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ANNEX 13

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Approval of the content of the draft Commission Notice providing guidance on new or substantially modified provisions of the recast Energy Performance of Buildings Directive (EU) 2024/1275

Life-cycle global warming potential of new buildings (Article 7(2) and (5))

TABLE OF CONTENTS

1.	General consideration.....	2
2.	Relevant legal provisions	2
3.	Drafting the national roadmap	3
3.1.	Step 0 – General considerations on the legal framework.....	4
3.1.1.	Timeline for setting the limit values	4
3.1.2.	Compliance with limit values.....	4
3.1.3.	Defining roles and responsibilities.....	5
3.2.	Step 1 – Methodology and environmental data.....	5
3.2.1.	Step 1a – Methodology	5
3.2.2.	Step 1b – Environmental data	5
3.3.	Step 2 – Collecting building life-cycle GWP data	6
3.3.1.	Step 2a – Building stock	9
3.3.2.	Step 2b – Raw building data	10
3.3.3.	Step 2c - Life-cycle GWP calculations of buildings	11
3.4.	Step 3 – Analysis of life-cycle GWP building data	11
3.5.	Step 4 – Setting limit values.....	12
3.6.	Recommended timeline.....	14
4.	Common roadmap template	14

ANNEX 13 OF 13

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Commission Notice providing guidance on new or substantially modified provisions of the recast Energy Performance of Buildings Directive (EU) 2024/1275

Life-cycle global warming potential of new buildings (Article 7(2) and (5))

1. GENERAL CONSIDERATION

The recast Energy Performance of Buildings Directive (the ‘recast EPBD’)¹ supports the 2050 vision for a decarbonised building stock, which goes beyond the current focus on operational greenhouse gas emissions. It aims to reduce a building’s overall contribution to greenhouse gas emissions through the whole life cycle², supported by measures including better design and more sustainable choice of materials. According to Article 7(2), Member States must ensure that the life-cycle GWP is calculated and disclosed in the energy performance certificate of new buildings (as of 2028 for large new buildings and as of 2030 for all new buildings). Article 7(5) requires Member States to draw up national roadmaps by 1 January 2027 on the introduction of limit values on the life-cycle GWP of all new buildings.

2. RELEVANT LEGAL PROVISIONS

As defined in Article 2(25), the life-cycle GWP of a building measures the GWP contributions of a building along during its full life cycle.

Calculating and disclosing the life-cycle GWP in an energy performance certificate of the building³ is mandatory under Article 7(2) for all new buildings with a useful floor area larger than 1000 m² from 1 January 2028, and for all new buildings from 1 January 2030. The categories of buildings which Member States exclude from the obligation to have an energy performance certificate (as permitted by Article 20(6)) may also be exempt from the obligation to calculate the life-cycle GWP.

As provided for in Article 7(3), a delegated act will be adopted by the Commission by 31 December 2025 to amend Annex III to set out an EU framework for the national calculation of life-cycle GWP with a view to achieving climate neutrality.

According to the first paragraph of Article 7(5), by 1 January 2027 Member States must publish and submit to the Commission a roadmap for introducing limit values for the life-cycle GWP of new buildings. Member States have to set targets for new buildings from 2030, that feature a progressive downward trend, i.e. the targets must be understood as a series of limit values from 2030 with a lower limit value each time (i.e. in 2033, in 2036, etc.). If relevant, the Member States adapt these limit values to different climatic zones and building typologies. When setting the limit values, Member States can take into account the readiness of the market while encouraging the decarbonisation of the construction sector as soon as possible. As mentioned in the second paragraph of Article 7(5), Member States must set these limit values in line with the EU’s objective of achieving climate neutrality. No limit values are required for new buildings exempted from the GWP calculation obligation.

As provided for in Article 7(5), Member State must publish and submit a roadmap to the Commission by 1 January 2027. It may be very technically challenging for some Member States to directly set the actual numerical value of the limit values in this national roadmap by

¹ [Directive \(EU\) 2024/1275](#)

² See definition of ‘whole-life-cycle greenhouse gas emissions’ in Article 2(24).

³ See definition of ‘building’ in Article 2(1).

that date. However, they must detail how the limit values will be introduced and what the ambition levels are. The actual numerical limit values can be set later in the national legislation at the earliest possible date, but they must be in force by 1 January 2030 at the latest.

