

Pan, your SMART Sustainability Expert

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Track: AI in Sustainability

Focus: Technical

OVERVIEW

Using OpenAI, we cross-reference a given Global Reporting Index (GRI) report with specific standards from SustainableIT to determine measurable goals and impact. The goal is less to identify a specific goal but rather ensure these goals are actually SMART (Specific, Measureable, Achievable, Relevant, and Time-Bound).



The assistant created for this purpose, Pan, is focused on cross-reference and identifying specific components of goals listed to determine efficacy. Pan acts as a guide rather than a dictator, advising on where a user might improve the wording. As you can imagine, Pan is a reference to the Greek God of the same name, who acts to a certain extent like the bridge between humans and nature.

A user might use a tool like this to evaluate a company's progress towards specific goals. A company might also self-assess in order to fine-tune their content to provide the best information regarding their initiatives, assuming they aren't incentivized to be vague.

SOLUTION

We utilized the OpenAI API through Python and the Streamlit library in order to create a test demo of the functionality. You can see a live version of the demo here:

<https://pan-sustainability.streamlit.app/> (Please note that API keys may be disabled later after submission.)

With pre-built examples, the demo walks a user through how you might want to cross-reference standards and the reports themselves. A pre-loaded GRI report from a company called Givaudan was used as a baseline to evaluate. The model provides a rating, breaks down goals in the SMART

format, and provides both positive and constructive feedback on where to improve the goals in sustainability.

4. **Relevant:** The focus on reducing energy consumption and increasing renewable energy use is highly relevant to the global sustainability agenda, particularly in the context of climate change and resource conservation. This relevance is underscored by the alignment with SDGs 7 (Affordable and Clean Energy), 9 (Industry, Innovation, and Infrastructure), 13 (Climate Action), and 17 (Partnerships for the Goals).
5. **Time-bound:** The goals are time-bound, with specific targets set for 2025, such as the transition to 100% renewable electricity in Brazil
【4:14†GIV_2021_GRISustainabilityReport.pdf】.

Summary and Rating:

The goals set under SIT EF 110 are well-aligned with international standards and sustainability goals. They are specific, measurable, achievable, relevant, and time-bound, making them effective in driving energy efficiency and sustainability in technology infrastructure. The organization demonstrates a strong commitment to these goals through practical initiatives and strategic planning.

Rating: 4.5 out of 5

Feedback:

- **Positive:** The organization has made significant strides in renewable energy adoption and energy efficiency, as evidenced by projects like solar panel installations and the rapid transition to renewable electricity in Brazil. These efforts are commendable and align well with the sustainability frameworks referenced.
- **Constructive:** While the goals are robust, continuous monitoring and adaptation are crucial to address any emerging challenges or opportunities. Expanding partnerships and collaborations, as well as investing in innovative technologies, could further enhance the efficacy of these goals. Additionally, ensuring transparency and regular reporting on progress will help maintain accountability and stakeholder engagement.

Through this example, we've shown that an LLM can assist in evaluating the efficacy of goals set in sustainability and cross-referencing different standards.

In a full solution, one might want a multi-agent system to handle specific facets of standards (environment, social, government, etc.) to be able to fine tune outputs and evaluation criteria.