

16 November 2022

TRANSFORMATIVE INVESTMENT IN SUSTAINABILITY

Introducing the Investment Philosophy for the Second Deep Transition

Johan Schot, Roberta Benedetti del Rio, Ed Steinmueller, Susanne Keesman

In collaboration with the Deep Transitions research team
and Global Investors Panel

© 2022 The Deep Transitions project

Lead authors: Johan Schot, Roberta Benedetti del Rio, Ed Steinmueller, Susanne Keesman

Contributing authors: Laur Kanger, Jack Davies, Victoria Ward, Bipashyee Ghosh, Caetano Penna, Phil Johnstone, Wendy Schultz, Carla Alvial Palavicino, Imogen Wade

This introduction was compiled with support of James Stevens and is based on the Investment Philosophy for the Second Deep Transition. The Investment Philosophy is the output of a year-long collaborative process between the Deep Transitions research team and the Global Investors Panel: a panel of 16 public and private investors whose contributions and insights to the panel sessions informed the content of both the full report and this guide.

The panel consists of:

Nick Abel (CalSTRS – California State Teacher’s Retirement System)

Dominic Burke (Lankelly Chase Foundation)

Yuni Choi (RS Group Asia)

Audrey Desiderato (Mirova SunFunder)

Kate Fox (Baillie Gifford)

Drew von Glahn (Collaborative for Frontier Finance)

Jonathan Hausman (Ontario Teachers’ Pension Plan)

Lisa Jordan (Draper Richards Kaplan Foundation)

Atanas Kolev (European Investment Bank)

Göran Marklund (VINNOVA)

Katherine Ng (United Nations Principles for Responsible Investment)

Christopher Palmberg (Business Finland)

Roberta Benedetti del Rio (Impact investor, and senior advisor to Just Climate, a subsidiary of Generation Investment Management)

Dimple Sahni (Anthos Fund & Asset Management BV)

Sanjoy Sanyal (Caspian, Regain Paradise, Adelphi)

Daan du Toit (South African Department of Science and Innovation)

Design and illustrations by Naz Costante

3D rendered images by Deep Mind (Unsplash)

The images in this document are licensed under [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/) unless otherwise attributed in the captions.



Foreword

Do we break down or break through?

As we write these words in late summer of 2022, unprecedented yet predicted heatwaves, droughts, floods, food shortages and wildfires rage across the planet. Humankind's profound neglect for the natural world during the last decades is matched only by the renewed realisation of our dependence upon it: evidence-based consensus among international organisations, such as the Intergovernmental Panel on Climate Change (IPCC) and the UN Office for Disaster Risk Reduction, is that business-as-usual is accelerating us towards catastrophe. Disruptive, fundamental and systemic change is required to avoid disaster. The future looks bleak without major change.

Major change demands tremendous levels of public and private investment and coordination. Already, the critical role of finance as an engine for transformation has fuelled an increase in capital flowing towards building a sustainable future, but there is a long way to go. Even the most ambitious investors find themselves constrained by inadequate approaches that do not reflect and leverage the ways in which fundamental change can be achieved. Vital capital that could create a brighter future often flows towards innovations that optimise existing systems. A new approach, which targets just and sustainable transformations through systems change, is needed. Investors, philanthropists, business leaders, policy makers and those already working towards systems change, are in a position to align their efforts to become influential agents for change, while academics, civil society and researchers can, amongst other things, aid with evidence-backed insight.

In 2021, with the generous support of James Anderson and Baillie Gifford, a Deep Transitions Global Investors Panel was formed to explore the implications of this new approach for the investment practice. Working with a research team based in Utrecht University and the University of Sussex, they considered how public and private investors could go beyond current investment practices and the lure of systems optimisation to achieve something more radical: fundamental and lasting systems change.

