



RESPONSIBLE AI FOR SUSTAINABLE INNOVATION AND ETHICAL GOVERNANCE

Table of Contents

Executive Summary.....	3
Understanding AI in Sustainability, Ethics and Governance (SEG).....	4
Responsible AI Frameworks, AI Principles, and Integration Methodologies.....	5
AI Metrics and Monitoring.....	7
AI Transformations for Sustainability.....	8
Environmental Impacts of AI and Mitigation Strategies.....	9
Policy and Regulatory Landscape, AI Governance Frameworks, Innovation, and Equity.....	11
Ethical Considerations in AI.....	12
The Way Forward.....	13
Call to Action.....	14

Executive Summary

This whitepaper explores the transformative role of Artificial Intelligence (AI) in advancing Sustainability, Ethics and Governance (SEG) goals. As organizations worldwide strive to achieve sustainability, AI emerges as a pivotal tool in optimizing resource usage, enhancing decision-making processes, and driving innovative solutions to complex environmental and social challenges. The whitepaper delves into the necessity of AI for sustainability to uncover some key insights into AI adoption:



AI and SEG: The rapidly evolving AI technologies, including machine learning and natural language processing, enable efficient resource management, predictive analytics for environmental conservation, and automation of processes that reduce carbon footprints. By leveraging AI, organizations can address pressing environmental challenges, optimize resource use, reduce waste, and support sustainable practices.



Environmental Impacts and Mitigation Strategies: While AI offers significant benefits for SEG initiatives, it also poses challenges such as high energy consumption and electronic waste generation. The whitepaper outlines strategies to mitigate these negative impacts, including energy-efficient algorithms, renewable energy sources, and circular economy principles.



Responsible AI Frameworks: The whitepaper emphasizes the importance of responsible AI frameworks, principles, and integration methodologies. Core principles such as fairness, inclusivity, privacy, transparency, accountability, and compliance are essential for developing and deploying AI systems that align with ethical standards and promote long-term sustainability.



Policy and Regulatory Landscape: The integration of AI with SEG principles is shaped by evolving policies and regulatory frameworks. Infosys proactively engages in policy discussions to shape AI regulations that support sustainability and innovation, ensuring all AI strategies align with regulatory requirements and promote ethical practices.



Metrics and Monitoring: Advanced metrics and monitoring tools are crucial for tracking AI performance, compliance, risk management, ethical implications, and social impact. Infosys employs comprehensive monitoring approaches to ensure their AI systems exceed industry standards in transparency and fairness.



Ethical Considerations: Ethical considerations in AI encompass transparency, fairness, privacy, environmental responsibility, social impact, and accountability. Infosys addresses these considerations through its Responsible AI Toolkit, integrating security, privacy, fairness, and explainability into AI workflows.



AI Transformations for Sustainability: Infosys leverages AI to drive sustainability transformations through various offerings, including the Infosys Topaz Responsible AI Suite, AI-driven solutions for energy optimization, smart grids, precision farming, and supply chain management. Collaborative initiatives with industry leaders and academic institutions further enhance AI applications for sustainability.



Future Directions: The future of AI in SEG involves continued innovation, collaboration, and adherence to standards. Emerging trends include enhanced predictive analytics, AI-driven circular economy models, AI for social impact initiatives, agentic AI, and sustainable AI technologies with reduced energy consumption, including deployment of low-carbon energy sources.

AI is becoming increasingly crucial for advancing SEG goals, offering innovative solutions to complex environmental, social, and governance challenges. By adopting responsible AI practices, investing in workforce capacity building, enhancing digital infrastructure, and engaging in policy advocacy, organizations can lead the way in integrating AI with SEG goals, driving positive environmental and social outcomes while maintaining robust governance practices.

This whitepaper serves as a comprehensive guide for organizations seeking to leverage AI for sustainability, providing actionable insights and strategies to navigate the complex landscape of AI and SEG integration.

2. Understanding AI in the Sustainability, Ethics and Governance Landscape

AI plays a crucial role in sustainability by enabling efficient resource management, predictive analytics for environmental conservation, and automation of processes that reduce carbon footprints. AI technologies such as machine learning and natural language processing help analyse vast amounts of data to identify trends, risks, and opportunities that human analysts might overlook. AI has the potential to address some of the most pressing environmental challenges, including optimizing resource use, reducing waste, and enhancing decision-making processes to support sustainable practices.

