

Circularity Framework Development of Regeneration.VC Portfolio

Authors:

Joaquin Meckler (primary)	Dani Sclafani (primary)	Alex Gaynor	Andrea Duran
meckler-pacheco@ucsb.edu	dsclafani@ucsb.edu	jgaynor@ucsb.edu	agraciaduran@ucsb.edu
MESM class of 2022	MESM class of 2022	MESM class of 2022	MESM class of 2022

Client:

Katie Hoffman | Partner at Regeneration.VC | (310) 528-2621 | katie@regeneration.vc

Objectives:

The objective of this project is to synthesize quantitative and qualitative data to inform the development of a high level framework that will measure and evaluate the circularity impact of investment opportunities in the existing Regeneration.VC portfolio. Currently, Regeneration.VC has invested in a few companies including, For Days and Cruz Foam. It is predicted that Regeneration.VC's investment portfolio will include 5-6 companies at the start of the project. Regeneration.VC is in need of a holistic report that showcases the overall contribution of their portfolio to the advancement of the circular economy. This advancement is measured in circularity metrics, or how a company is able to reduce their waste, emissions, water, and energy by implementing or creating circular strategies. This report will also be used to inform Regeneration.VC's public relations strategy. This will be achieved by two supporting objectives:

- Analyze and determine the most relevant and impactful circularity metrics to apply to potential investment opportunities. These metrics, including but not limited to, carbon footprint, waste, resource use and reuse, and toxic chemical avoidance, will enable Regeneration.VC to better understand the short term and long term environmental impacts of various investment opportunities.
- Synthesize and create a holistic framework to measure and evaluate the circularity footprint of Regeneration.VC investment portfolio to create a year end public facing impact report that will be used as a tool to attract potential investors.

Significance:

Circularity and environmental, social, and governance (ESG) standards are quickly becoming driving frameworks for diverse investors, offering new perspectives towards better risk-adjusted returns in the long run while achieving strong value alignment. Innovations in waste management, material reuse, pollution and toxicity mitigation, and supply chain efficiency have the potential to accelerate the adoption of climate critical goals set by global treaties and frameworks.

A report by the Ellen MacArthur Foundation (EMF) finds that 45% of greenhouse gas (GHG) emissions come from production of consumer goods and food products. The economic opportunity for a circular economy is projected to be wide-scale and have far reaching impacts across a variety of industries. The EMF report shows that a fully circular economy could eliminate 45% of GHG emissions¹ and encourage greater investments in sustainable technologies. According to Accenture research, the circular economy is projected to be worth \$4.5 trillion by 2030.² These sorts of projections – both for environmental impact and economic opportunity – are useful from a macro perspective and highlight the growing demand for innovative and sustainable technologies. However, this perspective lacks the nuance and specificity

required to analyze individual companies with a standardized, rigorous methodology for environmental metrics.

While circularity is now identified by experts – like the Ellen MacArthur Foundation – as one of the most important drivers to advance climate solutions, capital markets currently lack a standardized, integrated approach to measuring indicators and impacts across industries. Venture capital and private equity firms have a significant role to play in investing financial capital to solutions that address circularity and climate issues, yet the measurement and evaluation protocols for circularity lack a clear benchmark for efficient and practical application across a portfolio. Pulling from existing quantitative approaches, such as SCA(sustainable competitive advantage), Carbon Dioxide (CO₂) equivalent footprinting, and environmental, social and governance reports (ESG), alongside emerging tools such as the Material Circularity Index, there is an opportunity to create a more comprehensive measurement that address gaps in prior evaluation approaches. This will allow early stage companies and investors to optimize their financial and environmental performance.

Background:

Regeneration.VC is an early stage venture capital fund that focuses on consumer-oriented investment opportunities that follow a product from its creation until the end of use phase, known as a circularity approach. Areas of focus include fashion, packaging, consumer packaged goods (CPG), consumer brands, food and agriculture, as well as reverse logistics (reuse/recycling) and waste management. The team has over 30 years of experience in private equity investing, environmental policy, and environmental analytics. Currently, Regeneration.VC is building monitoring and evaluation (M&E) protocols based on the best available data related to circularity to enhance environmental evaluation of companies considered for investment. Ultimately, this will provide a comprehensive impact report on annual portfolio performance, which can also be applied when evaluating future investments opportunities related to the circular economy.

Available Data:

The data utilized for this project will be gathered from a variety of sources, including:

- Publicly available reports and data on circular economics and analysis will be used as guides for building a specific framework for Regeneration.VC's portfolio:
 - Ellen MacArthur Foundation (EMF)³ "*Material Circularity Indicator*" provides a circularity methodology that can be used to evaluate and rank the circularity of companies
 - *Circle Economy*⁴ "*Circularity Gap Report*" and World Business Council for Sustainable Development⁵ "*Circular transitions Indicator*" will be used.
- Access to relevant investment databases as needed for evaluation of companies and other investors (e.g. Pitchbook, Crunchbase Pro). Broader data resources from providers related to environmental standards and market trends will be used as needed - such as sustainalytics, Bloomberg, CDP, the Principles of Responsible Investment, OECD, Environmental Finance, SASB, US SIF and the like.
- Regeneration.VC will provide internal reports of analysis and data rooms for companies included in its investment portfolio. These materials will be provided upon signature of an NDA. Typically, data rooms include preliminary SCA (if conducted) or other environmental impact

assessments (carbon footprinting for example), as well as all the necessary legal and financial documents (formation documents, financial statements, pro forma and projections, offering memorandum etc).

