







Impact of the European Green Deal on Energy Security of Georgia

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About the European Green Deal

The European Green Deal (EGD)¹, adopted in December 2019, is the EU's new growth strategy and aims to create a modern resource-efficient and competitive economy where there are no net emissions of greenhouse gases by 2050 and where economic growth is decoupled from resource use. The EGD is a revived EU approach to achieve the UN 2030 Agenda and Sustainable Development Goals.

The deal aims to achieve **three main goals**. First, it focuses on achieving **net-zero emissions** by proposing specific strategies that can help curb emissions across all sectors, with a strong focus on energy, which makes up more than 75% of total EU-27's greenhouses gas. The objective is to increase the share of renewable energy in the EU's energy mix.

Second, it plans to **decouple growth from resource exploitation**. Achieving this objective will not only require a boost in technological advancements but also rethinking lifestyles, communities, and societies.

Third is the need to **foster an inclusive green transition and to leave none behind**, supported through the Just Transition Mechanism, which will provide between 65€ and 75€ billion over the period of 2021-2027 to alleviate the socio-economic impacts of the transition.

According to the guidelines for the implementation of the Green Deal there are **five pillars of the Green Agenda**²: **(1) climate action/decarbonisation**, including climate, energy and mobility, **(2) circular economy**, addressing in particular waste, recycling, sustainable production and efficient use of resources, **(3) biodiversity**, aiming to protect and restore the natural wealth of the region, **(4) Depollution/fighting pollution** of air, water and soil and **(5) sustainable food systems and rural areas**. Digitalization will be a key enabler for the above five pillars in line with the concept of the dual green and digital transition. The objectives of these pillars should be pursued through concrete actions and supported by mechanisms and financial instruments.

The deal represents an unprecedented effort to review more than 50 European laws and redesign public policies. On 14 July 2021, the European Commission presented the **'Fit for 55' Package**, a series of legislative proposals setting out how it intends to reach its climate targets under the EU Green Deal.

Transposition of these legislation into national legislation is not mandatory for Georgia yet. However, EU-Georgia Association Agreement and the Energy Community membership of Georgia create legal framework for the future transposition of EU climate and energy acquis into national legislation. The European Green Deal put in additional political pressure on existing formats.

Georgia's accession to **the Energy Community Treaty** in 2016 also encouraged the inter-sectoral integration of the climate-related issues. The Protocol of Georgia's accession to the Treaty requires harmonization of Georgian legislation with the EU Directives and Regulations. In the context of climate change the Treaty includes some obligations, which require increase of energy efficiency; facilitate the use of renewable energy sources (which serves to decarbonization of economy); energy security; and elaboration of **National Energy and Climate Plan (NECP)**.

¹ A European Green Deal | European Commission (europa.eu)

² green agenda for the western balkans en.pdf (europa.eu)

The NECP is a new initiative of the European Union and the member states of the Energy Union also have a recommendation to develop a unified, integrated policy and measures for energy and climate issues at the national level. The NECP covers the period 2021-2030 and include a vision for 2050 to be in line with the policy objectives of the European Union, the Energy Community, or the UNFCCC.

The objective of this paper is to assess the possible impact of the EGD on energy security of Georgia in general. This is done by carrying out a mapping of policies and measures of the Green Deal relevant to energy security. The result of this study will support the Ministry of Economy and Sustainable Development of Georgia (MoESD) in designing a roadmap for further alignment with EU policies and attract international financial support in strengthening the national energy security.

EGD Pillars and Measures Relevant to Energy Security

According to the draft energy policy of Georgia the objective of energy security is to ensure adequate and reliable supply of different types of high-quality energy to all consumers, at an affordable price, while protecting the interests of national security and sustainable development, in the short and long term. The **availability** of energy, **accessibility** to energy, **reliability** of energy infrastructure and **quality** of energy, **affordability** of energy, **flexibility** of energy systems and **sustainability** are important principles of energy security. The table below describes the aims of the EGD strategic documents and its relevance to the energy security, and also presents its possible impact to the energy security of Georgia if it will implement the proposed measures at the national level.

N	EGD Strategic Document	Aim of the Document and Its Relevance to the Energy Security	Poss	ible Impact to the Energy Security of Georgia
		Crosscutting		
1	Communication	General Aim:	1.	Energy efficiency
	From the	It is a new growth strategy that aims to transform the EU into a fair and prosperous society, with a		1.1. Availability – Positive (high), EE
	Commission -	modern, resource-efficient, and competitive economy where there are no net emissions of		increases availability of energy.
	The European	greenhouse gases in 2050 and where economic growth is decoupled from resource use. The		1.2. Reliability – Positive (high) EE
	Green Deal ³ and	roadmap with actions to boost the efficient use of resources by moving to a clean, circular economy		will increase reliability with
	the Roadmap	and stop climate change, revert biodiversity loss and cut pollution. It outlines investments needed		better management of supply and consumption.
		and financing tools available and explains how to ensure a just and inclusive transition. To deliver the European Green Deal, there is a need to rethink policies for <u>clean energy supply across</u>		1.3. Affordability – Positive
		the economy, industry, production and consumption, large-scale infrastructure, transport, food and		(Medium), EE reduces energy
		agriculture, construction, taxation, and social benefits.		consumption and losses for
		To achieve these aims, it is essential to increase the value given to protecting and restoring natural		suppliers affecting (positively)
		ecosystems, to the sustainable use of resources and to improving human health.		end user prices.
		The Commission will propose to revise the Energy Taxation Directive, focusing on environmental		1.4. Flexibility – Positive (high), EE
		issues.		increases flexibility of energy
		Invest in the necessary <u>digital transformation</u> and tools as these are essential enablers of the		system with better management
		changes.		of demand and leaving more
				capacity to supply side.
		Energy Security Specific Aim:		1.5. Sustainability – Positive (high),
		 Supplying <u>clean</u>, <u>affordable</u>, <u>and secure energy</u>. 		EE is a more sustainable source
		Building and renovating in an energy and resource efficient way.		of energy then any other
		 Accelerating the shift to <u>sustainable and smart mobility.</u> 		sources.