Environmental Monitoring and Management: AI can analyse vast amounts of environmental data to monitor climate change, predict natural disasters, and manage natural resources more efficiently.

Energy Efficiency: AI-driven systems can optimize energy consumption in buildings, industries, and transportation, significantly reducing carbon footprints.

Sustainable Agriculture: AI technologies can improve crop yields, reduce water usage, and minimize the environmental impact of farming through precision agriculture.



Building a robust digital and data infrastructure is essential for leveraging AI in all sustainability efforts. This infrastructure must support the collection, storage, and analysis of large datasets while ensuring accessibility and inclusivity. This includes developing centralized platforms for SEG data collection, standardizing data across sources, and ensuring data accessibility and transparency. Collaboration between stakeholders is also key to creating inclusive AI systems that benefit all sectors of society. And to maximize the benefits of AI in sustainability, organizations must invest in workforce capacity building. This involves training employees in AI technologies, fostering a culture of continuous learning, and developing interdisciplinary teams that can integrate AI into sustainability initiatives.

An argument is being made that tech companies are running wild with AI, which may impact the environment and society. Damages from AI will take time to precipitate. Such alleged SEG risks down the road may not be very visible at this stage, but debates among lawmakers across the world have accelerated.

Case in point is the European Union, which gave significant weight to SEG (as a subset) and its landmark EU AI Act, placing a lot of emphasis on preventing such risks. This law specifically calls for the inclusion of sustainability as an objective in voluntary codes of conduct to be adopted by the developers of AI Systems. The law also requires the EU AI Office and EU Member States to 'facilitate' the drawing up of these codes. Since this will come into force in 2026, how this is implemented in practice will have to be seen.

The legal debates in the US are also equally interesting. Lawmakers in state legislatures have tabled several hundreds of bills to regulate AI. This has already translated into 30+ laws being passed. From an environmental perspective, a few states have proposed bills with heavy reporting obligations. For example, California and Massachusetts require AI model developers to report energy consumed in developing or pre-training an AI model. The developers are also required to report the energy used to operate the AI model every year. These legal obligations apply to AI companies that run pre-training of their AI models using compute capacity greater than 10^{25} FLOPS. Though there are multiple debates on this threshold itself, such sharp focus on the issue advances the cause of environmentalists.

When it comes to SEG conversations and the need to create new AI laws, strange alliances are being formed as contrarian interest groups have the same interests. In sharp contrast to what is happening among state lawmakers, a legislative amendment was recently moved at the federal level to bring a 10-year moratorium on AI bills by states and roll back all the state laws already passed. It is being argued that there are multiple reasons why the US federal government is focusing on innovation over environmental and social issues of AI. And the most interesting one is geopolitical. To win the tech race with China, a 'light-touch' AI regulation will possibly accelerate the innovation. Ironically, China itself has regulated AI to decent levels.

Creating Digital and Data Infrastructure for Inclusive AI Use

High-Performance Computing and Data Centers: AI models require significant computational power. HPC infrastructure, including GPUs and specialized hardware, is essential for processing large datasets and training and deploying complex AI models. Efficient data centres with advanced cooling systems and renewable energy sources can support AI workloads while minimizing environmental impact. In addition, High-speed, low-latency networks are vital for real-time AI applications and data transfer.

Data Integration and Management: Effective data management systems are needed to integrate diverse data sources and ensure data quality and accessibility.

Scalable Cloud Solutions: Cloud-based platforms provide scalable resources for AI development and deployment, enabling organizations of all sizes to leverage AI technologies.

3. Responsible AI Frameworks, AI Principles, and Integration Methodologies

Sustainable and Responsible AI frameworks, principles, and integration methodologies are critical to developing and deploying AI systems that align with ethical standards and promote long-term sustainability.

These frameworks provide guidelines to ensure AI technologies are developed and used in ways that minimize environmental impact, promote social responsibility, and uphold governance standards. They emphasize core principles such as fairness, inclusivity, privacy, transparency, accountability, and

compliance, ensuring that AI processes are clear, responsibilities are defined, and legal and regulatory requirements are met. AI principles serve as foundational values, guiding the design and implementation of AI systems, ensuring they are unbiased, accessible, and protect user data. Integration methodologies refer to the strategies and practices used to seamlessly incorporate AI technologies into existing systems and workflows. These methodologies focus on scalability, continuous monitoring, and adaptation to align AI with ethical standards and performance goals.