Timeline	Details
1 January 2027	Article 7(5) requires Member States to submit a roadmap to the Commission by 1 January 2027. The roadmap should describe at least the process and how Member States want to apply limit values. This does not mean that the actual numerical values have to be set by 1 January 2027, but Member States must as a minimum set a clear ambition level and timeline and set out in detail how the limit values will be set and then applied.
1 January 2030	The first limit values must be in place by 2030 at the latest for all new buildings, meaning they need to be set beforehand, taking into account the preparations needed for inclusion in national regulation and by people involved in construction, such as project designers.

3. DRAFTING THE NATIONAL ROADMAP

As defined in Article 2(25), the life-cycle GWP of a building measures the GWP contributions of a building during its full life cycle.

Figure 1 sets out the recommended steps to be taken by the Member States to write their national roadmap. These steps are based on experience and inputs from experts and some Member States that have already adopted national regulation in this area. These Member States have developed and implemented aspects such as official national methodologies, product environmental data and limit values. If their current measures fully meet the requirements laid down by the Directive, they could simply report their actions using the templates provided in this document, see Section. If they only partially meet the requirements of the recast EPBD, the national measures must be brought into alignment. Checking the recommended process will identify whether national regulations need any adjustments.

Each step will be discussed in more detail below. As some of the steps could take a lot of time, fast-track routes are proposed in some cases to help all Member States comply with the Directive's objective by 2030, especially those who otherwise are unsure of being able to follow the full process. However, the fast-track route is an initial short-cut and Member State will eventually need to move to a full national process at the earliest opportunity. Any Member States using the initial fast-track must detail in their roadmap the timeline they will follow for any such later adjustments.

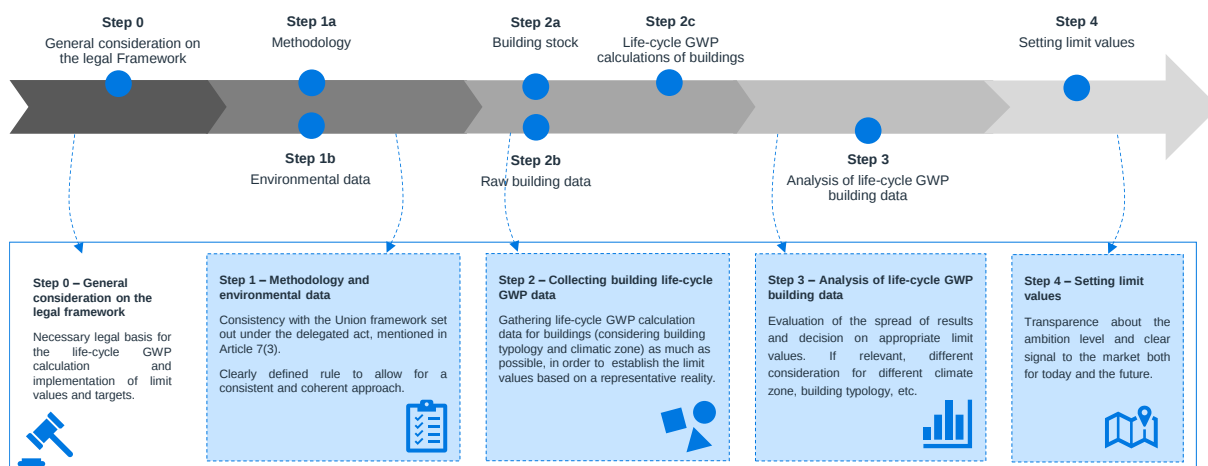


Figure 1. Steps for setting limit values for the life-cycle GWP of buildings at national level.

3.1. Step 0 – General considerations on the legal framework

The whole process (steps 1-4) is underpinned by the general national legal framework for the calculation of GWP in line with Article 7(2) (step 0), which is the basis for setting limit values at Member State level. The legal framework for GWP calculation must be in place by May 2026 to comply with the transposition deadline of the recast EPBD. Other legal frameworks may be developed and evolve in parallel with the other steps in the process. A clear legal framework is essential for outlining procedures, defining roles and responsibilities, and for giving a consistent interpretation of the terms and meaning of the EPBD legal text.

When preparing their roadmap for publication by 1 January 2027, Member States should consider at least the elements described below and may report them as step 0 in their national roadmap.

When establishing and implementing the national roadmap, Member States are highly encouraged to consider coordination and cooperation among different countries to reduce the fragmentation of the market. Besides this document, Member States should also consider other relevant documents addressing the life-cycle greenhouse gas emissions associated with the buildings and construction sector, including the European Commission Staff Working Document on the decarbonisation of buildings when available.

