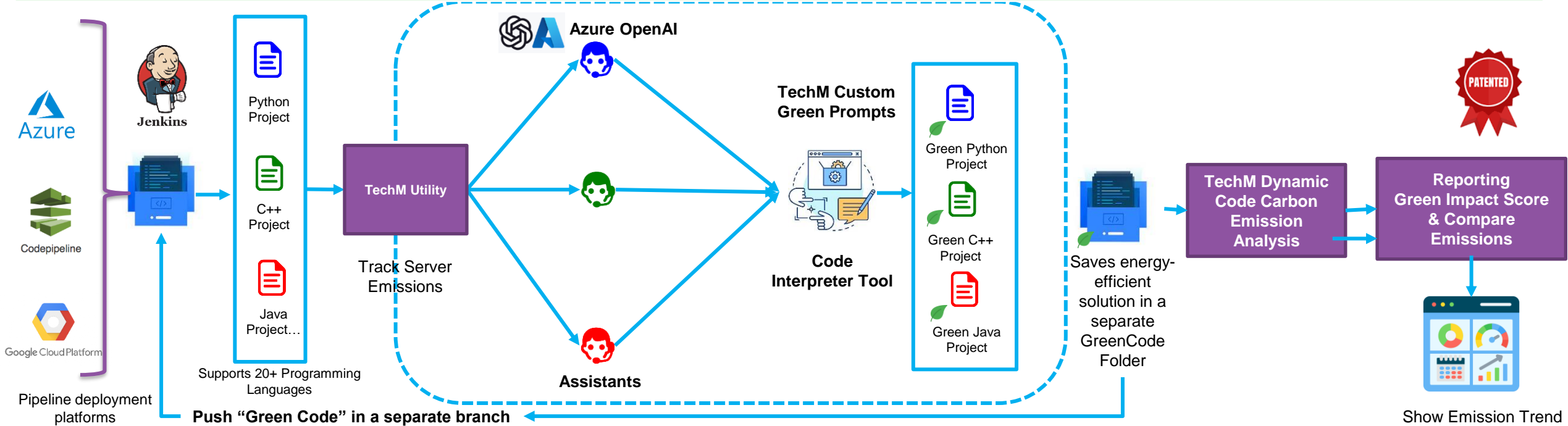


# Green CodeRefiner™ – A Utility to generate energy-efficient code through CI/CD pipeline

**Green CodeRefiner™** is our patented in-house developed utility that integrates seamlessly into the existing CI/CD release pipeline. It applies custom green prompts to the entire source code folder and converts the entire code into an energy-efficient code in batch mode. Utilizing the Azure OpenAI service that leverages the same GPT4 LLM that GitHub Copilot uses in the backend, Green CodeRefiner™ ensures optimized performance and sustainability of the entire solution.



TechM has developed a utility based on Azure OpenAI service that can be integrated into the existing DevOps CI/CD pipeline to baseline and optimize emissions of application source code

TechM has expanded the scope of Azure Open AI service so that the DevOps team can configure Green CodeRefiner in a CI/CD release pipeline to convert existing code into green code that is efficient, sustainable, and minimizes energy consumption

The utility also baselines and reports Co2e emission in a dashboard for the existing and converted code, which helps improve the Green Impact score of the overall solution.

Key benefits	Value Delivered
Strengthen adoption of Green IT practices.	20 – 40% Improved green impact score
Seamless integration with existing GitHub and DevOps workflows	Reduced Scope – 2 GHG Emissions
Improved energy efficiency of application source code	Improvement in developers' productivity