

# PROJECT FRAME

[projectframe.how](https://projectframe.how)

**Investor Profile:** Autodesk Foundation  
**Expert:** Ishita Jain, Impact Manager &  
Ryan Macpherson, Climate Innovation and Investment Lead  
**Last Edited:** Nov, 2022

## Organization Overview

Impact Theory of  
Change and  
Characteristics of  
Overall Practice

## Setting Fund Strategy & Impact Assessment Workflow

What, When, & Why  
Impact Goals Drive  
Decisions at All Stages

## Impact Assessment: Pre-investment

What, When, & How  
Impact Assessment is  
Conducted To Make  
Investments

## Impact Assessment: Post-Investment/Exit

What, When, & How  
Impact is Managed  
After Investments are  
Made

## Lessons & Plans

Lessons Learned,  
Realized Impact  
and/or Plans to  
Improve Processes

# Assessment Dashboard



## Impact Strategy

- **Investment type/ asset class:** Venture / Equity and Debt
- **Stage:** Early stage: Seed-Series A/B
- **Geography:** Global
- **Sector:** Climate Mitigation (Energy, Buildings, Industry, Mobility, Carbon Removal); Climate Adaptation and Workforce Development
- **Organization type(s):** Corporate Foundation of Autodesk Inc.
- **Impact assessment capacity:** 1.5 FTE dedicated to impact assessment; supported by external consultants
- **Assets allocated towards impact portfolio:** 100% of assets; Evergreen fund capitalized at 1% operating income of Autodesk
- **Strategies to steer towards impact:** Deep post-investment partnership with in-kind programs focused on technology, talent, and marketing

## Frameworks/Methodology

- **Does an existing methodology align w/yours? If so, which one(s)?** Prime/NYSERDA Emission Reduction Potential (ERP) Framework
- **Time horizon of assessment:** Through 2050
- **Fractionalize shares of impact among interdependent climate technologies:** No
- **Fractionalize your share of impact as an investor among many investors:** No
- **Metrics tracked:** Potential and realized GHG Impact (Annual/Cumulative). Energy and materials outcome metrics (see theory of change)
- **How realized impact is/will be tracked:** Work with portfolio companies to build climate impact assessments; collect self-reported data by investees annually. Use external consultants to “verify” models and methods
- **Other assessment or investment decision making characteristics you're proud of:** Integrated Theory of Change and impact metrics across Autodesk's corporate-wide Impact Strategy
- **Resources:** [Autodesk Foundation FY22 Impact Report](#)

# Autodesk Inc.

Autodesk, Inc. is a 3D software corporation that makes software products and services for the **architecture, engineering, construction, manufacturing, media, and entertainment** industries.



[FY22 Autodesk Impact Report](#)

PROJECT  
FRAME

## How we create impact

### Improve our operations

Advance sustainable business practices, set the standard in our culture, governance, and operations, and align and activate diverse employees to make a positive impact at work

### Partner with customers

Empower customers to harness data, automation, and insights to improve the impact of design and make decisions—advancing a more sustainable, resilient, and equitable world

### Advance industries

Accelerate industry transformation through cross-sector collaboration, policy advocacy, and by catalyzing innovation between and beyond our industries

## Impact opportunity areas

### Energy & Materials

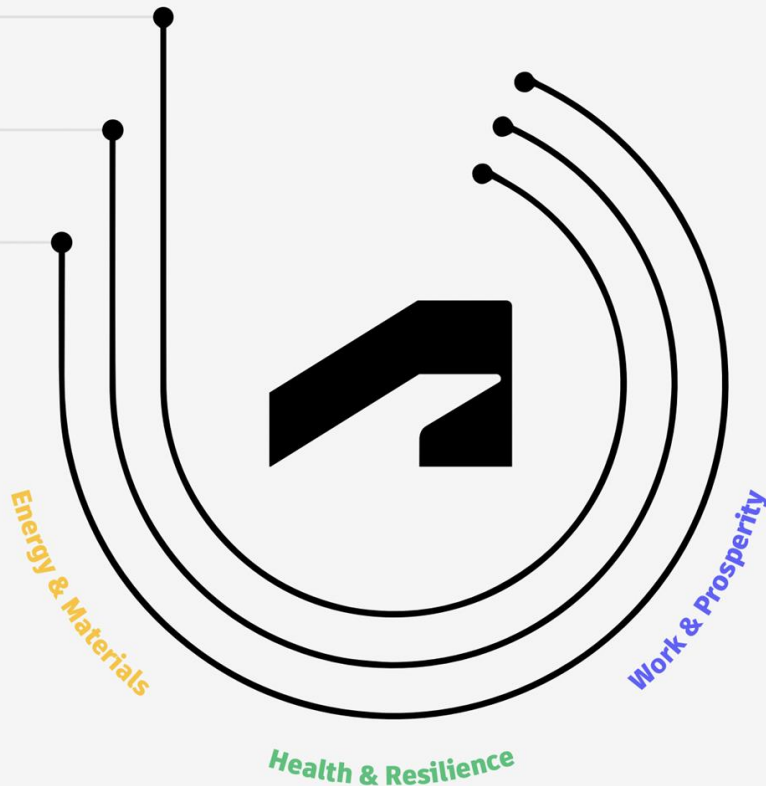
Enable better energy and material choices, reducing carbon emissions and waste. Encompasses key aspects related to energy, materials, waste, and supply chain.