3.1.1. Timeline for setting the limit values

Article 7(5) requires Member States to publish a national roadmap and submit it to the Commission by 1 January 2027 at the latest. The national roadmap does not necessarily need to set any fixed limit values. Limit values can be defined later in national regulation. However, the first limit values must be in force no later than 1 January 2030.

3.1.2. Compliance with limit values

The aim of the recast EPBD is to consider the whole-life-cycle emissions of buildings, starting with new buildings, to encourage better design and better choices of material. Once a product or a material has been used for the construction of a building, its emissions have already occurred, so the life-cycle GWP has to be estimated before the start of the construction work.

The compliance with the limit values must be confirmed at least at the ‘as-built’ stage. Member States should also clearly define the responsibility of the economic actors involved to comply with limit values to give the visibility to the sector.

3.1.3. *Defining roles and responsibilities*

Implementing the GWP calculations and limit values could involve different actors, depending on the legislative context in each Member State. Member States should define the different roles and responsibilities as soon as possible so that those involved can be prepared. For example, it is quite typical for the regional or local authorities to handle practical implementation such as issuing building permits and controlling building quality. Member States could therefore decide that the control and verification of the calculation and documentation will happen at this same level. Member States could also decide that the requirements for life-cycle GWP and compliance with limit values should have a different control system than other building requirements.

Member States should clearly define the role of the private sector. This should be done as soon as possible, so that it is clear who is responsible for: calculating the value; submitting the calculated value from 2028; and complying with the limit values as of 2030. Member States might at some point need support from research and science centres, for issues such as tool development, databases management, and data gathering and analysis. Member States should have a long-term perspective over who handles the databases on construction-product environmental data and building data.

3.2. **Step 1 – Methodology and environmental data**

Step 1 is the fundamental step for setting limit values, consisting of two sub-steps, step 1a setting out the calculation methodology, and step 1b defining the environmental data for the calculation (see Figure 1). It is important to have these steps in place, to ensure the right understanding and ambition of the limit values. Both sub-steps need to be initiated as soon as possible and can be worked on in parallel. Step 2 cannot be finalised before step 1 is finished, but step 2a and 2b can run in parallel with step 1.

3.2.1. *Step 1a – Methodology*

The definition of the calculation methodology (step 1a) must be consistent with the provision in Article 7(2). In accordance with Article 7(3), by 31 December 2025, the Commission will adopt a delegated act to set out an EU framework for national calculations of life-cycle GWP.

The scope of life-cycle stage or building components covered by the limit values can be more selective than the scope required for the calculation. For example, a building's life-cycle can be split into stages (A, B, C, D) and sub-stages or modules (A1, A2, etc.). The scope of the life-cycle stages required for the calculation according to Article 7(2) needs to follow the minimum requirements set out in the delegated act. This information is particularly useful in giving the designer and project owner a clear understanding of emission sources. However, the Member States can adjust the scope of life-cycles stages or modules covered by the limit values for their national regulation. See section 'Step 4 – Setting limit values' for more discussion on the scope of life-cycle stages or building components covered by the limit values.

3.2.2. *Step 1b – Environmental data*

The life-cycle GWP calculation at the building level requires data inventories for products and other relevant environmental data. Where available, the construction-product data issued under the Construction Products Regulation must be used.

In addition, Member States should adopt environmental generic data⁴ and default values⁵ for products and processes so that GWP calculation is possible when project-specific data or

⁴ Data that is not for a specific product or project and calculated in accordance with EN 15804 or compatible standards for a group of products for a country or region.

product-specific data is not available or to simplify the calculation. Generic data and default values are also needed especially to fill the data gap when specific production information is unknown. Beside the data related to products, other types of input data will be necessary to carry out the building assessment, such as environmental data for energy carriers and processes like activities on the construction site.

Before creating a new national framework for environmental data, Member States may consider existing frameworks including databases, generic data, default value data, etc., for inspiration or collaboration if relevant. If a national system is in place, the environmental database for products and processes will require continuous maintenance and updates due to sector development. In that case, as mentioned previously, Member States should think strategically about the role and responsibility of any actors involved.

When available, the data calculated in accordance with Regulation (EU) 2024/3110⁶ (previously Regulation (EU) No 305/2011⁷) has to be used for specific construction products. If compatible, data on specific products calculated in accordance with product regulation derived from Directive 2009/125/EC, Regulation (EU) 2024/1781⁸ and/or from Regulation (EU) /2017/1369⁹ should also be used when available. Any platform or tool for GWP calculation should be developed with these requirements taken into account and designed to be readily adaptable to the availability of such data.