³ EUR-Lex - 52019DC0640 - EN - EUR-Lex (europa.eu)

Supplying clean, affordable, and secure energy

Further <u>decarbonizing the energy system</u> is critical to reach climate objectives in 2030 and 2050. The production and use of energy across economic sectors account for more than 75% of the EU's greenhouse gas emissions and about 60% of Georgia's GHG emissions. <u>Energy efficiency</u> must be prioritized. A <u>power sector</u> must be developed that is based largely on <u>renewable sources</u>, complemented by the rapid phasing out of coal and decarbonizing gas. At the same time, the EU's <u>energy supply needs to be secure and affordable for consumers and businesses</u>. For this to happen, it is essential to ensure that the European <u>energy market is fully integrated</u>, interconnected, and <u>digitalized</u>, while respecting technological neutrality.

When Member States begin <u>updating their national energy and climate plans (NECPs)</u> in 2023, they should <u>reflect the new climate ambition</u>. The Commission will continue to ensure that all relevant legislation is rigorously enforced.

The clean energy transition should involve and benefit consumers. Renewable energy sources will have an essential role. Increasing offshore wind production will be essential, building on regional cooperation between Member States. The smart integration of renewables, energy efficiency and other sustainable solutions across sectors will help to achieve decarbonisation at the lowest possible cost. The rapid decrease in the cost of renewables, combined with improved design of support policies, has already reduced the impact on households' energy bills of renewables deployment. In parallel, the decarbonisation of the gas sector will be facilitated, including via enhancing support for the development of decarbonized gases, via a forward-looking design for a competitive decarbonized gas market, and by addressing the issue of energy-related methane emissions.

The risk of <u>energy poverty</u> must be addressed for households that cannot afford key energy services to ensure a basic standard of living. Effective programmes, such as <u>financing schemes for households</u> to renovate their houses, can reduce energy bills and help the environment. In 2020, the Commission will produce guidance to assist Member States in addressing the issue of energy poverty.

The transition to climate neutrality also requires <u>smart infrastructure</u>. Increased cross-border and regional cooperation will help achieve the benefits of the clean energy transition at affordable prices. The regulatory framework for energy infrastructure, including the TEN-E Regulation, will need to be reviewed to ensure consistency with the climate neutrality objective. This framework should foster the deployment of innovative technologies and infrastructure, such as <u>smart grids</u>, <u>hydrogen networks or carbon capture</u>, storage and utilization, energy storage, also <u>enabling sector integration</u>. Some existing infrastructure and assets will require upgrading to remain fit for purpose and <u>climate resilient</u>.

Building and renovating in an energy and resource efficient way

The construction, use and renovation of buildings require significant amounts of energy and mineral resources (e.g. sand, gravel, cement). <u>Buildings also account for 40% of energy consumed</u>. Today the

- Renewable sources, including offshore RES, decarbonized gas, sustainable alternative transport fuels.
 - 2.1. Availability Positive (high)
 - 2.2. Accessibility Positive (high)
 - Reliability & Quality sometimes negative due to the intermittency.
 - 2.4. Affordability Positive (medium), net-metering.
 - 2.5. Flexibility depends on the energy system.
 - 2.6. Sustainability Positive (high)
- 3. Integrated, interconnected, and digitalized energy markets
 - 3.1. Availability Positive (high)
 - 3.2. Accessibility Positive (high)
 - Reliability & Quality Positive (medium), negative impact in case of low level of cybersecurity.
 - 3.4. Affordability Positive (medium)
 - 3.5. Flexibility Positive (medium)
 - 3.6. Sustainability Positive (medium)
- 4. Smart energy infrastructure (smart grids, hydrogen networks, carbon capture, storage and utilization, energy storage)
 - 4.1. Availability Positive (high)
 - 4.2. Accessibility Positive (medium)
 - 4.3. Reliability & Quality Positive (high)
 - 4.4. Affordability depends on the scale of the infrastructure and impact on the end-user prices.
 - 4.5. Flexibility Positive (high)
 - 4.6. Sustainability Positive (medium)
- 5. Fighting energy poverty

annual renovation rate of the building stock varies from 0.4 to 1.2% in the Member States. This rate will need at least to double to reach the EU's energy efficiency and climate objectives. In parallel, 50 million consumers struggle to keep their homes adequately warm.

<u>To address the twin challenge of energy efficiency and affordability</u>, the EU and the Member States should engage in a <u>'renovation wave' of public and private buildings</u>. While increasing renovation rates is a challenge, <u>renovation lowers energy bills</u>, and can reduce energy poverty. It can also boost the construction sector and is an opportunity <u>to support SMEs and local jobs</u>.

The Commission will rigorously <u>enforce the legislation related to the energy performance</u> of buildings. The Commission will also launch work on the possibility of <u>including emissions from buildings in European emissions trading</u>, as part of broader efforts to ensure that the relative prices of different energy sources provide the right signals for energy efficiency. In addition, <u>the Commission will review the Construction Products Regulation</u>. It should ensure that the design of new and renovated buildings at all stages is <u>in line with the needs of the circular economy</u>, and lead to increased digitalization and climate-proofing of the building stock.

In parallel, the Commission proposes to work with stakeholders on a new initiative on renovation. This will include an open platform bringing together the buildings and construction sector, architects and engineers and local authorities to address the barriers to renovation. This initiative will also include innovative financing schemes under InvestEU. These could target housing associations or energy service companies that could roll out renovation including through energy performance contracting. An essential aim would be to organize renovation efforts into larger blocks to benefit from better financing conditions and economies of scale. The Commission will also work to lift national regulatory barriers that inhibit energy efficiency investments in rented and multi-ownership buildings. Particular attention will be paid to the renovation of social housing, to help households who struggle to pay their energy bills. Focus should also be put on renovating schools and hospitals, as the money saved through building efficiency will be money available to support education and public health.

Accelerating the shift to sustainable and smart mobility

Transport accounts for a quarter of the EU's greenhouse gas emissions, and still growing. To achieve climate neutrality, a 90% reduction in transport emissions is needed by 2050. Road, rail, aviation, and waterborne transport will all have to contribute to the reduction. Achieving sustainable transport means putting users first and providing them with more affordable, accessible, healthier and cleaner alternatives to their current mobility habits. The Commission adopted a strategy for sustainable and smart mobility in 2020 that addresses this challenge and tackle all emission sources.

