commit to ensure that the aid beneficiary starts the works to reach that standard within three years following the upgrade works, as recalled by point 390 of the CEEAG.
73. **Energy-efficient district heating** systems typically cover investments on construction, upgrade and operation of the generation unit to use renewable energy, waste heat or highly-efficient cogeneration including thermal storage solutions, or the upgrade of the distribution network to reduce losses and increase efficiency, including through smart and digital solutions. Aid for energy generation based on waste may be found to be compatible under this section to the extent that it is limited to either waste that meets the definition of renewable energy sources or waste used to fuel installations that meet the definition of high-efficiency cogeneration, provided that it does not circumvent the waste hierarchy principle⁴³.
74. The Commission considers that State aid can contribute to addressing market failures by triggering the investment costs needed for the creation, extension or upgrade of efficient district heating and cooling systems. Operating costs should in general be paid for by heat consumers, and aid for these costs should therefore not generally be required. Where a Member State demonstrates that operating costs cannot be passed on to heat consumers without undermining environmental protection, operating aid for heat and cooling generation may be found compatible insofar as the net extra operating costs (as compared to a counterfactual scenario) contribute to the realisation of environmental benefits (such as reduction of CO₂ and other pollution as compared to alternative heating solutions).
75. Proportionality of the aid is to be assessed on the basis of the funding gap principle as set out in points 48, 51, and 52 of the CEEAG. Eligible costs consist of the funding gap, which based on point 48 of the CEEAG is to be calculated as the difference between the economic revenues and costs (including the investment and operation) of the aided project and those of the alternative project which the aid beneficiary would credibly carry out in the absence of aid (the counterfactual scenario). For the construction, upgrade and operation of distribution networks, as set out in point 52, the counterfactual scenario would be the situation in which the project would not take place. Support measures may go up to 100% of the funding gap.
76. The Commission considers that the support to the upgrade, construction or operation of district heating and cooling systems which rely on the most polluting fossil fuels such as coal, lignite, oil and diesel, have negative consequences on competition and trade which are unlikely to be offset, unless the conditions set in point 396 of the CEEAG are cumulatively fulfilled.
77. Finally, for investments in or operation based on natural gas (which are better detailed in point 397 of the CEEAG) that may reduce greenhouse gas emissions in the short term but aggravate negative environmental externalities in the longer term, Member States must explain how they will ensure that the aid contributes to achieving the Union's 2030 climate target and 2050 climate neutrality target and, in particular, how a

⁴³ The waste hierarchy consists of (a) prevention, (b) preparing for re-use, (c) recycling, (d) other recovery, for instance energy recovery, and (e) disposal. See Article 4, point (1), of Directive 2008/98/EC.

lock-in of the gas-fired energy generation will be avoided and how it does not displace investments into cleaner alternatives that are already available on the market.

See the State aid assessment of the additional examples of investments and reforms contained in the [component – Power Up](#)

Investment 1: Supporting the development of district heating systems based on renewable energy and waste heat: *This measure will first of all support the necessary installations to produce and store the heat which will be used in district heating systems, based on renewable energy and waste sources, by providing financial support to investments; [...] the support will take the form of investment aid [...] The country will notify support schemes for renewable energy investment aid, for district heating, generation and network, and for waste heat recovery, whenever the aid thresholds are higher than those foreseen in Article 4 of the General Block Exemption regulation, pursuant to either section 4.1 (for investment aid for renewable energy sources), 4.10 (district heating and waste heat recovery) of the Climate, Environmental protection and Energy Guidelines.*

VI. References

- Commission Notice on the notion of State aid as referred to in Article 107(1) of the Treaty on the Functioning of the European Union, OJ C 262, 19.7.2016, p. 1.
- Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty, OJ L 187, 26.6.2014, p. 1.
- Commission Decision 2012/21/EU of 20 December 2011 on the application of Article 106(2) of the Treaty on the Functioning of the European Union to State aid in the form of public service compensation granted to certain undertakings entrusted with the operation of services of general economic interest, OJ L 7, 11.1.2012, p. 3.
- Communication from the Commission on the application of the European Union State aid rules to compensation granted for the provision of services of general economic interest, OJ C 8, 11.1.2012, p. 4.
- Communication from the Commission, European Union framework for State aid in the form of public service compensation (2011), OJ C8, 11.1.2012, p. 15.
- Commission Regulation No 360/2012 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to de minimis aid granted to undertakings providing services of general economic interest, OJ L 114, 26.4.2012, p. 8.
- Commission Regulation (EU) No 1407/2013 of 18 December 2013 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to de minimis aid, OJ L 352, 24.12.2013, p. 1.
- Communication from the Commission – Guidelines on State aid for climate, environmental protection and energy 2022, OJ C 80, 8.2.2022, p. 1.
- Council Regulation (EU) 2015/1589 of 13 July 2015 laying down detailed rules for the application of Article 108 of the Treaty on the Functioning of the European Union, OJ L 248, 24.9.2015, p. 9.
- Guidelines on regional State aid for 2014-2020, OJ C209, 23.7.2013, p.1.

- Guidelines on regional State aid, OJ C 153, 29.4.2021, p. 1.