When combining data from different sources, Member States may consider include in their national roadmaps the measures they deem necessary to achieve consistency for the life-cycle GWP calculation at building level.

Fast-track for step 1

Member States that currently have no data and methodology in place, can work together with neighbouring countries or other partners. For example, before starting to develop national generic data, Denmark used the data available in the German product database (Ökobaudat). This fast-track option helped Denmark to get started quickly with the calculations, but it will take more time later on, since changing the generic database will impact building-level assessments. Its effects need to be considered in the limit values.

Another case study to be considered is the collaboration on database development between Sweden and Finland.

3.3. Step 2 – Collecting building life-cycle GWP data

Step 2 may well be the most time-consuming step, consisting of three sub-steps. The aim of this step is to gather data from actual building projects to set limit values. The sub-steps are:

- Step 2a: gather information on the building stock;
- Step 2b: gather raw building data, like bill of materials etc., for representative building typologies;
- Step 2c: conduct actual life-cycle GWP calculations of the building cases according to the methodology of the national legislation (step 1).

⁵ Environmental data calculated in accordance with EN 15804 or compatible standards, used to fill data gaps, where no other data sources are available or to simplify the calculation.

⁶ OJ L, 2024/3110, 18.12.2024.

⁷ OJ L 88, 4.4.2011.

⁸ OJ L, 2024/1781, 28.6.2024.

⁹ OJ L 198, 28.7.2017.

Steps 2a and 2b can be started straight away (and run in parallel to step 1). However, step 2c can only be finalised when step 1, step 2a and step 2b have been finalised. The detail and quality of these steps will affect the execution and the quality of step 2c.

Besides the steps presented below, Member States may also consider the continuous collection of life-cycle GWP data for new buildings, as set out in Article 7(2), for the purpose of adjusting the limit values. Indeed, as of January 2028, life-cycle GWP calculations will be required for new buildings with a useful floor area larger than 1 000 m². The calculation will be mandatory for all new buildings from 2030 onwards. The calculated GWP values contained in the energy performance certificates will be gathered in a national database for energy performance of buildings in accordance with Article 22. In addition, for the purpose of setting and adjusting limit values, Member States are encouraged to consider using a standard building document for more comprehensive building data collection at national level. For example, the standard building document could contain the information below:

Reporting information	Description	Example
A short description of the building in free text	The potential to highlight any unique features of the building project that might be relevant when assessing the life-cycle GWP result. This should also be associated with a unique identifier to help identify specific assessments from national databases when needed. This requires a clear description of the technical and functional requirements and characteristics of the building. Member States may consider including any relevant information, including criteria set out in the Level(s) common EU framework.	– Building/project ID – Heat pump – Major materials used, e.g. load bearing structure is concrete – Flat roof – Information on on-site energy consumption – Energy consumption
Building typology	So that the national database can be filtered by building typology, preferable also the type and pattern of use and the number of users.	Single-family house, for 3-4 users.
Type of assessment	A design stage assessment or an as-built type assessment.	As-built assessment/assessment here
Year of assessment	To assess trends over time.	2030
Useful floor area, for the life-cycle GWP calculation	To have transparency of the life-cycle GWP results. The area should be based on a national definition.	The area used for this calculation is 152 m ² , where the calculation for the area is followed as described in the national methodology.

Other relevant floor area information	So that the national database can be used for analysis across Member States; to see if there are any trends related to this (e.g. larger buildings possibly having lower per m ² life-cycle GWP)	Reference floor area: 130 m ² Gross floor area: 160 m ² Heated floor area: 110 m ²
Number of floors	To be able to analyse data to see if there is any carbon premium on higher buildings, for example, related to foundations or the larger relative share of space that might be occupied by structural elements and vertical circulation areas.	A single-family house with a ground floor, and a first floor.
Country	To allow for analysis of data at European level.	Country: [...]
Region	To allow for analysis of data on a regional basis.	Region: [...]
Latitude, longitude	Approximate latitude and longitude to see if there are any significant impact	Latitude: [...] Longitude: [...]
Altitude	Approximate altitude to see if there is any notable trend caused by this variable for similar building typologies.	Altitude: [...]
Life-cycle GWP impacts	Reporting of life-cycle GWP results with maximum details	GWP impact (kg CO ₂ /m ²) for each sub life-cycle stages or modules, e.g. A1-A3, A4, A5, B1, B2, B4, B6, C1, C2, C3, C4, D1, D2, etc.
Carbon storage in or on buildings	Relevant indicator for carbon storage in or on buildings in accordance with Regulation (EU) 2024/3012 ¹⁰	Biogenic carbon content (kgC)
Relevant metric reflecting the data quality of the assessment	Metric reflecting the ratio between project-specific and product-specific data, as compared to average data, generic data, and default values.	
Data reference	To declare what emission data is	Data as defined in the