<u>Multimodal transport</u> needs a strong boost. This will increase the efficiency of the transport system. As a matter of priority, a substantial part of the 75% of <u>inland freight carried today by road should</u>

- 5.1. Accessibility Positive (high)
- 5.2. Reliability & Quality Positive (medium)
- 5.3. Affordability Positive (high)
- 5.4. Sustainability Positive (medium)

6. Renovation of buildings

- 6.1. Availability Positive (medium)
- 6.2. Accessibility Positive (low)
- 6.3. Reliability & Quality Positive (medium)
- 6.4. Affordability Positive (medium) renovation lowers energy bills, and can reduce energy poverty
- 6.5. Flexibility Positive (medium)
- 6.6. Sustainability Positive (high)
- Sustainable transport means (multimodal transport, affordable, accessible, healthier, and cleaner alternatives); automated and connected multimodal mobility; stringent air pollutant emissions standards for combustion-engine vehicles
 - 7.1. Availability Positive (medium), more options, efficient cars.
 - 7.2. Accessibility Positive (medium)
 - 7.3. Reliability & Quality Positive (medium)
 - 7.4. Affordability depends on the transport mode, the price of transport must reflect the impact it has on the environment and on health
 - Flexibility Positive (medium), if properly use the car batteries in the energy system.
 - Sustainability Positive (high), from inland freight to rail, healthier, and cleaner transport alternatives.

shift onto rail and inland waterways. This will require measures to manage better, and to increase the capacity of railways and inland waterways, which the Commission will propose by 2021. The Commission will also consider withdrawing and presenting a new proposal to revise the Combined Transport Directive to turn it into an effective tool to support multimodal freight operations involving rail and waterborne transport, including short-sea shipping. In aviation, work on adopting the Commission's proposal on a truly Single European Sky will need to restart, as this will help achieve significant reductions in aviation emissions.

<u>Automated and connected multimodal mobility</u> will play an increasing role, together with <u>smart traffic management systems enabled by digitalization</u>. The EU transport system and infrastructure will be made fit to support new sustainable mobility services that can <u>reduce congestion and pollution</u>, especially in urban areas. The Commission will help develop <u>smart systems for traffic management and 'Mobility</u> as a Service' solutions, through its funding instruments, such as <u>the Connected Europe Facility</u>.

The price of transport must reflect the impact it has on the environment and on health. Fossil-fuel subsidies should end and, in the context of the revision of the Energy Taxation Directive, the Commission will look closely at the current tax exemptions including for aviation and maritime fuels and at how best to close any loopholes. Similarly, the Commission will propose to extend European emissions trading to the maritime sector, and to reduce the EU Emissions Trading System allowances allocated for free to airlines. This will be coordinated with action at global level, notably at the International Civil Aviation Organization and International Maritime Organization. The Commission will also give fresh political consideration as to how to achieve effective road pricing in the EU.

The EU should in parallel ramp-up the production and deployment of <u>sustainable alternative transport fuels</u>. By 2025, about 1 million public recharging and refueling stations will be needed for the 13 million zero- and low-emission vehicles expected on European roads. The Commission will support the deployment of <u>public recharging and refueling points</u> where persistent gaps exist, notably for long-distance travel and in less densely populated areas and will launch as quickly as possible a new funding call to support this. These steps will complement the measures taken at national level. The Commission will consider legislative options to boost the production and uptake of sustainable alternative fuels for the different transport modes. The Commission will also <u>review the Alternative Fuels Infrastructure Directive</u> and the <u>TENT Regulation to accelerate the deployment</u> of zero- and low-emission vehicles and vessels.

<u>Transport should become drastically less polluting</u>, especially in cities. A combination of measures should address emissions, urban congestion, and improved public transport. The Commission will propose more <u>stringent air pollutant emissions standards for combustion-engine vehicles</u>. The Commission will also propose to <u>revise by June 2021 the legislation on CO2 emission performance standards for cars and vans</u>, to ensure a clear pathway from 2025 onwards towards zero-emission mobility. In parallel, it will consider applying European emissions trading to road transport, as a complement to existing and future CO2 emission performance standards for vehicles. It will take

8. Ending fossil-fuel subsidies

- 8.1. Availability NA
- 8.2. Accessibility NA
- 8.3. Reliability & Quality NA
- 8.4. Affordability Negative (medium), due to the price increases.
- 8.5. Flexibility NA
- 8.6. Sustainability Positive (high)

		action in relation to maritime transport, including to regulate access of the most polluting ships to		
		EU ports and to oblige docked ships to use shore-side electricity. Similarly, air quality should be		
		improved near airports by tackling the emissions of pollutants by airplanes and airport operations.		
		According to the communication the Commission and the High Representative are also envisaging a		
		number of strong environment, energy and climate partnerships with the Southern Neighbourhood		
		and within the Eastern Partnership.		
		and maint the Education at the tonig.		
		Digitalization also presents new opportunities for monitoring and optimizing how energy and natural		
		resources are used, to improve the energy efficiency and circular economy performance of the		
		sector itself, from broadband networks to data centers and ICT devices.		
2	EU taxonomy ⁴	General Aim:	1.	The EU taxonomy would provide
		The EU taxonomy is a classification system, establishing a list of environmentally sustainable		companies, investors, and
		<u>economic activities</u> . It could play an important role helping the EU <u>scale up sustainable investment</u>		policymakers with appropriate
		and implement the European green deal. The EU taxonomy would provide companies, investors,		definitions for which economic
		and policymakers with appropriate definitions for which economic activities can be considered		activities can be considered
		environmentally sustainable. In this way, it should create security for investors, protect private		environmentally sustainable. The
		investors from greenwashing, help companies to become more climate-friendly, mitigate market		Taxonomy Regulation supports
		fragmentation and help shift investments where they are most needed.		development of energy efficient,
		The Taxonomy Regulation (EU 2020/852) was published in the Official Journal of the European Union		renewable, clean, and sustainable
		on 22 June 2020 and entered into force on 12 July 2020. It establishes the basis for the EU taxonomy		energy alternatives and scaling up the
		by setting out 4 overarching conditions that an economic activity has to meet in order to qualify as		investment there.
		environmentally sustainable.		1.1. Availability – Positive (medium)
				1.2. Accessibility – Positive (medium)
		The Taxonomy Regulation ⁵ establishes <u>six environmental objectives</u>		1.3. Reliability & Quality – depends
		Climate change mitigation		on the energy system.
		Climate change adaptation		1.4. Affordability – Positive
		The sustainable use and protection of water and marine resources		(medium), low interest rate
		The transition to a circular economy		loans.
		Pollution prevention and control		1.5. Flexibility - NA
		The protection and restoration of biodiversity and ecosystems		1.6. Sustainability – Positive (high)
		Energy Security Specific Aim:		
		The Taxonomy Regulation supports development of energy efficient, renewable, clean and		
		sustainable energy alternatives.		
		On 2 February 2022, the Commission approved in principle a Complementary Climate Delegated Act		
		including, under strict conditions, <u>specific nuclear and gas energy activities</u> in the list of economic		
		activities covered by the EU taxonomy. The criteria for the specific gas and nuclear activities are in		
		activities covered by the EO taxonomy. The chiteria for the specific gas and fluctear activities are in		

