



4. Reviewing National Vision and Targets



Stage 3. Review Energy Objectives and Targets



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Where we are...?

REGIO1ST Methodology



Stage 3 | Reviewing energy objectives and targets

Examine national and regional visions and targets, discussing them with stakeholders to ensure alignment.



- Step 1: Review National Visions and Targets,
- Step 2: Review Regional Visions and Targets,
- Step 3: Set and define new regional objectives and targets,
- Step 4: Discuss visions and targets with stakeholders





National and Regional Targets Mapping

REGIO1st Planning Framework
Stage 3 – Reviewing energy objectives and targets
<https://fedarene.org/project/regio1st/>

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National and Regional Targets Mapping



Comparison template EXAMPLE

- What: Regional authority's plans
- What: Please replace your country's relative plans and targets and categorize them based on their level of implementation (local, regional, national) with in grey. Their key points and main objectives should also be identified and be filled (with in orange).
- How: Level of implementation: Click on the grey cells in the table below. A drop-down menu is available. Targets/Main objectives: You can write in the orange cells the targets set by the respective plan.

National and Regional Targets Mapping



EU targets

The following table outlines relevant European legislation and targets.
Please note that this may change over time, and that the table covers up to 2023.

Strategy/ Directives/ Laws	Energy Efficiency related objectives	Other targets/policies
European Climate Law (Regulation 2021/1111) Fit for 55 package		-55% GHG up to 2030 compared to levels in 1990 -at least 39% reduction in greenhouse gas emissions by 2030 -38 % reduction in emissions from the transport sector by 2030
Energy Efficiency Directive (EED) Directive (EU) 2023/1791 Amendment: 2018/944/EU	-Energy efficiency must be considered by EU countries in all relevant policy and major institutional decision taken in the energy and non-energy sectors. -At least 14.3% reduction in energy consumption by 2030, compared to the 2020 reference scenario projections. [corresponds to a reduction of 48,5 % for primary energy consumption and 38 % for final energy consumption when compared to the 2007 EU Reference Scenario projections for 2030.] -Annual energy consumption reduction target of 1.3% for the public sector as a whole and the annual 3% buildings renovation obligation is being extended to all levels of public administration.	
Renewable Energy Directive Directive (EU) 2018/2001		32% RES share by 2030 Provisional agreement in 2023 to raise 2030 target to at least 42.5%, aiming for 45%
Energy Performance Building Directive (EPBD) Directive (EU) 2018/844	Each Member State shall: -Make energy efficiency renovations to at least 3% of the total floor area of buildings owned and occupied by central governments. -Establish a long-term renovation strategy to support the renovation of the national stock of residential and non-residential buildings, both public and private, into a highly energy-efficient and decarbonized building stock by 2030, facilitating the swift transition to refurbishment of existing buildings into nearly zero-energy buildings. -Carry out a public consultation on the long-term renovation strategy prior to submitting it to the Commission. Commission proposals under consideration:	80-85% GHG reduction by 2030 compared to 1990 levels [excluding non-energy buildings]

Targets/Main objectives

Energy Efficiency	Renewable Energy	Other
It reg. setting of final consumption, and in projections of 2030 Revised RECP)*	National: 40% RES share (Jan 23-Revised RECP)*	National: Greenhouse Gas Emissions reduction: 54% emissions reduction compared to levels in 1990-1995 (Jan 23-Revised RECP)
It has not been revised since 2016, as in the relevant law incorporating the in EED Directive:		
4045/Government Gazette 133/6/20-10 regarding the Incorporation of Directive 18/2002 (Energy Efficiency Directive) reg. efficiency: -Setting energy audits -Publication of Energy Efficiency Label Regulations -List of residential and public building buildings -Each of no more is established to energy efficiency, in order for the to contribute to the achievement of its goals for 2030 for at least 32.5%. -renovation of 3% of the total area of and public administration buildings.		
Long-term goal of domestic hot water needs by 60% through water energy using the alternative fuel for high efficiency buildings of goals for the energy upgrade of 10 Manager in public buildings		

1. EU Targets:

EU Energy Efficiency Targets

Description

Final Energy Efficiency Target (2030)

The recast Energy Efficiency Directive establishes a final energy consumption target of 763 million tonnes of oil equivalent (Mtoe) by 2030, indicating a substantial reduction from previous targets and emphasizing the EU's commitment to optimizing energy use.