¹⁰ OJ L, 2024/3012, 6.12.2024

	used, both on product level (specifying if it is generic data, default values, EPDs, CPR etc.,) with a link to the operational emission data, and emission data for transport, materials etc.	national methodology is used. Which data exactly is used, can be seen in the calculation file.
Special specification compared to the EU framework	Describe if any special specification is used for the calculation for the transparency of the results.	
Building system scenarios for operational energy	Describe which scenario is applied for building integrated photo voltaic and/or on-site generated and exported energy and refer to which Approach the national method describes (see delegated act on EU framework for national calculations of life-cycle GWP referred to in Article 7(3)).	Approach A is required in the national methodology, and also used in this calculation.
Climate zone	Optional: Only if Member State decides to define these in more detail than default climate zones.	Climate zone: [...]
Soil class	Optional: Only if Member States have important differences in soil classes and want to be able to see how this affects results for total life-cycle GWP as well as for foundations.	Soil class: [...]
Other relevant information		[...]

To simplify the process of data collection, Member States are encouraged to consider using a machine-readable format document.

3.3.1. Step 2a – Building stock

Member States should begin by analysing their respective building stocks, to identify the most common building types and to establish the sample size needed to statistically represent the national building stock. It is essential that the buildings chosen to set limit values accurately reflect the types of buildings commonly constructed within the Member State, ensuring that these limit values are realistic and appropriate to local conditions. The reliability of data depends on how closely the selected cases represent the actual building stock of newly constructed buildings in the Member State. Achieving good representativeness requires a thorough understanding of the building stock.

To understand their building stock, Member States can consider, for example, national database for the energy performance of buildings¹¹, EU Building Stock Observatory data, as well as other databases and research projects. Member States should consider the available information in their national building renovation plan, the national database for the energy performance of buildings as well as any analysis already undertaken for the purposes of Article 9 of recast EPBD. Additional information about representative building typologies could also be obtained through consultation with researchers, experts and stakeholders¹². The representativeness of the building stock should cover different factors, e.g. building typology, climatic zone, construction method, size of building, main building material, etc. Member States may exclude from this analysis buildings exempted from the GWP calculation obligation (as permitted by the regulation according to Article 20(6)). Member States may also decide to prioritise the analysis of the most recently built buildings. After a number of specific building types are identified and respective high-quality data is gathered, the number of studied cases can be multiplied by applying variations to each of those specific building type, see step 2b.

Member States are encouraged to consider factors such as location and temperature when collecting case data (step 2) and conducting analysis (step 3) to determine if there is a need to differentiate limit values based on climatic zones or their specific geography. In some areas, factors related to building location, such as differences in ground conditions, seismic activity, groundwater levels, proximity to the coast, and other environmental factors, could have a major impact on a building's life-cycle GWP.

3.3.2. Step 2b – Raw building data

This sub-step is about gathering information needed for the life-cycle GWP calculation in the step 2c from recently built buildings. Step 2b is a crucial part of the process and can be time consuming. To accelerate the process, Member States can begin to gather these raw input data on buildings even before progress has been made with step 1. It is recommended that data collected at building level include at least:

- Bill of materials (BOM) including both material type and amount, normally held by construction contractors and engineers and which can be extractable from building information models (BIM) if available;
- Floor area: available from public records, technical drawings and BIMs;
- Energy performance certificate (if available).

Preparing and curating BOM information may take a lot of effort to have consistent and comparable case studies. When available, the BOM information can be compared and organised into a hierarchy similar to that described in Level(s) to ensure its completeness and to have it 'prepared' as input for life-cycle GWP calculation as soon as the calculation method and databases are available.

There are different approaches to gathering robust data on buildings. Two approaches are presented below as examples, and Member States should indicate in the national roadmap the adopted approach at the national level.

Approach I: Case collection

¹¹ See Article 22 for the databases for the energy performance of buildings.

¹² For example, the Commission study 'Analysis of GHG emissions and removals of EU buildings and construction' has modelled the whole life cycle emissions of the building stock at national level and EU level. See <https://c.ramboll.com/life-cycle-emissions-of-eu-building-and-construction>.