⁴ EU taxonomy for sustainable activities | European Commission (europa.eu)

⁵ Regulation (EU) 2020/852 of the European Parliament and of t... - EUR-Lex (europa.eu)

		line with EU climate and environmental objectives and will help accelerating the shift from solid or liquid fossil fuels, including coal, towards a climate-neutral future.	
3	Fit for 55	General Aim:	Assessment of the measures under Fit for
	Package ⁶	The Fit for 55 package consists of a set of inter-connected proposals, which all drive towards the	55 Package has already reflected in the
		same goal of ensuring a fair, competitive and green transition by 2030 and beyond. Where possible	first section of the table - Communication
		existing legislation is made more ambitious and where needed new proposals are put on the table.	From the Commission - The European
		Overall, the package strengthens eight existing pieces of legislation and presents five new initiatives,	Green Deal and the Roadmap.
		across a range policy areas and economic sectors: climate, energy and fuels, transport, buildings,	
		land use and forestry.	
		Energy Security Specific Aim:	
		The Fit-for-55 package includes the following initiatives ⁷ :	
		 Revision of the EU Emissions Trading System (ETS), including maritime, aviation and 	
		CORSIA as well as a proposal for ETS as own resource	
		Carbon Border Adjustment Mechanism (CBAM) and a proposal for CBAM as own resource	
		Effort Sharing Regulation (ESR)	
		Revision of the Energy Tax Directive	
		Amendment to the Renewable Energy Directive to implement the ambition of the new	
		2030 climate target (RED)	
		Amendment of the Energy Efficiency Directive to implement the ambition of the new 2020 climate to reach (EED)	
		2030 climate target (EED)	
		 Revision of the Regulation on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry (LULUCF) 	
		 Revision of the Directive on deployment of alternative fuels infrastructure 	
		• Revision of the Regulation setting CO ₂ emission performance standards for new passenger	
		cars and for new light commercial vehicles	
		Fit for 55 is a draft amendment to eight existing legal acts and the adoption of five new legal or policy	
		documents (13). Particularly noteworthy in this regard is the increase in the share of renewable energy up to 40% and the noticeable increase in the total target energy efficiency (36-39%), the	
		change in the emissions trading system and the adoption of regulation of effort sharing. Among the	
		innovations are the development of carbon price mechanisms (so-called regulation of the carbon	
		border correction mechanism) and the promotion of green hydrogen popularization.	
4	REPowerEU:	General and Energy Security Specific Aim:	Diversify supply sources and lower the
	affordable,	In response to the hardships and global energy market disruption caused by Russia's invasion of	dependence on Russian energy:
	secure and	Ukraine, the European Commission presented the REPowerEU Plan. Building on the Fit for 55	1.1. Availability – Positive (medium),
	sustainable	package of proposals and completing the actions on energy security of supply and storage, this	more options will be available
		REPowerEU plan puts forward an additional set of actions to:	1.2. Accessibility – NA

⁶ <u>EUR-Lex - 52021DC0550 - EN - EUR-Lex (europa.eu)</u>

⁷ <u>The EU's Fit-for-55 package: The European Green Deal's fitness test | Heinrich Böll Stiftung | Brussels office - European Union (boell.org)</u>

				- 11 1 1111 2 2 111
	energy for	save energy	1.3.	Reliability & Quality – Positive
	Europe ⁸	diversify supplies		(medium)
		 quickly substitute fossil fuels by accelerating Europe's clean energy transition 	1.4.	Affordability – Negative
		smartly combine investments and reforms.		(medium), prices will increase.
		The REPowerEU plan cannot work without a fast implementation of all Fit for 55 proposals and		Flexibility - NA
		higher targets for renewables and energy efficiency.	1.6.	Sustainability – Positive (high)
		With a full implementation of the REPowerEU plan, high prices, gas alternatives (sustainable		more focus on EE and RES
		biomethane, renewable hydrogen), further deployment of renewables, and structural demand		
		measures such as energy efficiency, EU gas demand is expected to decrease at a faster rate than		
		foreseen under Fit for 55.		
5	New EU Strategy	General Aim:		NAPA, vulnerability assessment
	On Adaptation	The strategy aims to realize the 2050 vision of a climate-resilient Union by making adaptation	and adap	tation of energy sector to climate
	To Climate	smarter, more systemic, swifter, and by stepping up international action. This translates throughout	change:	
	Change ⁹	the policy cycle into improved knowledge and data, support to policy development and climate risk	1.1.	Availability – Positive (medium),
		management at all levels, and accelerated adaptation action across the board. This would mean		readiness for the climate risks
		adaptation awareness and planning spread to every single local authority, company, and household;		will increase availability of
		adaptation implementation well underway for those most affected; and global leadership in areas		energy. Support solar energy
		such as climate services, climate proofing, or nature-based solutions.		generation
			1.2.	Accessibility – Not Estimated
		Energy Security Specific Aim:		(NE)
		The implementing regulation on the Governance of the Energy Union and Climate Action already	1.3.	Reliability & Quality – Positive
		stipulates the structure, format, submission processes and review of adaptation information		(medium), adaptation measures
		reported by Member States. This robust reporting also supports the implementation of the National		will increase robustness and
		Energy and Climate Plans, for instance in the protection of the security of the EU's energy supply		reliability of power grids.
		against climate impacts.	1.4.	Affordability – Negative
				(medium), prices will increase.
		the Commission will promote a wider use of <u>drought management plans</u> , measures to increase the	1.5.	Flexibility - NE
		water retention capacity of soils and safe water reuse. The Commission will address improving water	1.6.	Sustainability – Positive (high)
		efficiency and reuse by raising the requirements for products subject to eco-design and energy		
		labelling, energy production (In TPP for cooling, HPP), housing and buildings, and agriculture and will		
		look at how to improve water savings in industrial plants.		
		The Commission and the Member States must also promote the transition to water-saving		
		technologies and practices by setting a price that correctly reflects the value of water.		
6	The Digital	General Aim:	Digitaliza	tion and strengthening
	Europe	The Digital Europe Programme (DIGITAL) is a new EU funding programme focused on bringing digital	cybersecu	urity:
	Programme ¹⁰	technology to businesses, citizens, and public administrations. The Digital Europe Programme will	1.1.	Availability – NE
<u> </u>	_	i	1	•

