



GC Supporting Document

Artificial Intelligence Programs

Artificial Intelligence Programs

GC's responsible AI programs translate policy commitments into operational practice setting out the controls, processes, and capabilities that govern how AI tools are used, monitored, and improved across the organization. These programs cover how GC protects sensitive data in AI interactions, ensures transparency in AI-assisted decisions, maintains the quality and fairness of deployed models over time, reduces the environmental footprint of AI infrastructure, and builds the skills employees need to use AI safely and ethically.

▪ Data protection & access control

GC does not allow employees to enter sensitive information into Generative AI tools, in order to prevent the exposure of proprietary or sensitive data. Personnel are prohibited from entering company-confidential or strictly confidential information, the personal data of vulnerable data subjects, or sensitive personal data whether in whole or in part into any Generative AI tool, including financial data, system transaction records, employee records (e.g., company ID, email address, phone number), sensitive personal data (e.g., age, gender, religion), employee medical data, customer personal data, intellectual property and copyrighted material, and vendor/supplier data. Where a document's classification is unclear, personnel are required to independently assess whether it contains confidential or sensitive information and to avoid submitting it to any Generative AI tool.

GC requires clear attribution for any content derived from Generative AI, and disclosure to affected individuals when a decision is made or materially supported by AI. Its Generative AI Usage Guideline sets out specific disclosure practices referencing the AI tool, version, and date used, and identifying the reviewer so AI-assisted work remains traceable. GC views this transparency as essential to maintaining the trust of employees, customers, and stakeholders, and as a means for teams to help identify errors and continuously improve the safe use of AI.



▪ **Model quality & ongoing oversight**

GC continuously monitors the performance of AI services through periodic reviews, user feedback, and output validation to identify potential performance degradation or changes in output quality over time. Where an AI service is found to be unsuitable for its intended purpose, responsible personnel take appropriate corrective actions, including restricting or suspending its use, updating configurations or prompts where applicable, engaging the service provider, and notifying affected users as appropriate. Activity logs and AI-generated outputs are retained in accordance with applicable legal, regulatory, and IT requirements to support ongoing monitoring and continuous improvement.

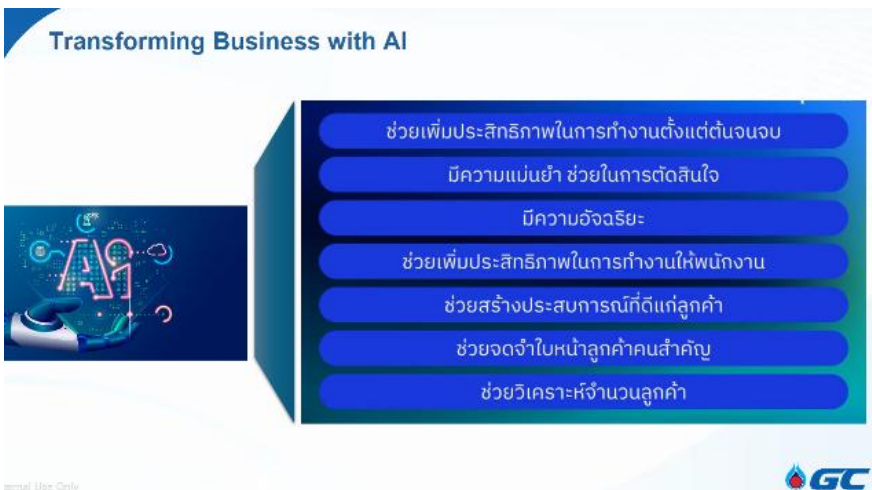
Inaccurate or biased outputs from Generative AI tools can significantly affect stakeholders. Personnel must fact-check and verify the validity of any output before using or communicating it, as such outputs may be incomplete, inaccurate, outdated, or fabricated (hallucinations). Using AI output without verification exposes the Company to risk and may damage its reputation, with consequences for customers, stakeholders, and personnel. In addition to this case-by-case verification, deployed AI models must undergo regular, scheduled assessments for fairness and bias such as testing outputs for disparate impact across protected characteristics (e.g., gender, age, ethnicity) or vulnerable groups, and reviewing performance consistency across different user segments. Where bias is identified, responsible personnel must take corrective action (e.g., retraining, adjusting parameters, or restricting use) and document the findings and remediation taken.

▪ Environmental sustainability of AI infrastructure

GC is committed to reducing the ecological footprint of AI technologies by promoting the responsible and efficient use of AI services and minimizing unnecessary use of computing resources. Where AI infrastructure or models are provided by third-party suppliers, GC will, where practicable, prefer suppliers that demonstrate measurable commitments to environmental sustainability, including improvements in energy efficiency, the use of renewable energy, and greenhouse gas emissions reduction. GC also engages with suppliers to promote the continual improvement of the environmental performance of AI services.

▪ Capability building & system certification

GC's ongoing cybersecurity awareness program provides regular guidance to all employees on the secure and ethical use of Generative AI.



This training aims to build awareness of how artificial intelligence can be applied across business operations from improving end-to-end process efficiency and supporting accurate, data-driven decision-making, to boosting employee productivity and strengthening customer experience. The material highlights specific AI use cases relevant to the business, including facial recognition for identifying VIP customers and analytics for customer volume and behavior.

- Quantification of the impact of AI initiatives/tools on sustainability outcomes (1/2)

Advanced Analytics (AA)

GC applies advanced analytics to improve energy efficiency and operational reliability in its refinery operations. An AA-based predictive model was developed for the crude preheat train to forecast fouling constraints and determine the optimum heat exchanger cleaning schedule. This enables proactive cleaning, minimizes energy losses, and avoids unplanned operational constraints. With no capital investment, the initiative delivers annual energy savings of 74,022 GJ, GHG reductions of 4,154 tonnes CO₂e, and cost savings of THB 67 million.

GC aims to align its AI governance practices and implement AI governance practices in line with ISO/IEC 42001 by 2027 and engage an independent external party to conduct a pre-audit against the standard.

GC systematically measures and reports the impact of AI initiatives on sustainability outcomes through its "3 Smart" digital strategy Smart Plant, Smart Sales & Marketing, and Smart Work Process with each pillar directly contributing to GC's sustainability goals across climate, resource efficiency, safety, and people development dimensions.

- Quantification of the impact of AI initiatives/tools on sustainability outcomes (2/2)

Smart Plant: Climate & Operational Efficiency Goals

Plant-Wide Optimization powered by simulation and AI for real-time production control directly supports GC's decarbonization goal of reducing Scope 1 and 2 GHG emissions by more than 20% by 2035 and achieving Net Zero by 2050, by minimizing energy waste and improving resource utilization across GC's integrated petrochemical complex. Through AI-driven operations spanning digital twin plant-wide optimization, predictive asset maintenance, and drone-based computer vision inspection to reduce energy use, prevent equipment failures, and enhance safety in support of GC's decarbonization goals.

Smart Sales & Marketing: Resource Efficiency Goals

AI and machine learning applications for feedstock selection and production planning at the refinery level support GC's resource efficiency objectives by improving the accuracy of price and margin forecasting.

Smart Work Process: Social & Governance Goals

AI integration into administrative and operational workflows including lab analytics, procurement spend analysis, legal compliance monitoring, and financial classification contributes to GC's people productivity and governance objectives by reducing manual processing time, paper-based activities, and procurement inefficiencies.

More information click: <https://setsustainability.com//download/9z5yc8f4bi7nlpk>