NEWMUN VII

EUROPEAN UNION: BACKGROUND GUIDE

AGENDA 1: Modernizing the GDPR: Safeguarding Data Privacy in the Age of AI and Emerging Technologies

Introduction

In an era defined by artificial intelligence, big data, and rapid technological advancement, the concept of privacy has evolved from a personal concern to a cornerstone of digital governance. The European Union's General Data Protection Regulation (GDPR), which took effect in 2018, remains one of the most comprehensive data protection frameworks in the world. However, emerging technologies—such as AI-driven decision-making systems, biometric surveillance, and the Internet of Things—are testing the limits of this regulation. The Council of the European Union must now examine how to adapt the GDPR to ensure it remains both effective and future-proof in safeguarding citizens' rights while encouraging innovation across the digital economy.

Definition of Key Terms

- **GDPR (General Data Protection Regulation):** The EU's primary legal framework governing data protection and privacy for individuals, establishing rules for how personal data is collected, processed, and stored.
- **Data Controller:** The individual or entity that determines the purposes and means of processing personal data.
- **Data Processor:** An entity that processes data on behalf of a controller.
- **Data Sovereignty:** The principle that digital data is subject to the laws of the country in which it is collected or processed.

General Overview

The GDPR was introduced to harmonize data protection laws across EU member states and strengthen individuals' control over their personal data. Its principles—lawfulness,

transparency, purpose limitation, and data minimization—were designed for a digital world dominated by social media and e-commerce platforms.

Yet, since its implementation, technological progress has accelerated. Today, AI systems depend on large amounts of data, which can include sensitive or anonymized personal information. New technologies such as facial recognition, data prediction tools, and self-operating systems make it harder to follow GDPR rules about consent and limiting data use. In addition, there are growing concerns about how transparent and accountable these technologies are—issues that the original GDPR did not fully prepare for.

Modernizing the GDPR involves balancing two priorities: maintaining strong privacy safeguards and ensuring that the EU remains competitive in the global digital economy. Policymakers must adapt existing frameworks without stifling technological innovation or creating excessive regulatory burdens.

Major Parties Involved

- **European Commission:** Responsible for proposing legislative reforms to update the GDPR and ensure consistency across member states.
- **Member States:** Each country has its own data protection authority (DPA) that enforces GDPR rules at the national level.
- **Private Sector & Tech Companies:** Including both European firms and international corporations (e.g., Meta, Google, OpenAI) that must comply with EU data protection standards.
- **Ireland:** As the European base for many global tech companies, Ireland has been central to major GDPR enforcement cases. The Irish Data Protection Commission has fined **Meta (Facebook and Instagram)** hundreds of millions of euros for unlawful data transfers to the U.S. and for not properly protecting users' information.
- **France:** France's data authority, **CNIL**, has led some of the largest GDPR cases in Europe. In 2019, it fined **Google €50 million** for not being transparent about how it used personal data for advertising. More recently, CNIL has targeted companies for tracking users without consent through cookies and AI tools.

Timeline of Key Events

- **2012:** European Commission proposes comprehensive data protection reform to replace the 1995 Data Protection Directive.
- **April 2016:** The European Parliament and Council adopt the GDPR.
- **May 2018:** GDPR comes into effect across all EU member states.
- **2020:** The European Court of Justice invalidates the EU-U.S. Privacy Shield, raising questions about cross-border data flows.
- **2021–2023:** The European Commission proposes and negotiates the **AI Act**, introducing risk-based regulation of artificial intelligence.
- **May 2023:** The Irish Data Protection Commission (DPC) imposed a historic fine of €1.2 billion on US tech giant Meta.
- **2024–2025:** Discussions begin within EU institutions on updating or supplementing the GDPR to address AI-driven data processing and emerging digital technologies.

Previous Attempts to Resolve the Issue

Several efforts have been made to clarify the intersection of data protection and AI. The European Data Protection Board has issued guidelines on data processing in the context of automated decision-making and machine learning. The proposed **AI Act** seeks to ensure that high-risk AI systems comply with fundamental rights, including data protection principles outlined in the GDPR.