⁸ REPowerEU: affordable, secure and sustainable energy for Europe | European Commission (europa.eu) / EUR-Lex - 52022DC0230 - EN - EUR-Lex (europa.eu) ⁹ A new EU Strategy on Adaptation to Climate Change (europa.eu) / EUR-Lex - 52021DC0082 - EN - EUR-Lex (europa.eu) / EUR-Lex - 52021DC0082 - EN - EUR-Lex

⁹ A new EU Strategy on Adaptation to Climate Change (europa.eu) / EUR-Lex - 52021DC0082 - EN - EUR-Lex (europa.eu) / EUR-Lex - 52021DC0082 - EN - EUR-Lex (europa.eu)

¹⁰ Digital Programme | Shaping Europe's digital future (europa.eu) / EUR-Lex - 32021R0694 - EN - EUR-Lex (europa.eu)

		provide strategic funding supporting projects in five key capacity areas: in supercomputing, artificial intelligence, <u>cybersecurity</u> , advanced digital skills, and <u>ensuring a wide use of digital technologies</u> across the economy and society, including through Digital Innovation Hubs. With a planned overall budget of €7.5 billion (in current prices), it aims to accelerate the economic recovery and shape the digital transformation of Europe's society and economy, bringing benefits to everyone, but in particular to small and medium-sized enterprises. Energy Security Specific Aim: Cybersecurity technologies such as <u>digital identities</u> , <u>cryptography¹¹ and intrusion detection¹²</u> , and their application in areas such as finance, industry, <u>energy</u> , <u>transport</u> , healthcare, and e-government are essential to safeguarding the security of, and trust in, online activities and transactions by citizens, public administrations, and businesses. Deployment and Best Use of Digital Capacities and Interoperability.	 1.2. Accessibility – NE 1.3. Reliability & Quality – Positive (medium). 1.4. Affordability – NE 1.5. Flexibility – Positive (medium) 1.6. Sustainability – Positive (medium)
		Decarbonisation ¹³	
7	European Climate Law ¹⁴	General Aim: The European Climate Law entered into force on 29 July 2021. The Law sets a legally binding target of net zero greenhouse gas emissions by 2050. The law also puts the intermediate target of reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels. It sets a high standard for public involvement (the principle of equitable energy regulation). Energy Security Specific Aim: In light of the importance of energy production and consumption for the level of greenhouse gas emissions, it is essential to ensure a transition to a safe, sustainable, affordable, and secure energy system relying on the deployment of renewables, a well-functioning internal energy market and the improvement of energy efficiency, while reducing energy poverty. Digital transformation, technological innovation, and research and development are also important drivers for achieving the climate-neutrality objective.	Ensure a transition to a safe, sustainable, affordable, and secure energy system relying on the deployment of renewables, a well-functioning internal energy market and the improvement of energy efficiency, while reducing energy poverty: 1.1. Availability – Positive (high) 1.2. Accessibility – Positive (high) 1.3. Reliability & Quality – Positive (medium). 1.4. Affordability – Positive (medium) 1.5. Flexibility – Positive (medium) 1.6. Sustainability – Positive (high)
8	Methane Strategy (EU strategy to	General Aim: The European Commission presented an EU strategy to reduce methane emissions on 14 th October 2020. Tackling methane emissions is essential to reaching our 2030 climate targets and the 2050 climate neutrality goal, as well as contributing to the Commission's zero-pollution ambition.	Reducing methane leakage during the production and transport of fossil gas: 1.1. Availability – Positive (medium) 1.2. Accessibility – NA 1.3. Reliability & Quality – NA

 $^{^{\}rm 11}$ the practice and study of techniques for secure communication

¹² device or software application that monitors a network or systems for malicious activity or policy violations.

¹³ Five pillars of the Green Agenda: (1) **climate action/decarbonisation**, including climate, energy, and mobility, (2) **circular economy**, addressing in particular waste, recycling, sustainable production and efficient use of resources, (3) **biodiversity**, aiming to protect and restore the natural wealth of the region, (4) **fighting pollution** of air, water and soil and (5) **sustainable food systems and rural areas**.

¹⁴ European Climate Law (europa.eu) / EUR-Lex - 32021R1119 - EN - EUR-Lex (europa.eu)

			T
	reduce methane	This strategy sets out measures to cut methane emissions in Europe and internationally. It presents	1.4. Affordability – Positive (low)
	emissions)15	<u>legislative</u> and non-legislative actions in the energy, agriculture and waste sectors, which account	1.5. Flexibility – NA
		for around 95% of methane emissions associated with human activity worldwide.	1.6. Sustainability – Positive (high)
		One of the priorities under the strategy is to improve measurement and reporting of methane	
		emissions.	
		Energy Security Specific Aim:	
		Whereas a large number of the most <u>cost-effective methane emissions savings</u> can be achieved in	
		the energy sector.	
		Whereas methane leakage during the production and transport of fossil gas is a significant	
		contributor to methane emissions in the energy sector.	
		Whereas improving leakage detection and repair and strict rules on routine venting and flaring are	
		essential measures to reduce methane emissions from the energy sector.	
		whereas fugitive emissions from leaking equipment, infrastructure or closed and abandoned sites,	
		as well as emissions from venting and the incomplete combustion of methane, represent the	
		majority of methane emissions in the energy sector.	
9	European	General Aim:	Establishing platforms for awareness
	Climate Pact16	In 2020 the European Commission has launched a European Climate Pact - EU-wide initiative to	raising about climate change and
		engage with different stakeholders and civil society with the aim to commit them to climate action	sustainable energy solutions:
		and more sustainable behavior. The Pact focuses on three ways to engage with the public on climate	1.1. Availability – Positive (medium),
		action. First, it will encourage information sharing, inspiration, and foster public understanding of	EE behavior, RES
		the threat and the challenge of climate change and environmental degradation and on how to	1.2. Accessibility – NA
		counter it. It will use multiple channels and tools to do so, including events in Member States, on	1.3. Reliability & Quality – NA
		the model of the Commission's on-going citizens' dialogues. Second, there should be both <u>real and</u>	1.4. Affordability – Positive
		<u>virtual spaces for people to express their ideas</u> and creativity and work together on ambitious action,	(medium)
		both at individual and collective level. Participants would be encouraged to commit to specific	1.5. Flexibility – NA
		climate action goals. Third, the Commission will work on <u>building capacity to facilitate grassroots</u>	1.6. Sustainability – Positive (high)
		initiatives on climate change and environmental protection.	
		Energy Security Specific Aim:	
		Establishing platforms for awareness raising about climate change and sustainable energy solutions.	
11	Renovation	It aims to double annual energy renovation rates in the next 10 years. As well as reducing emissions.	Improving energy performance of
	Wave Strategy ¹⁷	The Renovation Wave identifies 3 focus areas: 1) Tackling energy poverty and worst-performing	buildings:
	- "A Renovation	buildings 2) Public buildings and social infrastructure 3) Decarbonizing heating and cooling.	1.1. Availability – Positive (high), EE
	Wave for Europe	Energy Security Specific Aim:	behavior, RES
	- Greening our		1.2. Accessibility – N/A
1	buildings,		1.3. Reliability & Quality – N/A

