



LETTER FROM THE CEO

As we stand at the forefront of technological innovation, the importance of upholding ethical standards has never been more critical. Artificial Intelligence (AI) is rapidly reshaping how we live and work, offering unprecedented opportunities alongside significant challenges. AI has the power to revolutionize industries, improve lives, and tackle complex problems. However, with this power comes a profound responsibility to address the ethical implications that accompany it. AI systems, by their very nature, can have far-reaching impacts—both positive and negative—affecting individuals, communities, and societies at large. Therefore, it is essential that we develop and operate our AI systems with a strong focus on ethical considerations.

At 22nd Century, we acknowledge our duty not only to advance technology but to do so with integrity, transparency, and a deep respect for ethical principles. Our AI Technology Ethics Policy is designed to ensure that our AI initiatives are firmly rooted in these ethical principles, reflecting our company's core values and the expectations of society. This policy will serve as a guide to navigating the complexities of AI development, reinforcing our commitment to being a responsible leader in the tech industry.

This policy represents a significant step forward in aligning our innovations with the values we hold dear and the expectations of our stakeholders. It embodies our commitment to conducting business in a way that is both innovative and responsible. As we continue to push the boundaries of technological advancement, we must embrace our shared responsibility to uphold the highest ethical standards in all our work with AI.

This policy is more than just a set of guidelines; it is a reflection of our identity as a company and the principles we stand for. By adhering to these ethical standards, we will not only enhance our technological capabilities but also build a legacy of trust and integrity. I am confident that, together, we can navigate the challenges of AI technology with wisdom and responsibility.

Thank you to the entire 22nd Century team for your dedication to these principles and for your ongoing commitment to making 22nd Century Technologies, Inc. a leader in ethical innovation.

-Anil Sharma (CEO)



At 22nd Century technologies, Inc., we exist to create technologies that drive human progress. We believe in the power of artificial intelligence (AI) and other advanced technologies to help people and businesses improve our world and make it a better place. These technologies must be developed and applied ethically and responsibly.

To that end, we have established these principles to help guide our development and use of AI applications. 22nd Century’s AI ethical principles encompass six major areas:

- 1. Responsible.** 22nd Century’s personnel will exercise appropriate levels of judgment and care, while remaining responsible for the development, deployment, and use of AI capabilities. AI systems, processes and data should be technically robust and designed to secure against malicious actors and unintended uses. Fail-safe mechanisms and processes for human intervention should be developed to avoid undesirable outcomes, validate decisions and provide oversight.
- 2. Equitable.** 22nd Century will take deliberate steps to minimize unintended bias in AI capabilities. It should be designed to avoid unfair biases and guard against prejudice, discrimination, and the marginalization of vulnerable populations. AI systems may require human oversight or intervention to ensure equitable results. AI should reflect a transparent commitment to equality, diversity and accessibility for all. AI systems should be safe and reliable, guarding the wellbeing of users and yielding results consistent with our values.
- 3. Traceable.** 22nd Century’s AI capabilities will be developed and deployed such that relevant personnel possess an appropriate understanding of the technology, development processes, and operational methods applicable to AI capabilities, including with transparent and auditable methodologies, data sources, and design procedure and documentation.
- 4. Reliable.** 22nd Century’s AI capabilities will have explicit, well-defined uses, and the safety, security, and effectiveness of such capabilities will be subject to testing and assurance within those defined uses across their entire life-cycles.
- 5. Governable.** 22nd Century will design and engineer AI capabilities to fulfill their intended functions while possessing the ability to detect and avoid unintended consequences, and the ability to disengage or deactivate deployed systems that demonstrate unintended behavior.
- 6. Beneficial.** AI applications should benefit society and people now and in the future. AI should be human-centered, developed with the complex personal and social needs in mind. It should enhance our lives and improve our ability to solve complex problems. It should embody the most current practices of scientific and technical excellence. The societal impacts of AI should always be carefully considered, respecting cultural norms, furthering social equality, and ensuring environmental sustainability.