The more buildings covered, the more robust and better informed any decisions on future limits and targets, as well as any adjustment for different building typologies or climate zones will be. Member States are advised to carefully select at least a limited number of highly representative buildings in different categories, e.g. single-family houses (detached, semi-detached, terraced, etc.), multi-family houses (i.e. apartment blocks), office buildings, retail units, etc. The selection of these buildings should be well documented and with sufficient numbers to represent the building stock in the context of each Member State. If available, Member States may decide to focus on the most recently built buildings or credible building projects. Member States should indicate in their national roadmaps the number of building cases they expect to collect in their respective countries.

Approach II: Variations in generic buildings

Another possibility is to create a set of generic buildings, representing typical construction methods, and covering different building typologies. The generic buildings could be adapted to different variations in materials for facades, form of roofs, etc. This can also help in getting a better understanding of the impact of different building parts on GWP.

Experience from Member States

Some Member States such as Denmark and France worked with voluntary systems before adding life-cycle GWP obligations to their national regulation. These voluntary systems have helped to gather data from participating projects including building information and life-cycle GWP assessment. These voluntary systems can be identical to or can be adjusted to the future obligation in the regulation. The Netherlands is currently implementing a voluntary system to extend the scope of modules. This approach allows them to gain experience on a voluntary basis before transitioning to mandatory requirements.

3.3.3. Step 2c - Life-cycle GWP calculations of buildings

This step focuses on the assessment of life-cycle GWP data of real buildings. These buildings should have been built as recently as possible, i.e. within the last two or three years. Data will be compiled to form the basis for the subsequent analyses in step 3 and decisions on limits and targets in step 4.

To perform the life-cycle GWP calculations, environmental data from step 1b are connected to real building data from step 2b, following the calculation methodology set out in step 1a. It is strongly recommended that the data obtained are collected in a digital case bank containing single unit record data for each building, so that further extensions and updates to the methodology, data or the assessment tools can be done effectively.

3.4. Step 3 – Analysis of life-cycle GWP building data

Step 3 consists of analysing the result of the life-cycle GWP calculations of the buildings. The execution and quality of the analysis depends on the amount of data gathered and its quality. During the analysis, Member States can divide the datasets by building typology (e.g. residential, offices, educational buildings, hospitals, etc.). If relevant, Member States should also group data into different climate zones. However, when the dataset is divided, the subsequent datasets for each category will become smaller in size, and it will be harder to draw clear conclusions. Hence, a balance needs to be found based on the available dataset. It is up to Member States to decide if and how they want to break down the datasets. They can also consider the development of the available dataset, e.g. adding more data in the future, with more building typologies or climate zones.

The results spread for life-cycle GWP for each building typology should be statistically analysed, and this will form the basis for decisions in step 4 about where to set the maximum limit values and the targets. Theoretically, if step 1 and step 2 are done well, step 3 can be rather rapidly executed. However, based on experience, the analysis in step 3 can identify certain issues, which in turn require that steps 1 and 2 need to be refined.

Example of limit values for different building typologies in Denmark

Denmark introduced one limit value for all new buildings over 1 000 m² in 2023, based on a limited amount of building cases collected in the previous years. In the years following the first data collection, Denmark collected more cases and ended up with separate limit values for different building typologies, which will be applied as from mid-2025. The advantage of having separate limit values is that each building typology is subject to the same ‘intensity’ of regulation, ensuring that no typology is disproportionately affected.

3.5. Step 4 – Setting limit values

Steps 1 to 3 put in place the life-cycle calculation method, life-cycle datasets, and a statistical analysis of real building life-cycle GWP data. This last step in the recommended process will depend on each Member State’s pathway to achieving climate neutrality, while also considering the readiness of their economic actors and their markets. As provided for in Article 7(5), limit values need to be in place by 2030.

As set forth in Article 7(5), Member States should consider setting different limit values for different climatic zones and building typologies depending on the national context. Member States may consider the specific features of a building typology that may affect its life-cycle GWP results, e.g. hospitals, care facilities for older people, technical buildings requiring specialised foundation, buildings equipped with additional photovoltaic capacity, etc. Depending on the geographical situation, Member States may also consider differentiating limit values by climatic zone. Buildings in different climatic zones may face different challenges, e.g. buildings in areas prone to earthquakes or high winds or heavy snowfall, etc. Possible approaches include setting limit values with a high level of granularity for different building typologies or adding an ‘add-on’ to the limit values to accommodate special needs based on building functionality. For any of these considerations, Member States should document their approach in the national roadmap.