TA MEF (europa.eu)
 https://europa.eu/climate-pact/system/files/2020-12/20201209%20European%20Climate%20Pact%20Communication.pdf
 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0662

	creating jobs, improving lives	 To achieve the 55% emission reduction target, by 2030 the EU should reduce buildings' greenhouse gas emissions by 60%, their final energy consumption by 14% and energy consumption for heating and cooling by 18%. Decarbonisation and integration of renewables. Building renovation should speed up the integration of renewables in particular from local sources 	 1.4. Affordability – Positive (medium) 1.5. Flexibility – NA 1.6. Sustainability – Positive (medium)
12	European Battery Alliance. ¹⁸	With massive migration from fossil fuels to clean tech, electricity is considered as a cleanest energy carrier. In the future with electricity, batteries play a significant role and the demand for efficient batteries grow faster than ever. European Battery Alliance (EBA) was created to help Europe to establish the crucial goals – complete battery value chain with aim of clean energy transition. EBA is a community with more than 700 actors from different sectors of the economy with the same goal of building competitive European battery industry. For more than a decade the European Commission has developed policies and directives including New Battery regulation, Batteries Directive, Eco-design Directive, Strategic Action Plan on Batteries, and the List on Critical Raw Materials. Those documents should help the community electrify the future. Energy Security Specific Aim: For more than a decade the European Commission has developed policies and directives including New Battery regulation, Batteries Directive, Eco-design Directive, Strategic Action Plan on Batteries, and the List on Critical Raw Materials.	Development of battery market and improvement of technology: 1.1. Availability – Positive (medium), RES, sustainable transport 1.2. Accessibility – Positive (low) 1.3. Reliability & Quality – positive (medium) 1.4. Affordability – N/A 1.5. Flexibility – Positive (medium) 1.6. Sustainability – Positive (medium) (medium)
13	EU Strategy on Offshore Renewable Energy. ¹⁹	The Strategy proposes to increase Europe's offshore wind capacity from its current level of 12 GW to at least 60 GW by 2030 and to 300 GW by 2050. The Commission aims to complement this with 40 GW of ocean energy and other emerging technologies such as floating wind and solar by 2050. Energy Security Specific Aim: • Getting to 300 GW of offshore wind and to 40 GW of ocean energy installed capacity by 2050 means a massive change of scale for the sector in less than 30 years, at a speed unparalleled by the past development of other energy technologies. It means multiplying the capacity for offshore renewable energy by nearly 30 times by 2050. • Domestic, renewable clean energy to support country's energy imports	Development of offshore renewables: 1.1. Availability – Positive (high) RES 1.2. Accessibility – N/A 1.3. Reliability & Quality –N/A 1.4. Affordability – N/A 1.5. Flexibility – N/A 1.6. Sustainability – Positive (medium)
14	EU strategy on energy system integration ²⁰	This Strategy sets out a vision on how to accelerate the transition towards a more integrated energy system, one that supports a climate neutral economy at the least cost across sectors. Energy system integration refers to the planning and operating of the energy system "as a whole", across multiple energy carriers, infrastructures, and consumption sectors, by creating stronger links between them with the objective of delivering low-carbon, reliable and resource-efficient energy services, at the least possible cost for society. It includes three core pillars:	Transition towards a more integrated energy system 1.1. Availability – Positive (medium), increased efficiency, RES 1.2. Accessibility – Positive (medium) 1.3. Reliability & Quality – N/A 1.4. Affordability – N/A

https://www.eba250.com/
https://energy.ec.europa.eu/topics/renewable-energy/eu-strategy-offshore-renewable-energy en
https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0299&from=EN

		 a more 'circular' energy system, with energy efficiency at its core, in which the least energy intensive choices are prioritized, unavoidable waste streams are reused for energy purposes, and synergies are exploited across sectors a greater direct electrification of end-use sectors. The rapid growth and cost competitiveness of renewable electricity production can service a growing share of energy demand – for instance using heat pumps for space heating or low-temperature industrial processes, electric vehicles for transport, or electric furnaces in certain industries. the use of renewable and low-carbon fuels, including hydrogen, for end-use applications where direct heating or electrification are not feasible 	1.5. Flexibility – Positive (low) 1.6. Sustainability – Positive (high)
		System integration will likely follow different pathways in each EU country, depending on their respective starting points and policy choices. Some of these are already reflected in the national energy and climate plans 2021-2030. Energy Security Specific Aim: Core pillars relevant to ES: a more 'circular' energy system, with energy efficiency at its core a greater direct electrification of end-use sectors (with support of renewables penetration, electric transport, heat pumps, etc) the use of renewable and low-carbon fuels, including hydrogen, for end-use applications where direct heating or electrification are not feasible System integration will likely follow different pathways in each EU country, depending on their respective starting points and policy choices. Some of these are already reflected in the national energy and climate plans 2021-2030.	
15	A hydrogen strategy for a climate-neutral Europe ²¹	The priority for the EU is to develop green hydrogen, produced using mainly wind and solar energy. This gradual transition will require a phased approach: • From 2020 to 2024, we will support the installation of at least 6 gigawatts of renewable hydrogen electrolysers in the EU, and the production of up to one million tons of renewable hydrogen. • From 2025 to 2030, hydrogen needs to become an intrinsic part of our integrated energy system, with at least 40 gigawatts of renewable hydrogen electrolysers and the production of up to ten million tons of renewable hydrogen in the EU. • From 2030 to 2050, renewable hydrogen technologies should reach maturity and be deployed at large scale across all hard-to-decarbonize sectors.	Development of green hydrogen: 1.1. Availability – Positive (high) RES 1.2. Accessibility – N/A 1.3. Reliability & Quality –Positive (medium) 1.4. Affordability – N/A 1.5. Flexibility – Positive (low) 1.6. Sustainability – Positive (medium)
		Energy Security Specific Aim: • From 2020 to 2024, EU will support the installation of at least 6 gigawatts of renewable hydrogen electrolysers in the EU, and the production of up to one million tons of renewable hydrogen.	