Together, these elements help in navigating the complex landscape of AI, fostering trust, driving sustainable practices, and creating equitable and secure AI solutions to ultimately deliver long-term value.

Infosys is leading the charge in responsible AI with its Infosys Topaz suite. This suite includes the Responsible AI Toolkit, which integrates security, privacy, fairness, and explainability into AI workflows. The framework is designed to monitor and protect AI models from risks and threats, ensuring ethical and trustworthy AI systems. Infosys Topaz offers over ten solutions built around the Scan, Shield, and Steer framework, which aims to safeguard AI models while promoting responsible AI adoption. Additionally, Infosys' 12 Principles for Responsible AI by Design guide the ethical development and deployment of AI systems and play a crucial role in Environmental, Social, and Governance reporting by ensuring that AI systems are developed and deployed ethically and responsibly.

Environmental Impact

Infosys promotes environmentally friendly AI practices by developing energy-efficient algorithms that reduce overall power consumption and utilizing renewable energy sources, such as solar and wind, to power its data centres. These efforts help organizations report on their initiatives to lower carbon footprints and energy consumption associated with AI operations. As a carbon-neutral company, we continue to focus on reducing our environmental impact through initiatives like energy-efficient algorithms and the use of renewable energy sources. We also utilize the Infosys Sustainability Cloud to provide actionable insights and track progress on sustainability goals for our clients.

Social Responsibility

Infosys ensures that AI systems are unbiased, accessible, and protect user data through principles of fairness, inclusivity, and privacy. By employing techniques to identify and mitigate biases, designing AI systems to be accessible to individuals with disabilities, and implementing robust data privacy measures, Infosys highlights its commitment to creating equitable and secure AI solutions, which are vital for social responsibility reporting.

Governance

Infosys emphasizes transparency, accountability, and compliance to ensure that AI processes are clear, responsibilities are defined, and legal and regulatory requirements are met. By making AI systems and their operations understandable, establishing clear accountability frameworks, and adhering to regulatory standards, Infosys demonstrates robust governance practices that align with societal values and standards. We have established clear policies and accountability frameworks, such as the Code of Conduct and Ethics, to guide our operations. Additionally, Infosys has been recognized for its strong governance practices by independent corporate governance research firms. These approaches help Infosys ensure that it is making meaningful progress in our sustainability, ethics, and governance initiatives.

4. AI Metrics and Monitoring

Monitoring AI involves tracking various aspects such as compliance, performance, risk management, ethical implications, and social impact. Infosys employs advanced metrics to ensure AI systems not only align with industry standards but also exceed them in critical areas like transparency and fairness. Compliance monitoring involves ensuring that AI systems adhere to regulatory requirements, such as GDPR and the EU AI Act, which mandate data privacy and ethical AI practices. Performance assessment includes evaluating the efficiency and effectiveness of AI models, ensuring they deliver accurate and reliable results. Risk management focuses on identifying and mitigating potential ethical, legal, and security risks associated with AI deployment. Ethical implications are monitored by assessing the fairness and transparency of AI systems. Social impact metrics evaluate how AI systems affect communities and individuals, ensuring that AI-driven decisions promote inclusivity and equity. Infosys integrates explainability features into its AI models, providing clear reasoning behind AI decisions and fostering trust among stakeholders. This comprehensive monitoring approach helps Infosys maintain oversight, control, and accountability over its AI applications, driving responsible and sustainable AI innovation.

Workforce Capacity Building

Education and Training Programs: Organizations should invest in continuous learning programs to keep their workforce updated with the latest AI technologies and sustainability practices.

Collaborations with Academia: Partnerships with educational institutions can help bridge the skills gap by providing specialized training and research opportunities.

Inclusive Talent Development: Efforts should be made to ensure diversity and inclusion in AI-related roles, promoting a wide range of perspectives and innovative solutions.