The adopted limit values must not constitute barriers to Member States promoting renewable energy production (in particular through the solar energy installations) and tackling the issues of optimal indoor environmental quality, adaptation to climate change, fire safety, risks related to intense seismic activity, or accessibility for people with disabilities.

The targets are a series of limit values starting from 2030 with a downward trend, e.g. a limit value in 2030 followed by a lower value in 2033, an even lower in 2036, etc. A progressive downward trend would ideally represent a gradual, smooth reduction in limit values on a graph, starting from the anticipated values in 2030 and decreasing steadily towards 2050. This may not follow a perfectly linear path; instead, there could be periods of steeper decline and stabilisation as policies take effect and new technologies emerge. When setting the targets, Member States may consider taking into account progress in industry or other relevant sectors with regard to decarbonisation, as well as relevant policies towards the objective of climate neutrality. Member States are encouraged to anticipate also the benefits of the circular economy model when it is well established in the construction sector, as well as the potential of biobased materials. The interval is up to the Member State to decide. The advantage of applying shorter intervals is that quick changes in the sector are accounted for, but this comes

at the cost of bigger administrative burdens. A reasonable interval should be between three and five years.

Each Member State should decide on their downward trend ambition level at each interval in order to reach the objective of achieving climate neutrality. A target will in the future become a limit value. If relevant, Member States can consider adjusting these future limit values when the time comes based on the development of construction-product environmental data or any subsequent adjustment in the methodology.

While the scope of life-cycle stages or modules included in the calculation must cover the minimum requirements set out in the Union framework of the delegated act, the scope of life-cycle stages or modules covered by the limit values is for Member States to determine. Also, if relevant, Member States can decide to exclude certain parts of the scope of building components from the scope of the limit value. If Member States decide to neglect a certain scope of life-cycle stages or some parts of the scope of the building components from the scope of the limit value, they should include this decision in their national roadmap and provide an explanation for it. In any case, Member States are strongly recommended to adopt a long-term perspective, so that future limit values can always be compared to those in the past, confirming a progressive downward trend as required by Article 7(5). As will be specified in the delegated act issued under Article 7(3), most life-cycle stages will have to be included in the calculation and declaration referred to in Article 7(2). The delegated act will also specify the minimum requirements for the scope of building components for the calculation. Member States should therefore consider the benefits of the available information issued from the calculation when setting the scope of life-cycle stages or the scope of building components covered by the limit values. By using a fixed scope of life-cycle stages and building components covered by the limit values, Member States could encounter fewer difficulties in demonstrating a downward trend in their targets, as required by Article 7(5), and stakeholders, particularly project designers, would benefit from a more stable regulatory framework.

Being transparent about the ambition level for the limit values is recommended as this will help market uptake. When setting limit values and the scope of life-cycle stages and building components covered by the limit values, stakeholders must be properly consulted, and Member States should clearly communicate the technical solutions available for new buildings to comply with the proposed limit values. In addition, early communication of limit values is key for market readiness. For example, the first numerical limit values should ideally be communicated to stakeholders at least six months or a year before they enter into force in 2030.

Example of adjustment of limit values in France

In the beginning, Member States can consider adjusting the limit values to accommodate market uptake of relevant technologies or solutions. For example, France put in place a limit value for life-cycle GWP in 2022 covering all elements of the building. Two limit values have been applied for each typology of building: one limit value for operational carbon and one limit value for embodied carbon. Some components, such as solar panels, can have a very significant impact in terms of embodied carbon, although they are a local renewable source and greatly beneficial for operational carbon. In addition, the embodied carbon of solar panels is expected to be reduced progressively as more products will arrive on the market with better environmental declarations. To avoid slowing down the deployment of solar panels, the limit values are adjusted with an ‘add-on’ when the building project is equipped with solar panels.

3.6. Recommended timeline

Figure 2 suggests a timeline for recommended steps described above, with the following dates to be aware of:

- Member States must ‘publish and notify’ the roadmap to the Commission at the latest by 1 January 2027, describing the ongoing and planned steps for the implementation of limit values;
- Limit values need to be in force by 2030, hence they need to be set earlier, depending on the length of the legislative procedure in each Member State;
- There is no requirement in Article 7(5) to update the roadmap after 2027, but Member States should see it as their own individual strategic document;
- All the necessary legal framework for life-cycle GWP calculation for new buildings over 1 000 m² must be in place before 2028 and for all new buildings by 2030, see Article 7(2);
- Some real data on life-cycle GWP for new buildings over 1 000 m² should be obtained during 2028/2029.

Member States are highly encouraged to implement limit values as early as possible and ideally start a voluntary approach before 2030, as such a scheme can help actors across the whole value chain.