²¹ https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0301&from=EN

		• From 2025 to 2030, hydrogen needs to become an intrinsic part of EU integrated energy system, with at least 40 gigawatts of renewable hydrogen electrolysers and the production of up to ten million tons of renewable hydrogen in the EU.	
		From 2030 to 2050, renewable hydrogen technologies should reach maturity and be deployed at	
		large scale across all hard-to-decarbonize sectors.	
		The European Clean Hydrogen Alliance will help build up a <u>robust pipeline of investments</u>	
16	Clean energy for all Europeans	The package, adopted in 2019, will help to decarbonize EU's energy system in line with the European Green Deal objectives. The package consists of 8 new laws:	Decarbonisation of energy system: 1.1. Availability – Positive (high),
	package ²²	1. Energy performance in buildings ²³	increased efficiency, RES
		2. Renewable energy ²⁴	1.2. Accessibility – Positive (medium)
		3. Energy efficiency ²⁵	1.3. Reliability & Quality – Positive
		4. Governance of the energy union ²⁶	(high)
		5. Electricity regulation ²⁷	1.4. Affordability – Positive
		6. Electricity directive ²⁸	(medium)
		7. Risk preparedness ²⁹	1.5. Flexibility – Positive (medium)
		8. ACER (European Union Agency for the Cooperation of Energy Regulators) ³⁰	1.6. Sustainability – Positive (high)
17	Sustainable and	The European Green Deal includes a target to reduce transport-related greenhouse gas emissions	Sustainable transport to reduce GHG
	Smart Mobility	by 90% by 2050. Objectives of the strategy are:	emissions:
	Strategy-	increasing the uptake of zero-emission vehicles	1.1. Availability – controversial, might
	putting	making sustainable alternative solutions available to the public & businesses	be positive or negative (low) due to the
	European transport on	supporting digitalization & automation	penetration rate of electric vehicles
	track for the	improving connectivity & access.	1.2. Accessibility – N/A
	future 31	The key milestones are:	1.3. Reliability & Quality – N/A
	lutuic	By 2030:	1.4. Affordability – Positive (low) 1.5. Flexibility – Positive (low),
		at least 30 million zero-emission vehicles will be in operation on European roads. 100 European sitiation will be aligned a neutral.	1.5. Flexibility – Positive (low), potential for smoothing load curve
		100 European cities will be climate neutral. Compared to the first of the compared to	potential for smoothing load curve
		high-speed rail traffic will double.	

²² https://energy.ec.europa.eu/topics/energy-strategy/clean-energy-all-europeans-package en

²³ https://eur-lex.europa.eu/legal-content/EN/TXT/?toc=OJ:L:2018:156:TOC&uri=urisery:OJ.L .2018.156.01.0075.01.ENG

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L .2018.328.01.0082.01.ENG&toc=OJ:L:2018:328:TOC

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L .2018.328.01.0210.01.ENG&toc=OJ:L:2018:328:TOC

²⁶ https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L .2018.328.01.0001.01.ENG&toc=OJ:L:2018:328:TOC

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L .2019.158.01.0054.01.ENG&toc=OJ:L:2019:158:TOC

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L .2019.158.01.0125.01.ENG&toc=OJ:L:2019:158:TOC

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2019:158:FULL&from=EN

³⁰ https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L .2019.158.01.0022.01.ENG&toc=OJ:L:2019:158:TOC

³¹ https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12438-Sustainable-and-Smart-Mobility-Strategy en

	 scheduled collective travel of under 500 km should be carbon neutral within the EU. automated mobility will be deployed at large scale. zero-emission vessels will become ready for market By 2035: zero-emission large aircraft will become ready for market. By 2050: nearly all cars, vans, buses as well as new heavy-duty vehicles will be zero-emission. rail freight traffic will double. high-speed rail traffic will triple. the multimodal Trans-European Transport Network (TEN-T) equipped for sustainable and smart transport with high-speed connectivity will be operational for the comprehensive 	1.6. Sustainability – Positive (medium/high)
	network. Energy Security Specific Implications: Reduce consumption of fossil fuels Increase use of electric vehicle and potential for smoothing electricity consumption curve Circular Economy	
18 Circular Economy Action Plan ³²	This Circular Economy Action Plan provides a future-oriented agenda for achieving a cleaner and more competitive Europe in co-creation with economic actors, consumers, citizens, and civil society organizations. It aims at accelerating the transformational change required by the European Green Deal, while building on circular economy actions implemented since 2015. This plan aims also at ensuring that the circular economy works for people, regions, and cities, fully contributes to climate neutrality, and harnesses the potential of research, innovation and digitalization. It foresees the further development of a sound monitoring framework contributing to measuring well-being beyond GDP A circular economy reduces pressure on natural resources and is a precondition for achieving the climate-neutrality target by 2050 and halting biodiversity loss. Energy Security Specific Aim: improving product durability, reusability, upgradability and reparability, addressing the presence of hazardous chemicals in products, and increasing their energy and resource efficiency; promoting the uptake of green technologies through a system of solid verification by registering the EU Environmental Technology Verification scheme as an EU certification	Circular economy for achieving a cleaner and more competitive economy: 1.1. Availability –Positive (medium), EE in industry, resource efficiency 1.2. Accessibility – N/A 1.3. Reliability & Quality – Positive (medium) 1.4. Affordability – N/A 1.5. Flexibility –N/A 1.6. Sustainability – Positive (high)