5. AI Transformations for Sustainability

AI is revolutionizing sustainability efforts by offering innovative solutions to complex environmental, social, and governance challenges. It is transforming sustainability by optimizing resource utilization, enhancing energy efficiency, predicting and mitigating environmental risks, accelerating the development of sustainable solutions, improving supply chain transparency, and empowering the workforce. It optimizes resource utilization, for example, by analysing vast amounts of data to manage smart grids and enhance precision farming techniques, thereby reducing waste and improving efficiency. AI significantly improves energy efficiency in various sectors, such as controlling HVAC systems in buildings and optimizing production processes in manufacturing, which lowers costs and carbon emissions. Its ability to analyse complex datasets allows for better prediction and management of environmental risks, such as forecasting weather patterns and natural disasters to mitigate their impact. AI also accelerates the development of sustainable technologies, expediting the discovery of new materials for energy storage and aiding the transition to renewable energy sources. It enhances supply chain transparency by tracking and analysing the flow of goods and materials, ensuring compliance with environmental regulations and ethical standards. Additionally, AI empowers the workforce by providing tools and insights that enhance productivity and sustainability efforts, fostering a culture of sustainability.

Infosys is at the forefront of these transformations, offering innovative AI-driven solutions and collaborative initiatives to drive sustainability progress.

While AI offers significant benefits for SEG initiatives, several challenges must be addressed to ensure successful implementation. Ensuring high-quality, comprehensive, and up-to-date data is crucial for AI models to deliver accurate insights, as data gaps and inconsistencies can hinder AI's effectiveness. The initial investment in AI infrastructure and technology can be substantial, requiring a balance between costs and the long-term benefits of AI-driven sustainability. AI systems must also be transparent and accountable to build trust among stakeholders, necessitating ethical AI practices and addressing biases in AI models. Additionally, AI technologies can have significant environmental footprints, particularly in terms of energy consumption, so sustainable AI practices must be adopted to mitigate these impacts. Finally, navigating the complex landscape of regulations and standards related to AI and SEG aspects can be challenging, requiring stakeholders to stay informed and compliant with evolving guidelines.

6. Environmental Impacts of AI and Mitigation Strategies

AI has both positive and negative environmental impacts. On the positive side, AI significantly enhances sustainability efforts by optimizing energy consumption, reducing carbon emissions, and improving resource utilization in various sectors. It aids in climate change modelling, providing accurate predictions for better policy-making, and monitors deforestation through satellite imagery to support conservation. AI also enhances supply chain transparency, ensuring compliance with environmental regulations and ethical standards, and improves workplace safety by monitoring risks. Additionally, AI simplifies reporting by automating data collection and analysis, helping meet regulatory requirements efficiently. AI improves social inclusion and workplace safety by eliminating biases and monitoring potential risks. However, AI also has significant negative environmental impacts. The training and deployment of AI models require substantial computational power, leading to high electricity consumption and increased carbon emissions. Data centres that support AI operations consume large amounts of energy, often derived from fossil fuels, contributing to greenhouse gas emissions. Furthermore, the production and disposal of AI hardware generates electronic waste, adding to environmental pollution. The water-intensive cooling processes for AI hardware also strain local water supplies and disrupt ecosystems. To mitigate these negative impacts, several strategies must be employed. Pursuing green AI involves using energy-efficient hardware

and optimizing algorithms to reduce energy consumption. Shifting to renewable energy sources for data centres can significantly lower carbon footprints. Implementing circular economy principles for AI hardware, such as recycling and reusing components, can reduce electronic waste. Additionally, developing regulations and standards for sustainable AI practices can guide stakeholders in minimizing their environmental impact.

In the US Senate, an interesting AI bill was recently tabled: “Artificial Intelligence Environmental Impacts Act of 2024”. Though this bill has not progressed much, the scope of the bill is interesting. The bill “require the Administrator of the Environmental Protection Agency to carry out a study on the environmental impacts of Artificial Intelligence, to require the Director of the National Institute of Standards and Technology to convene a consortium on such environmental impacts, and to require the Director to develop a voluntary reporting system for the reporting of the environmental impacts of artificial intelligence, and for other purposes.”

Likewise, under the EU AI Act, the EU Commission is required to submit a report on the development of standards for the energy-efficient development of general-purpose AI models and on the effectiveness of the voluntary code for environmental sustainability. Irrespective of the final shape of AI laws, such law-making attempts provide good guidance to AI technology companies and other actors on SEG standards.

Infosys is leveraging AI to drive sustainability transformations through various offerings and accelerators:

Infosys Topaz Responsible AI Suite: This suite includes tools for ethical AI adoption, ensuring security, privacy, fairness, and transparency.

AI-driven Solutions: Infosys provides AI solutions for optimizing energy consumption, enhancing supply chain transparency, and improving resource management.

Smart Grids: Infosys uses AI to manage smart grids, balancing energy supply and demand to reduce waste and improve efficiency.