### Health & Resilience

Accelerate the design and make of places and products that are safer, healthier, and more resilient. Encompasses key aspects related to safety, health, well-being, resilience, and adaptation.

### Work & Prosperity

Facilitate the acquisition of in-demand skills and lifelong learning to meet the workforce needs of our industries. Encompasses key aspects related to diversity, inclusion, mindset, skills, and learning.



# Autodesk Foundation Investment Thesis



The Autodesk Foundation **supports the design and creation of innovative solutions transforming our industries** to be inclusive, resilient and sustainable.



## Energy & Materials

Invest in early-stage tech that can mitigate climate change by reducing CO2e emissions



## Health & Resilience

Invest in solutions that help low resource areas adapt to climate change & other shocks



## Work & Prosperity

Support worker prosperity in the era of automation in service of a more equitable future



Market-based climate technologies **decoupling economic growth from emissions across architecture, engineering, construction and manufacturing.**

PROJECT  
FRAME

# Catalyzing Climate Innovation



We invest **financial capital** and strategic **in-kind support** to catalyze the growth and scale of the portfolio.

## Technology

**Leveraging Autodesk's products and platform** to de-risk technology, productization, and manufacturability:

- Software license donations
- Technology workflow assessments
- Training and tech integrations

## Talent

**Leveraging Autodesk's 12,000+ employees** to support the build out of robust product, operations, HR, and finance functions:

- Pro bono 1:1 consulting
- Team-based projects
- Engineering fellows & tech leadership development

## Marketing & Markets

**Leveraging Autodesk's connection into AEC and PD&M** to support go-to-market and accelerate adoption:

- Storytelling and branding
- Customer sales pathways
- Technology integrations

# Investment Criteria

---



## Impact

### **If successful, does it matter for solving climate change?**

We assess whether the solution can result in large-scale GHG emissions reductions or removal. This ensures that our investment dollars are going towards the most impactful solutions.

## Viability

### **Can the venture be successful?**

We evaluate the viability of the market, business model, financials, and technology, as well as the team's ability to execute on their vision and build an industry-defining business.

## Additionality

### **What is Autodesk's ability to catalyze success?**

We evaluate how valuable our financial investment and in-kind programs can be to the company's next milestones, as well as our long-term ability to support its growth and scale.

# Investment Focus Areas



We invest across five focus areas critical to Autodesk industry decarbonization: **Energy, Buildings, Industry, Mobility, and Carbon Removal.**

## Energy



Achieve low-cost, abundant, reliable zero-carbon energy

## Buildings



Reduce embodied and operational emissions in buildings

## Industry



Tackle the industrial emissions in steel, cement & aluminum

## Mobility



Solve for hard-to-abate mobility challenges

## Carbon Removal



Build a carbon management industry from near-scratch

# Impact Assessment Approach



**Resourcing:** 1.5 FTE dedicated to impact assessment (across all 3 IOAs) + external consultants support.

**Process:** Impact assessment is managed in-house and with the help of external consultants like Rho Impact and CEA Consulting.

## Integrity, Scalability and Standardization

Engage and work with third-party experts to resource and scale this work with rigor and integrity with an eye towards training and internal capacity building.