³² New Circular Economy Action Plan (europa.eu) / new circular economy action plan.pdf (europa.eu) / Circular economy action plan (europa.eu)

		 rules on recycled content and measures to improve the collection and recycling rates of <u>all batteries (including transport)</u>, ensure the recovery of valuable materials and provide guidance to consumers; addressing the sustainability performance of construction products in the context of the revision of the Construction Product Regulation35, including the possible introduction of recycled content requirements for certain construction products, taking into account their safety and functionality; 	
19	Sustainable blue economy ³³ . A new approach for a sustainable blue economy in the EU Transforming the EU's Blue Economy for a Sustainable Future	It is a systemic view that integrates ocean policy into Europe's new economic policy. This communication sets out a detailed and realistic agenda for the blue economy to play a major role to achieve the European Green Deal's objectives. This communication: • calls on all maritime players to base their activities on the responsible use of natural resources, on decarburization and on circular economy concepts. • sets out a detailed agenda for greening the blue economy, underpinned by international ocean governance • facilitates coexistence and synergies of economic activities in the maritime space through Maritime Spatial Planning, without damaging the environment proposes a series of actions to boost investment in research (e.g. Mission on Oceans and Waters), skills and innovation, and mobilizes financing opportunities under the new European Maritime, Fisheries and Aquaculture Fund, and other EU Programmes (e.g. Resilience and Recovery Facility) Energy Security Specific Aim: • The blue economy can contribute to carbon neutrality by developing offshore renewable energy and by greening maritime transport and ports • promote the use of EU funds to green maritime transport (to reduce fossil fuels use) • Promote greening the port and use of energy efficiency	Sustainable blue economy to achieve green deal objectives: 1.1. Availability –Positive (medium), offshore renewable, greening maritime transport and ports 1.2. Accessibility – N/A 1.3. Reliability & Quality – N/A 1.4. Affordability – N/A 1.5. Flexibility –N/A 1.6. Sustainability – Positive (high)
20	A New Industrial Strategy for Europe ³⁴	This strategy helps the Europe's industry to lead the twin transition and drive its competitiveness. The package of initiatives set out a range of actions to support all players of European industry to maintain competitiveness in the internal market and globally, make Europe climate-neutral by 2050, and shape Europe's digital future. Energy Security Specific Aim: To become more competitive and more circular, industry will need a secure supply of clean and affordable energy and raw materials. Stepping up investment in research, innovation, deployment and up-to-date infrastructure will help develop new production processes and create jobs in the process. Europe also needs to address the sustainability of construction products and improve the energy efficiency and environmental performance of built assets.	Efficient and sustainable industry to ensure competitiveness of economy and support green deal objectives 1.1. Availability — Positive (medium) RES , EE in industry, resource efficiency 1.2. Accessibility — N/A 1.3. Reliability & Quality —Positive (low) 1.4. Affordability — N/A 1.5. Flexibility — N/A

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021DC0240&from=ENhttps://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0102

			1.6. Sustainability – Positive (medium)			
21	Pact for skills. ³⁵	To support a fair and resilient recovery and deliver on the ambitions of the green and digital transitions and of the EU Industrial and SME Strategies, the Commission invites public and private organizations to join forces and take concrete action to upskill and reskill people in Europe. Energy Security Specific Aim: Networking hub, including: support in finding partners and first meetings of the partnerships; linking with existing EU tools, e.g. Europass, Skills Panorama, EURES and European Network of Public Employment Services; promotion of the activities of the Pact members. Knowledge hub, including: webinars, seminars peer learning activities; updates on EU polices and instruments; information on projects, tools instruments and best practices Guidance and resources hub, including: access to information on relevant EU funding; guidance to identify financial possibilities; facilitation of exchange between the Pact members and national/regional authorities	Upskill and reskill people to achieve green deal objectives: 1.1. Availability –Positive (medium), smoother introduction of modern EE and RE technologies 1.2. Accessibility – N/A 1.3. Reliability & Quality – Positive (low) 1.4. Affordability – N/A 1.5. Flexibility –N/A 1.6. Sustainability – Positive (medium)			
	Depollution					
22	Zero pollution Action Plan (EU Action Plan: 'Towards Zero Pollution for Air, Water and Soil) ³⁶	It sets out an integrated vision for 2050: a world where pollution is reduced to levels that are no longer harmful to human health and natural ecosystems, as well as the steps to get there. The plan ties together all relevant EU policies to tackle and prevent pollution, with a special emphasis on how to use digital solutions to tackle pollution. Reviews of relevant EU legislation are foreseen to identify remaining gaps in EU legislation and where better implementation is necessary to meet these legal obligations. The Action Plan sets key 2030 targets to reduce pollution at source, in comparison to the current situation. Namely:	Reduce and prevent pollution: 1.1. Availability –Negative (medium), EE in industry, resource efficiency, reduction of fossil fuels 1.2. Accessibility – N/A 1.3. Reliability & Quality – N/A 1.4. Affordability – N/A 1.5. Flexibility –Negative (low) 1.6. Sustainability – Positive (high)			
		 improving air quality to reduce the number of premature deaths caused by air pollution by 55%. improving water quality by reducing waste, plastic litter at sea (by 50%) and microplastics released into the environment (by 30%). improving soil quality by reducing nutrient losses and chemical pesticides' use by 50%. reducing by 25% the EU ecosystems where air pollution threatens biodiversity. reducing the share of people chronically disturbed by transport noise by 30%, and 				

https://ec.europa.eu/social/main.jsp?catId=1517&langId=en
Commission aims for zero pollution in air, water and soil (europa.eu) / www.eubusiness.com/topics/environ/zero-pollution-action-plan

		significantly reducing waste generation and by 50% residual municipal waste. Energy Security Specific Implications:	
		 Resource efficiency Reduction of fossil fuels use 	
23	Proposals to	The proposal aims to minimize consumption of products coming from supply chains associated	Minimize consumption of products
	Stop	with deforestation or forest degradation; to avoid risks for human health and the environment	associated with deforestation, tackle
	Deforestation,	generated from waste shipped across borders; prevention of soil degradation and its restoration.	forest degradation:
	Innovate	Energy Security Specific Aim:	1.1. Availability –Positive (medium),
	Sustainable	Proposal for a Regulation on deforestation-free products:	sustainable use of wood
	Waste	This Regulation proposal is also expected to be applied together with the Renewable Energy	1.2. Accessibility – Positive (medium)
	Management	Directive as regards some commodities used as biofuels or to produce biofuels, such as wood	1.3. Reliability & Quality – N/A
	And Make Soils	pellets or derivatives of soy and palm oil.	1.4. Affordability – N/A
	Healthy ³⁷	Other implications:	1.5. Flexibility –N/A
		Use of forestry residue to produce biomass fuels and reduce pressure on forests Support regeneration of forests to ensure sustainable supply of wood	1.6. Sustainability – Positive (high)

³⁷ European Green Deal: Commission adopts new proposals (europa.eu)