Average Annual Energy Savings Rate

The Energy Efficiency Directive (recast) introduces new binding targets for EU countries, demanding an average annual energy savings rate of 1.49% from 2024 to 2030, demonstrating a significant increase from previous requirements and promoting energy savings in critical sectors.

Public Sector Energy Consumption

The recast directive sets a new objective for the public sector, requiring a 1.9% annual energy consumption reduction, highlighting the EU's commitment to leading by example and ensuring active participation from public institutions in energy efficiency efforts.

Building Renovation Mandate

Extending the yearly 3% building renovation mandate to all levels of government demonstrates a comprehensive approach to improving energy efficiency in the built environment, emphasizing inclusivity and broad-based action in energy efficiency initiatives.

2. National Cases: Brief Overview

Year of objective: 2021	Greece	Spain
Population	10,4 million	47 million
Covering area	131,957 square kilometers	505.992 square kilometers
Key economy sectors	Tourism, Shipping, Agriculture, Renewable Energy	Tourism, Agriculture, Industry, Renewable Energy



2.1. National Cases: SPAIN

Total GHG emissions (in kt CO₂ eq) by sector:

YEAR	1990	2005	2011	2021
Energy	213,191.25	344,337.23	268,251.06	216,048.45
IPPU	27,963.52	43,104.39	36,350.02	24,126.53
Agriculture	33,022.58	35,896.95	32,688.33	34,369.39
Waste	13,532.92	15,421.06	17,342.74	14,303.44
Total	287,710.27	438,759.63	354,632.15	288,847.82

2.1. National Cases: SPAIN

Total GHG emissions and forecast (in kt CO₂ eq) by sector:

Year of objective: 2030	Real Data (2011)	NECP 2021	NECP 2023 (Preliminary draft revised version)	EU core objectives	Real data (2021)
Reduction in greenhouse gas (GHG) emissions compared to 1990	-23.4%	23%	32%	55%	-0.4%
Reduction in greenhouse gas (GHG) emissions compared to 2005	19.1%	60%	55%	22.7%	34.2%
Share of renewables in gross final energy consumption	18%	42%	48%	42.5%	22%
Energy efficiency improvements	6,6%	39.5%	44%	11.7%	12.6%

2.2. National Cases: GREECE

Total GHG emissions (in kt CO₂ eq) by sector:

YEAR	1990	2005	2011*	2021
Energy	77,133.43 7	107,379.67	92,161.13	53,598.90
IPPU	10,933.61	14,774.73	10,044.05	9,991.75
Agriculture	10,534.68	9,337.32	8,965.32	8,045.99
Waste	5,383.97	5,256.42	5,008.62	5,852.19
Total	103,985.69	136,748.14	116,179.12	77,488.83

* The year 2011 was purposefully included in our dataset, since the World Meteorological Organization (WMO) declared that greenhouse gas emissions in the atmosphere had reached unprecedented levels.