Rely on tools like [CRANE](#) (an open source tool provided by Prime Coalition and Rho Impact) for a quick, lean and standardized way to give us the conviction that the impact opportunity is meaningful

## Impact Alignment

Use the assessment as a way to facilitate a conversation with the investee to align on impact and discuss assumptions and drivers of GHG impact. While the potential impact number is important, it is less about the number and more about the analysis

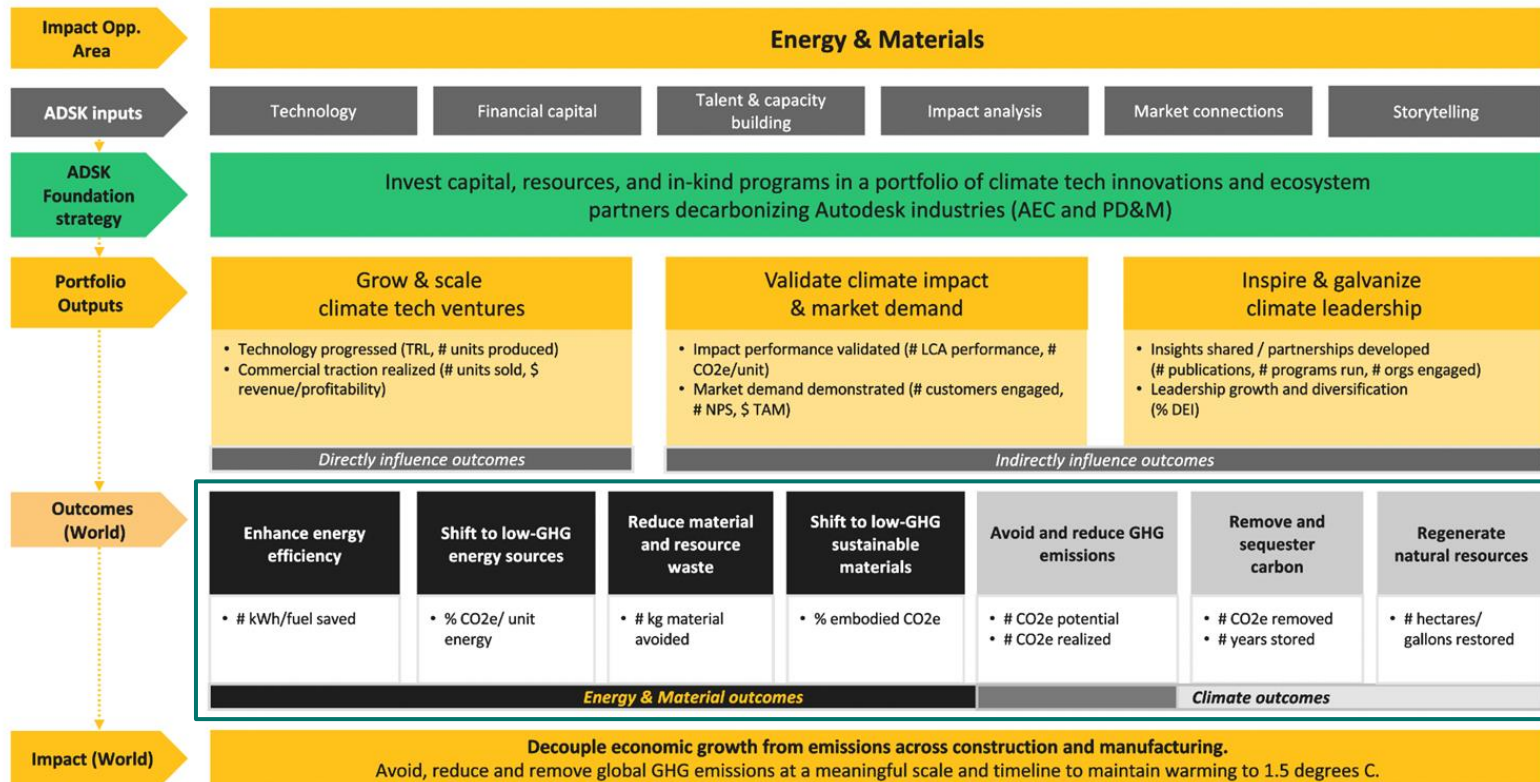
## Value for Investee

Make sure that the analysis is equally valuable for our investees and helps them:

- Speak with integrity about their orgs' potential impact with stakeholders
- Make informed operational decisions



# Autodesk Foundation Theory of Change



Impact Outcome Metrics



# Impact Criteria



The Autodesk Foundation supports organizations developing climate solutions that can lead to potential emissions reductions or removal of at least 0.5 GT CO<sub>2</sub>e cumulatively through 2050.

## Pre-Investment

Our investments focus on solutions that have the potential to mitigate or remove > 500 MMT CO<sub>2</sub>e by 2050 (or approx. 1% of today's annual emissions). We emphasize near-term GHG impact, but do monitor long-term impact potential. We also look for other impact outcomes related to reduction in energy and materials listed in our Theory of Change.

## Post-Investment

We request self-reported impact metrics annually and engage 3rd party consultants to validate methodology and data integrity. We refresh our potential impact assessment every 12-24 months to refine assumptions and methods of impact. As companies come to market, we work with the entrepreneurs to track realized impact relative to their commercial sales.