However, challenges persist. Fragmented national interpretations, complex compliance requirements, and the global nature of data flows have limited the GDPR's adaptability. Attempts to negotiate international data-sharing frameworks—such as the EU-U.S. Data Privacy Framework—highlight the difficulty of maintaining privacy standards in a connected world.

Possible Solutions

1. **Targeted Amendments to the GDPR:** Introduce specific provisions addressing AI, automated decision-making, and algorithmic accountability.
2. **Enhanced Transparency Requirements:** Mandate that AI systems clearly explain how personal data influences their outputs or recommendations.

3. **Stronger Oversight Mechanisms:** Strengthen the authority and resources of national data protection agencies to monitor compliance with both GDPR and AI regulations.
4. **Cross-Border Data Governance:** Develop updated frameworks for secure and ethical international data transfers.
5. **Public Awareness and Digital Literacy:** Promote education on data rights and responsible use of emerging technologies among EU citizens.

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AGENDA 2: Promoting Green Technology and Sustainability Innovation in the European Union

Introduction

The European Union has made sustainability a leading agenda item because climate change, environmental degradation and rising energy insecurity have continued to escalate. The EU aims to be the global leader in transitioning toward a green and circular economy and is aware that environmental sustainability and economic prosperity will have to go hand in hand. Through the creation of the European Green Deal, Horizon Europe, and the Net Zero Industry Act (NZIA), the EU is pushing to create a continent that becomes climate neutral by 2050, with a competitive economy, creating green jobs, and being socially fair. A key part of this agenda is increasing the deployment of green technologies and the promotion of sustainable innovations. This promotion will support carbon emissions reductions but also stimulate industrial modernization, resilience, and technological leadership.

Definition of Key Terms

- **Green technology (Green Tech):** Technologies designed to minimize environmental impact by conserving energy, reducing emissions, and using natural resources efficiently (e.g., renewable energy, sustainable transport, and waste management systems).
- **Circular economy:** An economic model focused on reuse, recycling, and regeneration, minimizing waste and resource consumption.
- **Decarbonization / climate neutrality:** The reduction and eventual elimination of greenhouse gas emissions to achieve net-zero emissions by mid-century.
- **Public-private partnership (PPP):** A collaboration between government, academia, and the private sector to advance research and technology development.
- **Just transition:** Ensuring that the move toward a green economy is socially inclusive, supporting workers and regions most affected by the transition.

General Overview

The EU's long-term agenda focuses on advancing green technologies and sustainable innovation to achieve climate neutrality by 2050 and reduce greenhouse gas emissions by 55% by 2030. The European Green Deal, launched in 2019, provides the roadmap for this transformation, aiming to decouple economic growth from resource use while ensuring a just and inclusive transition for all Europeans.

Central to this strategy is innovation as the driver of sustainability. Programs such as Horizon Europe, NextGenerationEU, and the Innovation Fund invest in renewable energy, carbon capture, circular manufacturing, and sustainable infrastructure, creating a cross-sector ecosystem that supports research, large-scale investment, and collaboration across EU Member States.

The EU's green transformation is driven by economic, geopolitical, and energy security goals, aiming to boost domestic clean technologies and create new industries and jobs. However, disparities in research, innovation, and investment across Member States—especially between Western/Northern and Southern/Eastern Europe—pose challenges. Equitable funding and capacity-building initiatives are needed to ensure all countries can fully participate in the transition.

Identifying pathways to green technology and sustainable innovation—as both an environmental imperative and an opportunity for Europe to rethink its economic model for enhancing social wellbeing and global leadership in sustainability—is paramount to the future of EU Member States.

Major Parties Involved (Key EU Countries)

While the European Union acts collectively on climate and innovation policy, individual Member States play significant roles in shaping and implementing the continent's green transition. Below are some of the key countries leading efforts to promote green technology and sustainable innovation:

- **Germany:** A leader in renewable energy and sustainable manufacturing, Germany has invested heavily in solar and wind energy under its Energiewende strategy. The country promotes industrial decarbonization and innovation through national

programs aligned with the EU Green Deal, such as hydrogen development and electric mobility.