2.2. National Cases: GREECE

Total GHG emissions and forecast (in kt CO₂ eq) by sector:

Year of objective: 2030	Real Data (2011)	NECP 2019	NECP 2023 (Preliminary draft revised version)	EU core objectives	Real data (2021)
Reduction in greenhouse gas (GHG) emissions compared to 1990	-11.73%	42%	54%	55%	25.48%
Reduction in greenhouse gas (GHG) emissions compared to 2005	15.04%	56%	N/A	22.7%	43.33%
Share of renewables in gross final energy consumption	12%	35%	44%	42.5%	39%
Energy efficiency improvements			15.4%	11.7%	14.6%

2.2. National Cases: GREECE

Mitigation actions and measures:

Mitigation action	Measures	Reduction (Mt CO ₂ -eq)	
		2025	2030
Increased renewables in electricity generation	• Support innovative thermal. •	8.3	11.8
Increased biofuels in transport	• Enhanced blending obligations with possible extension beyond road transport. •	0.10	0.43
Energy efficiency in industry	• Financial and tax support for energy-saving technology investment. •	0.76	1.28
Energy efficiency in buildings	• Establish a National Energy Efficiency Fund. •	2.27	2.99
Electrification and energy efficiency in road transport	• Incentives for energy-efficient vehicles. •	0.05	0.19

3. COMPARATION BY SECTORS:

	YEAR	1990 (Baseline)	2005	2011*	2021
Energy	Greece	77,133.44	107,379.67 (+39%)	92,161.13 (+19%)	53,598.90 (-31%)
	Spain	213,191.25	344,337.23 (+62%)	268,251.67 (+26%)	216,048.45 (+1%)
IPPU	Greece	10,933.61	14,774.73 (+35%)	10,044.05 (-8%)	9,991.75 (-9%)
	Spain	27,963.52	43,104.39 (+54%)	36,350.02 (+30%)	24,126.53 (-14%)
Agriculture	Greece	10,534.68	9,337.32 (-11%)	8,965.32 (-15%)	8,045.99 (-24%)
	Spain	33,022.58	35,896.95 (+9%)	32,688.33 (-1%)	34,369.39 (+4%)
Waste	Greece	5,383.97	5,256.42 (-2%)	5,008.62 (-7%)	5,852.19 (+9%)
	Spain	13,532.92	15,241.06 (+14%)	17,342.74 (+28%)	14,303.44 (+6%)
Total	Greece	103,985.69	136,748.14 (+32%)	116,179.12 (+12%)	77,488.83 (-25%)
	Spain	287,710.27	438,759.63 (+53%)	354,632.15 (+23%)	288,847.82 (+0.5%)

4. TARGET COMPARATION:

Year of objective: 2030	Spain Target	Greece Target	EU core objectives
Reduction in greenhouse gas (GHG) emissions compared to 1990	23% X	54% ✓	55%
Share of renewables in gross final energy consumption	42% ✓	44% ✓	42,5%
Energy efficiency improvements	39.5% ✓✓	15.4% ✓	11.7%

5. ESTIMATED INVESTMENT BY 2030:

Estimated investments by 2030	Spain Target	Greece Target
Saving and efficiency	35% (€83.540 bn)	25% (€11 bn)
Renewable energy	38% (€91.765 bn)	21% (€9 bn)
Networks and electrification	24% (€58.579 bn)	13+3+8+5+5=34% (€5.5+1.3+3.5+2.2+2 = 14.5 bn)
Other measures	3% (€7.528 bn)	3+5+11=19% (€1.5+2+5=8.5 bn)

6. CONCLUSIONS:

1

Distinctive Approaches, Consistent Commitment: Despite differing approaches, Greece and Spain remain steadfast in their commitment to combatting climate change, aligning with global initiatives for carbon neutrality.

2

Cohesive Strategies for Carbon Neutrality: Greece's plan boasts a robust strategy, emphasizing emissions reduction and renewable energy, while Spain's comprehensive approach could benefit from clearer links between targets and measures.

3

Transparency and Accessibility: Both nations prioritize transparent information in their plans, with Greece providing detailed insights and Spain having room for improvement in clarity, crucial for engaging stakeholders.

4

Commendable Consistency and Coherence: Greece and Spain's plans exhibit commendable consistency and coherence, underlining their dedication to a sustainable, carbon-neutral future.

Thank you.

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- [Discover Regio1st, a new project on the Energy Efficiency First principle - Fedarene](#)
- www.faen.es
- faen@faen.es



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