Precision Farming: AI-powered tools from Infosys enhance precision farming techniques, optimizing the use of water and fertilizers.

Supply Chain Management: Infosys’ AI solutions track and analyse supply chain data to identify inefficiencies and implement sustainable practices.

Collaborative Initiatives: Infosys collaborates with industry leaders and academic institutions to develop innovative AI applications for sustainability.

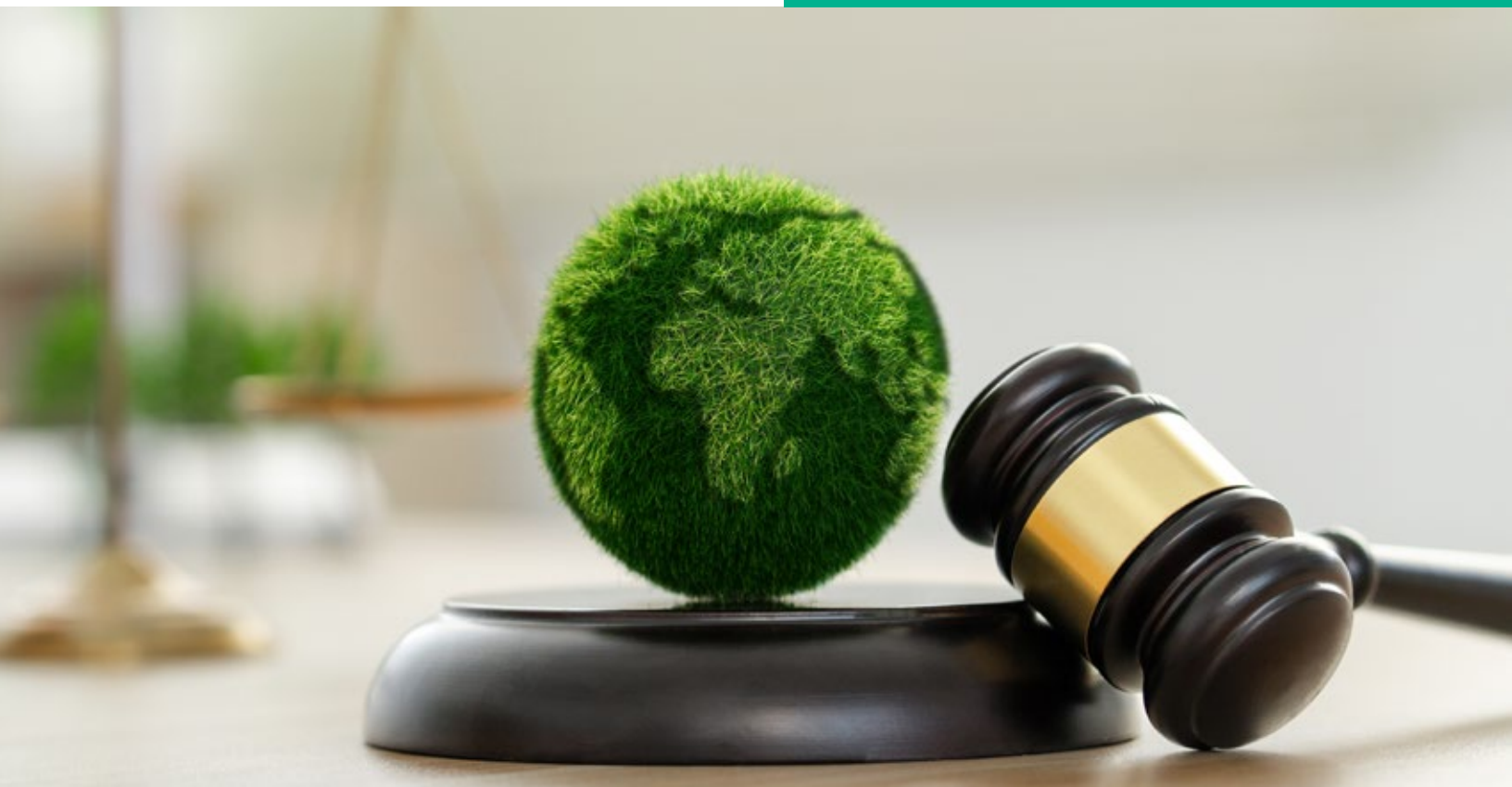
Measuring AI's environmental impact involves assessing both direct and indirect effects across its lifecycle. This includes evaluating the energy consumption and carbon footprint of AI systems, particularly during the training and operation of large models. Lifecycle Assessment (LCA) is a comprehensive method that examines the environmental impacts from raw material extraction, manufacturing, operation, and disposal of AI hardware. Key metrics such as Power Usage Effectiveness (PUE) and carbon footprint calculations help quantify energy efficiency and greenhouse gas emissions. AI-specific tools such as CO2 AI provide detailed insights into emissions hotspots and environmental changes, thereby enabling the implementation of decarbonization strategies and effective monitoring of environmental impacts. Additionally, adhering to international standards like ISO 14001 and ITU, as well as engaging in transparent reporting practices, ensures accountability and promotes sustainable AI development. By employing these methods and tools, one can effectively measure and manage the environmental impact of AI, ensuring that AI contributes positively to sustainability goals.

