

Evaluation Criteria

Created by synthesizing:

- Criteria for evaluating entries in original Harvard competition

<https://www.freelancer.com/contest/Join-Harvard-in-Creating-a-Sustainable-Future-Unlock-the-Potential-of-a-Circular-Economy-EST-2205448>

- Example criteria in problem statement
 - An idea validator advises human evaluators by developing clear rationale and ratings for essential metrics such as maturity stage, market potential, feasibility, scalability, technological innovation, or adherence to circular economy principles. Ideas that meet (self-)predefined criteria will be highlighted to human evaluators.
- Interview with Tim Parker, former teacher and founder of <https://circularcity.asia/>
 - Notes can be found in `docs/Tim Parker Notes.pdf`

1. Novelty (How different is it from existing solutions?)
 - Uses novel discoveries in science
 - Innovative technologies
2. Environmental Impact (How much does it benefit the planet?)
 - Energy use reduction
 - Minimal harmful by-products
3. Financial Impact (What financial value can it create for businesses?)
 - High market potential
 - High profitability
4. Feasibility of Implementation (How likely is it to succeed?)
 - 4.1 Economic and business feasibility
 - Doesn't require major behavioral changes
 - Has a viable business revenue model
 - 4.2 Technological and scientific feasibility
 - Mature stage of development
 - Well-understood scientific principles
5. Scalability of Implementation (How scalable is it?)
 - 5.1 Economic and business scalability
 - Low switching costs/financial barriers
 - Transparent and consistent data on circularity performance
 - 5.2 Technological and scientific scalability
 - Allows everyone to adopt
 - Not negatively impact run into thermodynamic limits
6. Adherence to [circular economy principles](#)
 - Increasing product utilization
 - High material efficiency
 - Use of recycled materials

Additional (suggested by ChatGPT):

Depending on the specific context and goals of evaluating circular economy business ideas, you might consider adding the following criteria:

Social Impact:

- **Inclusivity:** Assess the extent to which the business idea considers inclusivity and benefits diverse communities or demographics.
- **Job Creation:** Evaluate the potential for job creation, especially in local communities where the business operates.

Ethical Considerations:

- **Supply Chain Ethics:** Examine the ethical practices within the supply chain, ensuring fair labor practices, responsible sourcing, and ethical production methods.
- **End-of-Life Considerations:** Assess how the business deals with products at the end of their lifecycle, considering responsible disposal or repurposing.

Innovation and Adaptability:

- **Continuous Improvement:** Evaluate the commitment to continuous improvement, innovation, and adaptation to emerging technologies or market demands.
- **Future-Proofing:** Consider how well the business idea is positioned to withstand future challenges, such as regulatory changes or shifts in consumer behavior.

Community Engagement:

- **Stakeholder Involvement:** Assess the level of engagement with local communities, stakeholders, and customers throughout the development and implementation phases.
- **Education and Awareness:** Evaluate initiatives to educate and raise awareness about circular economy principles within communities.

Resilience and Risk Management:

- **Risk Mitigation:** Assess the business's ability to identify and mitigate potential risks, including economic, environmental, or social challenges.
- **Adaptability to External Factors:** Consider how well the business can adapt to external factors, such as changes in market conditions, policies, or global events.

Long-Term Impact:

- **Legacy and Longevity:** Evaluate the potential long-term impact of the business on the circular economy and its ability to create a lasting positive legacy.
- **Scalable Positive Externalities:** Assess the potential for the business to create positive externalities that extend beyond its immediate operations.

Measurement and Reporting:

- **Transparent Reporting:** Assess the transparency of the business in reporting its environmental, social, and economic impacts.
- **Metrics for Success:** Identify clear and measurable metrics for success in achieving circular economy goals.

Regulatory Compliance:

- **Legal and Regulatory Adherence:** Evaluate how well the business adheres to relevant local and international laws and regulations related to environmental sustainability and circular economy practices.

Cultural and Behavioral Impact:

- **Behavioral Change:** Assess the potential impact of the business on consumer behavior and attitudes towards sustainable and circular practices.
- **Cultural Sensitivity:** Evaluate how culturally sensitive the business is in its approach, considering diverse cultural perspectives on sustainability.

These additional criteria can provide a more comprehensive evaluation framework, considering a broader spectrum of impacts and considerations related to circular economy business ideas.