- Access to advisors/partners at the forefront of associated building metric frameworks (e.g. Cradle to Cradle⁶, Material Circularity Index, decarbonization/Project Drawdown⁷)

Approach:

- Part 1: Research and Structure:
 - Identify framework boundaries by selecting and/or creating relevant circular Key Performance Indicators (KPIs) for Regeneration investment evaluations. Using existing diligence memos from Regeneration's portfolio investments as a source of possible KPIs to include as well as example impact reports from similar venture capital firms. KPI's can include, but are not limited to, CO2e, Material Circularity Index (water, toxics, waste), SCA, Reverse logistics (upcycling, diversion/avoidance).
- Part 2: Analysis and Synthesis:
 - Create a holistic approach to measure and collect determined circularity metrics from companies being considered for investment. Utilize primary and secondary data sources provided by Regeneration.VC team, university data systems, and other existing databases to determine potential environmental impacts.
- Part 3: Reporting and Implementation:
 - Finalize framework to inform the creation of Impact Report processes for Regeneration.VC portfolio. Develop a template for impact assessment based on relevant and determined standards from parts 1 and 2, that could be applied to future portfolios.

Deliverables:

- Technical report outlining key datasets (listed above) and applications for Regeneration.VC portfolio by theme and tool, with visual representation and detail outlining steps if novel processes are developed.
 - Example impact report of circular economy venture capital firm, *Closed Loop Partners*⁸
- Creation of framework architecture, using metrics such as carbon footprint, waste, resource use and reuse, and toxic chemical avoidance, and ranking methodology of KPIs specific to Regeneration.VC for application to investments (creation of "scorecard" document or tool representing the M&E protocols for companies).
- Creation of an impact report template and final report for year end analysis of Regeneration.VC portfolio (predicted to include 5-6 portfolio investments).

Internship:

- Regeneration.VC is able to evaluate and create a fully paid internship program for 1-3 students for the summer period. This internship will be remote unless it can be safely completed onsite.

Budget:

- Regeneration.vc will cover associated costs related to the program, specifically in relation to data access necessary for project work.

References:

- 1) “Completing the Picture: How the Circular Economy Tackles Climate Change” (2019). *Ellen MacArthur Foundation*.
- 2) “Waste to Wealth: Creating Advantage in a Circular Economy” (2015). *Accenture*.
- 3) Ellen MacArthur Foundation [website](#) (2021).
- 4) *Circle Economy "Circularity Gap Report"*
- 5) World Business Council for Sustainable Development "[Circular transitions Indicator](#)"
- 6) Cradle to Cradle [website](#) (2021).
- 7) Project Drawdown [website](#) (2021).
- 8) Closed Loop Partners [Impact Report](#) (2019)

Re: Client Letter of Support, Regeneration.VC

To whom it may concern,

Our firm, Regeneration.VC, appreciates the opportunity to work with UCSB Bren School students on a year-long project to develop a circular impact evaluation framework and reporting structure for our venture capital investment portfolio. As a firm dedicated to expanding and integrating circularity and sustainability into the core of investing, we hope to provide the students with an opportunity to gain practical experience applying their academic skills. If selected for this program, our team will offer the students ongoing support throughout the year to accomplish our outlined project deliverables, as well as a unique, hands-on experience to help inform their career interests. A partner at our firm will lead student engagement, through weekly meetings to set goals, review progress, and address any outstanding needs.

The students will have access to curated data relevant to the project scope – including environmental, financial and legal documents – from companies in our existing portfolio as well as ventures the firm is actively considering for investment. The students will also have access to our current internal circular diligence framework and the living database of academic, scientific, government and financial reports that inform it. Working with our team, the students will have the opportunity to build upon our existing methodology and create the firm’s first annual impact report, which will be modeled after other industry examples that the students will explore during the first phase of the project. The framework that the students help develop to inform the year-end report will showcase what we determine to be the most important circulatory indicators represented by the Regeneration.VC portfolio within the context of broader market trends.

In addition to the work outlined in the application, our firm is committed to creating supplemental learning opportunities for the students – such as chances to meet select advisors and ecosystem partners, access to professional events and content, and one-on-one career mentorship with partners. Our firm will also offer 1-3 students a paid internship to continue project work during the summer of 2021. The internship will be based in California though remote participation is anticipated. Students will have the option to apply for the internship in early April, then learn of potential placement, scope of work and payment offer in early May.

We hope this is the first of many Bren collaborative projects and look forward to the opportunity.

All my best,

Katie Hoffman 

Bren Project Lead

Partner | Regeneration.VC

January 18, 2021