Infosys is actively addressing challenges that exist due to the negative environmental impact of AI through its comprehensive sustainability initiatives.

Infosys has achieved carbon neutrality and continues to focus on reducing carbon emissions through energy efficiency measures, green buildings, and the use of renewable energy. Infosys also implements water conservation strategies and waste management practices to minimize environmental impact. Infosys' Sustainability Cloud, powered by Infosys Cobalt and Infosys Topaz, helps enterprises uncover critical emission and consumption data for actionable sustainability insights. By integrating AI with sustainability efforts, Infosys aims to drive responsible AI adoption and contribute to global environmental goals.

Infosys' CO2 AI Platform

Infosys has also developed the CO2 AI platform, which helps organizations measure their carbon footprint, identify emissions hotspots, and implement decarbonization strategies. This platform uses AI to provide detailed insights into energy consumption and emissions, enabling companies to take proactive steps towards sustainability.



7. Policy and Regulatory Landscape, Governance Frameworks

The integration of AI with SEG principles is increasingly shaped by evolving policies and regulatory frameworks aimed at ensuring the responsible development and deployment of AI technologies. Environmental regulations, such as the EU's Corporate Sustainability Reporting Directive (CSRD), mandate detailed sustainability reporting, including AI operations, to enhance transparency and accountability. Data privacy regulations, like the GDPR, set stringent guidelines for ethical data handling in AI applications. Sustainability reporting frameworks, such as the GRI and TCFD, now incorporate AI-related metrics to foster transparency. The EU's proposed AI Act categorizes AI systems based on risk levels, imposing regulatory requirements to ensure safety and fairness. Corporate governance frameworks are evolving to include AI oversight and integrating AI governance into overall corporate structures. International collaboration through organizations like the ITU and OECD aims to harmonize AI regulations globally. Companies, including Infosys, are proactively engaging with policymakers to shape practical and forward-looking AI regulations that support sustainability and innovation. This dynamic regulatory landscape ensures AI technologies contribute positively to sustainability goals, uphold ethical standards, and foster stakeholder trust. AI governance frameworks are essential for ensuring ethical AI development and deployment. These frameworks promote innovation while addressing equity and inclusivity. Infosys' approach includes

embedding equity principles throughout the AI lifecycle, ensuring that AI systems do not perpetuate biases and are inclusive of diverse perspectives. Innovation is fostered through responsible AI practices that prioritize sustainability and ethical standards.



Infosys is proactively addressing the policy and regulatory landscape of AI in the context of SEG aspects through several key initiatives and frameworks. One of the cornerstone efforts is the **Infosys Topaz Responsible AI Suite**, which is built around the **Scan, Shield, and Steer** framework. The **Scan** component helps identify risks, legal obligations, and compliance status through tools like the Responsible AI Watchtower and Responsible AI Maturity and Risk Assessments. The **Shield** component focuses on protecting AI systems from vulnerabilities and ensuring compliance with existing standards. The **Steer** component guides enterprises in applying AI responsibly, ensuring strong AI governance, ethics, and security.

Infosys also engages in **proactive policy engagement** to shape AI regulations that support sustainability and innovation. By participating in policy discussions and collaborating with international organizations, Infosys helps develop comprehensive regulations that address AI's environmental and ethical impacts. This proactive approach ensures that Infosys' AI strategies align with evolving regulatory requirements and promote sustainable practices.