Step	2025	2025	2026	2026	2027	2027	2028	2028	2029	2029	2030
	1 st half	2 nd half	1 st half	2 nd half	1 st half	2 nd half	1 st half	2 nd half	1 st half	2 nd half	1 st Jan.
Step 0 – General considerations on the legal framework			Trans-position				Article 7(2).a				Article 7(2).b and 7(5)
Step 1a – Methodology		DA									
Step 1b – Environmental data											
Step 2a – Building stock											
Step 2b – Raw building data											
Step 2c – Life-cycle GWP calculations of buildings											
Step 3 – Analysis of life-cycle GWP building data											
Step 4 – Setting limit values								National scrutiny period			Article 7(5)
Drafting the roadmap				Article 7(5)							

Figure 2. Recommended timeline for Member States to draw up the national roadmap and implement the limit values. Light blue indicates when a work should have started, and dark blue areas indicate when a step should be finalised at the latest. Light green indicates when an initial work is finished but can be continued for the future target limit values.

4. COMMON ROADMAP TEMPLATE

A common template is proposed below to help Member States draw up their national roadmap. Following this template will help ensure that all the required elements are included and will help the Commission in reviewing and assessing the submitted documents.

Section	Content explained
Step 0 Legal framework	(1) Describe the relevant legislative framework (already in place, in preparation or planned) related to the GWP calculation and the setting of limit values . (2) Describe the relevant legislative framework (already in place, in preparation or planned) related to control, verification and penalties for non-compliance with limit values. (3) Describe the relevant legislative framework (already in place, in preparation or planned) related to roles and responsibilities for the different actors involved.
Step 1a Method	(1) Describe the adopted calculation methodology and any special consideration compared to the EU framework. (2) Describe the development of any guidance documentation (already in place, in preparation or planned) for the life-cycle GWP calculation , with reference and link if available. (3) Describe any framework or legal consideration regarding calculation software/tools (either obligatory or recommended), with reference and link if available. (4) If ‘ fast-track ’ is chosen, describe when and how the subsequent adjustment will be done. (5) Describe any planned future development/evolution.
Step 1b Data	(1) Describe the accepted environmental data for GWP calculation : data sources, data management, accessibility, data availability, data update, etc. (2) Describe how product-specific data issued according to Regulation (EU) 2024/3110 (CPR) is used when available. (3) Describe how compatible environmental data according to Regulation (EU) 2024/1781 (ESPR) is used when available. (4) Describe how any other product-specific or project-specific data can be used when data from CPR or ESPR is not available. Describe if average data for a product group can be used. Describe how the data quality is controlled, how the transition to CPR data or compatible ESPR data is planned, etc. (5) Describe how generic product data and default value data is established: data management, data responsibility, any specific rules (e.g. safety factor), etc. (6) If ‘ fast-track ’ is chosen, describe when and how adjustment will be done.
Step 2a Building stock	(1) Describe the existing building stock in your country. Member States may consider data reported in the National Building Renovation Plan. (2) Describe any factor or criteria considered relevant to the

		establishment of limit values: building typology, climatic zone, construction method, etc.
Step 2b Building data	(1) (2) (3)	Describe how data on building level (raw bill of materials data) will be collected from recently built projects: building typologies, amount, etc. Describe the treatment of collected data. Describe how generic building is identified if used or will be used.
Step 2c Life-cycle GWP calculations	(1)	Describe the work plan for how building data (step 2.b) is or will be used with environmental product data (step 1b) for the life-cycle GWP calculation for buildings .
Step 3 Analysis	(1) (2)	Describe the work plan: timeline, number of cases expected before proceeding to step 4: case study or the variations of generic building Describe orientation regarding the analysis and aggregation of data from Step 2c.
Step 4 Setting limit values	(1) (2) (3) (4) (5) (6) (7)	Describe how the limit values are/will be adopted, particularly the scope of the life-cycle modules covered by the limit values. Explain the choice , particularly if any module of the life-cycle is excluded from the scope of the limit value. Describe how the national policy is in line with the EU's objective of achieving climate neutrality. Describe how the national policy is translated to the ambition for each maximum limit value. Describe the interval of limit values. For each limit value, indicate either actual limit value or corresponding ambition level, with progressive downward trend and in line with above-mentioned national policy and ambition. Describe if Member States decide to use top-down approach for the establishment of the limit values. Present a timeline from 2027-2050 including any planned development/evolution: updates in methodology, data, case collection, updating of targets, setting limit values as milestones.