## At Exit

At investment exit, we continue to monitor impact performance through close connections afforded by our deep post-investment in-kind programs. We have yet to encounter an exit where strategic engagement didn't continue, but are in the midst of developing protocols for how to account in IMM.

# Pre-Investment Assessment Process

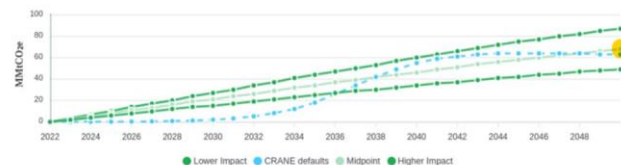


We apply the Emission Reduction Potential (ERP) Framework and are looking at potential rather than planned impact at this stage.

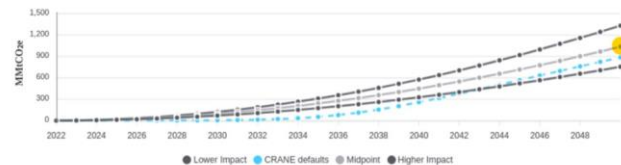
1. **Articulate the impact hypothesis**, all the ways in which the solution could lead to GHG emissions reduction including both the direct and indirect impact of the solution
2. **Understand the solution**, and the incumbent being displaced by the solution, including the serviceable market(s) and the unit of deployment
3. **Determine GHG intensity** using improvement of certain performance metrics vs baseline
4. **Establish the system boundary** including time horizon, geography and uncertainty
5. **Estimate the target market** using reliable data sources
6. **Discuss market penetration assumptions** and appropriateness of default S-curve
7. **Estimate annual and cumulative ERP values** stating which technology analysis is being used
8. **Discuss, adjust, and share results with investee**

PROJECT  
FRAME

Annual Emissions Reduction Potential



Cumulative Emissions Reduction Potential



The Emissions Reduction Potential (ERP) is the annual difference in emissions, measured in Metric Ton CO<sub>2</sub>e, between a Reference Scenario in which the solution does not exist and a Solution Scenario in which the solution is deployed with the provided inputs. The figures below depict the ERP for each year of the analysis as well as the cumulative ERP (ERP for that year and all the previous years). The higher impact case and lower impact case represent variations (±25%) of market penetration and the GHG intensity of the solution. This demonstrates the ERP if the technology has a 25% higher and lower market penetration and a 25% higher and lower GHG intensity than estimated. The CRANE defaults line illustrates the ERP using the CRANE default inputs instead of user inputs as a comparison.

CRANE tool ERP analysis report

# Post-Investment Assessment



<p><b>Manage Impact &amp; Optimize Outcomes</b> What investor actions or strategies deepen or incentivize impact after investments are made?</p>	<p><b>Report &amp; Disclose</b> How are you proactively fostering transparency — In your methodology, your portfolio's impact outcomes, and impact outcomes among individual companies?</p>	<p><b>Evolve processes</b> How is your process of assessment improving? What are you learning?</p>
<p>We want to continue to revisit our assessment to compare actual performance relative to what was projected and update assumptions.</p> <p>We also want to work with organizations to track realized impact wherever possible and bring in third party audit/assurance.</p>	<p><b>Annual Reporting</b></p> <p><b>Internal:</b> We report our impact metrics to the Autodesk Foundation board annually.</p> <p><b>External:</b> Impact data from the Foundation's work is included in Autodesk Inc.'s Impact Report and ESG disclosures.</p>	<p>Our consulting model for impact assessments + participation in working groups like Project FRAME ensure that we are constantly learning from experts and bringing back those learnings to improve our assessment process and model transparency.</p>

# Considerations

---



## **Managing impact & optimizing towards outcomes**

How might we further move our impact assessment from a diligence tool to a tool that helps ongoing operational decisions?

## **Scaling our assessments: consulting vs in-house vs shared models?**

The consulting model has helped us resource and scale this work with rigor and integrity thus far but as our portfolio grows and matures, how might we think about creatively resourcing this work? Can standardization result in easier sharing of impact assessments across investors?

## **Integrating Foundation impact assessment into Autodesk Inc. management & reporting**

How might we bring learnings from forward impact analysis to the management and reporting of Autodesk's corporate-wide impact strategy?

Investor Profiles are published on a rolling basis.

## View all Project Frame Investor Profiles

**Interested in publishing an Investor Profile of your own?**

Contact Director of Project Frame, Keri Browder, at [keri@primecoalition.org](mailto:keri@primecoalition.org).