8. Ethical Considerations in AI

Ethical considerations in AI are crucial for aligning AI technologies with SEG goals, encompassing transparency, fairness, privacy, environmental responsibility, social impact, and accountability. AI models can perpetuate bias and fairness issues, leading to discriminatory outcomes if not properly managed. Ensuring fairness and transparency in AI systems is crucial for promoting social sustainability and equity. The lack of transparency in AI decision-making processes, often referred to as the “black box” problem, makes it difficult to understand and trust AI outcomes. This lack of transparency can hinder accountability and ethical governance. AI systems must be transparent and explainable to ensure trust and accountability, while rigorous bias detection and mitigation techniques promote fairness and equity. Protecting user data and ensuring privacy are fundamental, requiring compliance with regulations like GDPR and robust security measures. Managing AI’s

environmental impact involves developing energy-efficient algorithms and transitioning to renewable energy sources. Ethical AI practices also focus on minimizing negative social impacts, such as worker displacement, and promoting inclusive growth through training and support. Establishing clear accountability for AI decisions is essential, with governance frameworks ensuring ethical use and compliance with SEG standards. Infosys addresses these considerations through its Responsible AI Toolkit, integrating security, privacy, fairness, and explainability into AI workflows, ensuring that AI technologies contribute positively to SEG goals and foster sustainable, socially responsible innovation.

Infosys emphasizes the importance of Explainable AI (XAI), which aims to make AI systems more interpretable and accountable. By employing techniques such as model simplification, visualization tools, and post-hoc analysis, Infosys enhances the transparency of AI systems.





9. The Way Forward

AI is becoming increasingly crucial for advancing SEG goals by optimizing resource use, reducing waste, and enhancing decision-making processes to support sustainability. However, the implementation of AI for SEG initiatives faces several challenges, including ensuring high-quality and comprehensive data, managing the substantial initial investment costs, maintaining transparency and accountability, addressing the environmental impact of AI technologies, and navigating complex regulatory and compliance issues. Looking ahead, future trends in AI for SEG frameworks include the use of enhanced predictive analytics to anticipate better and mitigate environmental risks, the development of AI-driven circular economy models to optimize resource use and promote recycling, the application of AI for social impact initiatives

such as improving healthcare access and education, the integration of AI with the Internet of Things (IoT) for real-time monitoring and management, and the focus on developing sustainable AI technologies with reduced energy consumption. To fully leverage AI's potential in creating a sustainable future, it is essential to build a robust digital infrastructure, foster an inclusive AI ecosystem, and invest in workforce capacity building. The future of AI in SEG aspects involves continued innovation, collaboration, and adherence to ethical standards. Infosys is committed to advancing AI technologies that drive positive environmental and social outcomes while maintaining robust governance practices. The way forward includes fostering global partnerships, investing in research and development, and promoting responsible AI use across industries.

Call to Action

As we navigate the complexities of integrating AI and SEG goals, it is imperative that we take decisive and informed actions to harness AI's potential for a sustainable future. Let's do our bit to make a meaningful impact:

Adopt Responsible AI Practices:

Implement the principles and frameworks outlined in this whitepaper to ensure your AI systems are ethical, transparent, and accountable. Prioritize fairness, inclusivity, and privacy in all AI initiatives.

Invest in Workforce Capacity Building:

Equip teams with the necessary skills and knowledge to leverage AI for sustainability. Invest in continuous learning programs and collaborate with academic institutions to bridge the skills gap.

Enhance Digital and Data Infrastructure:

Develop robust digital and data infrastructure to support AI-driven sustainability efforts. Ensure data centres are energy-efficient and powered by renewable energy sources.

Collaborate for Innovation:

Partner with industry leaders, academic institutions, and other stakeholders to drive innovation in AI applications for SEG. Collaborative efforts can lead to groundbreaking solutions and shared best practices.

Monitor and Measure Impact:

Use advanced metrics and monitoring tools to track the performance and impact of AI systems. Ensure compliance with regulatory standards and continuously improve AI models based on feedback and data insights.

Engage in Policy Advocacy:

Stay informed about evolving policies and regulations related to AI and SEG frameworks. Engage with policymakers to shape practical and forward-looking regulations that support sustainable and ethical AI practices.

Commit to Continuous Improvement:

AI and SEG goals are dynamic fields that require ongoing commitment and adaptation. Regularly review and update strategies to align with the latest advancements and best practices.