- **France:** Focuses on clean energy diversification, with major investments in nuclear power, renewable energy, and sustainable transport. France also promotes the development of green finance mechanisms and supports innovation clusters such as the France 2030 plan, aimed at accelerating sustainable industrial growth.
- **Netherlands:** Known for its circular economy leadership, the Netherlands focuses on sustainable agriculture, waste reduction, and green logistics. The government actively collaborates with private companies and research institutions to develop eco-friendly manufacturing and transport systems.
- **Sweden:** A pioneer in green innovation and energy efficiency, Sweden sources over half of its energy from renewables and invests significantly in clean technology research. The Swedish model emphasizes digitalization, sustainability, and equitable economic transition.
- **Denmark:** Globally recognized for its wind energy industry, Denmark has been a strong advocate for EU-level clean energy policies. Its companies, such as Vestas, play a major role in global renewable technology deployment.
- **Spain:** Emerging as a key player in solar energy and green hydrogen, Spain leverages EU recovery funds to modernize its energy grid and support innovation in sustainable transport and manufacturing.
- **Poland:** Traditionally reliant on coal, Poland faces unique challenges in the transition but is increasingly investing in renewable energy, battery manufacturing, and clean industry through EU support mechanisms.
- **Italy:** Aims to promote green manufacturing, circular economy models, and sustainable tourism. Italian regions have been active in utilizing Horizon Europe funding to strengthen R&D and support start-ups in renewable sectors.
- **Finland:** Invests heavily in bioeconomy and smart energy systems, combining environmental policy with technological innovation. Finland also emphasizes cross-border research collaboration and sustainable forestry practices.
- **Portugal and Greece:** Both nations are leveraging EU green funds to build renewable energy capacity and modernize energy infrastructure, particularly in solar and offshore wind technologies.

Collectively, these countries represent a diverse set of strengths, priorities, and challenges — from industrial innovation in Northern Europe to infrastructure development in Southern and Eastern regions. Strengthening collaboration among them remains essential for achieving EU-wide sustainability goals.

Timeline of Key Events

2019	Launch of the European Green Deal, committing to climate neutrality by 2050.
2021	Launch of Horizon Europe, focusing on green research and sustainable innovation.
2021–2027	Implementation of the EU–Catalyst Partnership and Innovation Fund for clean technologies.
2023	Adoption of the Green Deal Industrial Plan to boost EU clean-tech competitiveness.
2024	EU approval of the Net Zero Industry Act (NZIA) to increase domestic clean-tech production.
2025 (proposed)	Launch of the Clean Industrial Deal, expanding circular economy measures and simplifying green investment regulations.

Previous Attempts to Address the Issue

The EU has introduced a range of initiatives to promote green technology and sustainable innovation, including:

- **Horizon Europe (2021–2027):** The EU's €95.5 billion R&I framework program funding sustainability-related projects.
- **NextGenerationEU:** The €750 billion recovery fund, with at least 30% dedicated to climate and environmental initiatives.
- **Innovation Fund & EU–Catalyst Partnership:** Financing large-scale low-carbon technology demonstrations.

- **European Partnerships:** Joint public-private collaborations advancing renewable energy, sustainable manufacturing, and digitalization.
- **EU–ASEAN and international cooperation:** Supporting cross-border technology transfer and sustainability partnerships.
- **Green Deal Industrial Plan & NZIA:** Simplifying permitting and increasing domestic clean-tech capacity.

Despite progress, issues remain — notably uneven access to innovation funding, bureaucratic delays, and unequal regional development.

Possible Solutions / Policy Recommendations

1. Expand and simplify access to EU funding programs to prioritize innovation in renewable energy, carbon reduction, and sustainable industry.
2. Strengthen cross-border research networks under Horizon Europe, supporting joint projects in clean energy, sustainable manufacturing, and carbon-reduction technologies.
3. Direct targeted investment to less-developed EU regions to ensure inclusive participation in the green transition and reduce the innovation gap.
4. Encourage collaboration between governments, universities, and industries to accelerate technology commercialization and attract private investment.
5. Promote sustainable product design, repairability, and recycling to minimize waste and maximize resource efficiency.
6. Provide retraining programs, social protections, and innovation incentives for workers and communities impacted by the green shift.

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