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As of 2025, Earth's natural environment is being heavily degraded by the extractive business practices of companies that make many of the products and services we buy every day. The emerging field of *planetary health* recognizes profound interconnections between our economic behaviors, ecosystem services such as clean water, air, soil, the climate crisis, and human health. The way we use money to interact with companies - through shopping, or saving and investing - impacts the life-supporting biosphere we depend on. In essence, from an ecological perspective, every financial action is either an investment decision to support more environmentally-friendly companies - or to support polluters.

In Taiwan, college students are concerned with environmental issues, yet lack simple tools to effectively influence systemic change towards sustainable outcomes. Concurrently, in the European Union, new environmental policies include the concept of *digital product passports (DPPs)*, which aim to facilitate tracking data across the entire product lifecycle, from source materials, until the consumer purchase decision, and finally post-purchase recycling, building *transparency* into opaque global supply chains. These new digital tools hold the potential to benefit from *data-driven interaction design*, *large-language models*, and *AI agents* to translate complex environmental data into human-comprehensible language. If successful, DPPs may help to solve the *attitude-behavior gap* by making it easy to distinguish *eco-designed products* made by circular economy companies, striving to be *zero waste*, from those merely engaged in *greenwashing*.

My research focuses on college students and addresses the need for tools to make sustainable financial action more convenient. I leverage *design research* to find design concepts for *simple AI-based generative user interfaces* to help young adults participate in *sustainable financial activism*. Throughout the process, I conducted a survey of over 900 students from 20 universities across Taiwan, face-to-face user testing with 30 participants, and 6 expert interviews providing industry insights. The major contribution of the study is an interactive AI-assistant prototype.

Keywords: Human-AI Interaction, Digital Sustainability, Transparency