By taking these steps, one can lead the way in integrating AI with SEG goals, driving positive environmental and social outcomes while maintaining robust governance practices. Together, we can create a sustainable future where technology and ethics go hand in hand.

Join us on this journey towards a sustainable and equitable future. Implement the insights from this whitepaper and be a catalyst for change in your organization and beyond.

About the Authors



Ashiss Kumar Dash,
EVP & Global Head - Services, Utilities,
Resources, Energy and Enterprise
Sustainability, Infosys



Inderpreet Sawhney,
Chief Legal Officer & Chief
Compliance Officer, Infosys

References

- [1] Infosys Responsible AI - Overview
- [2] The Decent Dozen: 12 Principles for Responsible AI by Design - Infosys
- [3] INFOSYS RESPONSIBLE AI
- [4] Infosys Responsible AI Toolkit, an Infosys Topaz Responsible AI Suite ...
- [5] Infosys Responsible AI - Overview
- [6] Infosys - Corporate Responsibility | Environmental
- [7] Key Metrics & KPIs for GenAI Model Health Monitoring
- [8] Infosys Q&A: Balancing AI & Environmental Responsibility
- [9] Infosys Launches Open-Source Responsible AI Toolkit to Enhance Trust ...
- [10] AI and Sustainability: Opportunities, Challenges, and Impact
- [11] The Environmental Impacts of AI -- Primer - Hugging Face
- [12] The Artificial Intelligence (AI) global regulatory landscape - EY
- [13] Navigating the AI Regulatory Landscape: Challenges and Best Practices
- [14] Best Practices for Responsible AI Innovation and Governance Frameworks
- [15] Q&A: Can AI be governed by an 'equity by design' framework?
- [16] 5 Ethical Considerations of AI in Business - Harvard Business School Online
- [17] Top 10 Ethical Considerations for AI Projects | PMI Blog
- [18] AI Ethics and ESG in 2025 - chuckgallagher.com
- [19] The future of ESG in 2025: a world divided
- [20] 6 Ethical Considerations of Artificial Intelligence - Upwork
- [21] 12 AI Environmental Impact Facts To Know - Black Atlantic
- [22] Infosys Announces Expansion of Strategic Collaboration with Citizens to ...
- [23] W and Sustainability Insights: 10 Things That Should Be Top of Mind ...
- [24] AI Policy Expert Discusses Changing Regulatory Landscape
- [25] KPIs for gen AI: Why measuring your new AI is essential to its success
- [26] Rethinking AI Governance: A Bold Plan for Equity and Accountability
- [27] <https://betterimagesofai.org/>
- [28] Sustainability Cloud 2025 | Infosys
- [29] Infosys Responsible AI - Overview
- [30] Enterprise AI Takes Center Stage as Over 50% of AI Use Cases Now ...
- [31] Evaluation and monitoring metrics for generative AI

Appendix

Infosys' 12 Principles for Responsible AI by Design, also known as "The Decent Dozen," guide the ethical development and deployment of AI systems. These principles ensure that AI is used responsibly and ethically across various applications. Here are the principles:

1. Fairness: Ensuring AI systems are unbiased and equitable.
2. Transparency: Making AI processes and decisions understandable and clear.
3. Privacy: Protecting user data and ensuring confidentiality.
4. Security: Safeguarding AI systems against threats and vulnerabilities.
5. Accountability: Establishing clear responsibility for AI outcomes.
6. Inclusivity: Designing AI systems that are accessible and beneficial to all.
7. Reliability: Ensuring AI systems perform consistently and accurately.
8. Explainability: Making AI decisions interpretable and justifiable.
9. Ethical Use: Aligning AI applications with ethical standards and societal values.
10. Sustainability: Promoting environmentally friendly AI practices.
11. Human Oversight: Ensuring human control and intervention in AI processes.
12. Compliance: Adhering to legal and regulatory requirements.

These principles help Infosys maintain a balance between innovation and ethical considerations in AI development.

For more information, contact askus@infosys.com



© 2025 Infosys Limited, Bengaluru, India. All Rights Reserved. Infosys believes the information in this document is accurate as of its publication date; such information is subject to change without notice. Infosys acknowledges the proprietary rights of other companies to the trademarks, product names and such other intellectual property rights mentioned in this document. Except as expressly permitted, neither this documentation nor any part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, printing, photocopying, recording or otherwise, without the prior permission of Infosys Limited and / or any named intellectual property rights holders under this document.