The goal of the Deep Transitions research project was, by necessity, disruptive. Our ambition, uncomfortable to some. We challenged the values and beliefs of many (including panellists, stakeholders, beneficiaries) who have contributed to, benefitted from and believed in the current global system. While this system has delivered the largest increase in global standards of living in human history, it has been distributed unequally, and at the cost of extraction from and exploitation of the natural world.

We strongly believe investment has enormous potential to accelerate our world to a brighter future. To foster, nurture and scale up alternative ways of structuring our societies. Indeed, small groups of front-runners have long sought to use the power of capital for good. As the winds shift towards a global push for a sustainable and just world, the practices championed by these front-runners are gaining prominence. Our ambition is to collaborate to go even further: to embed a deeper understanding of transformative change into investment than has ever been done before.

To do this, we turned to Deep Transitions. Together, the Investors Panel and the research team asked how a Deep Transitions approach to systems change and transformation, grounded in history and academic research, might hold the keys needed to unlock new potential for investors seeking to build a better future. Deep Transitions provides a foundation for understanding how fundamental and lasting change occurs and how we as human beings can come together to accelerate and deepen that change. Our ambition is to translate this academic understanding into an actionable approach, with Deep Transitions as the underlying thinking for a new type of investment: transformative investment.

Over the last few years, the Panel and research team have built a core foundation for the business of investing in systemic change and societal transformation. We present these in the subsequent pages of this quick guide, and in more detail in the Investment Philosophy.

Yet we are only just at the beginning of our work. Transformative investment now needs bold action and active, committed and long-term involvement from individuals and organisations to create a transitional safe space in which to experiment, learn and accelerate. It requires a new ecosystem (or 'niche', in Deep Transitions thinking) with the mobilising potential needed to make a substantial contribution to the sustainability revolution, a Second Deep Transition. We encourage investors to take a bold step with us. We are living through increasing change, shocks and uncertainty. Taking transformational risk now is likely to be the most promising option long term, helping you to be nimble and proactive, to avoid stranded assets, and to diversify against profound systemic risk.

In this time of deep change, we invite you to join us in transformation.

Panel Co-chairs,
Roberta Benedetti del Rio & Johan Schot

Deep Transitions and the Road to Transformative Investment

Deep Transitions are a series of interconnected system changes that transform society in a fundamental way.

The First Deep Transition began with the Industrial Revolution, which led to unprecedented economic growth, prosperity and innovation, and it is still ongoing today. Our society rests on its socio-technical systems, which provide for our basic needs, such as energy, mobility and food. These systems are strongly interlinked and rely on a series of unsustainable yet deeply ingrained rules, including fossil-fuel usage, globalisation, resource exploitation and linear mass production and mass consumption. Climate change, biodiversity loss and social inequality are rooted in these interconnected principles and systems.

A Second Deep Transition will emerge when socio-technical systems reinforce each other and form the backbone of everyday life. Changing one system in isolation is difficult, and incremental change is not enough. A fundamental shift towards multi-level system change is necessary for precipitating the Second Deep Transition: a sustainable, socially just revolution. Deep Transitions thinking therefore concentrates on the creation and linking of niches and on opening dominant regimes to innovation and disruption.



The Deep Transitions project has been an unprecedented transdisciplinary research project based on Deep Transitions thinking it is a theory of change grounded in academic research, that explains how change unfolded in the past in order to learn how to shape the future.

The project has consisted of two phases:

Deep Transitions History (2018–2020)

An international team of historians, sustainability experts and transition scholars collaborated to learn how fundamental change on a global scale unfolded in the past. The resulting Deep Transitions framework provides a blueprint for understanding how to shape change in the future.

Deep Transitions Futures (2020–2022)

The research team collaborated with a Global Investors Panel consisting of 16 public and private investors from all over the world. Their collaboration led to the co-development and publication of a new philosophy for transformative investment which helps investors steer their investments towards multiple-system change, transformation and, ultimately, the Second Deep Transition.

Connected to Deep Transitions is the following project:

Transformative Innovation Policy Consortium (TIPC, 2018–2023)

While transformative investment seeks to encourage and equip private-sector investors, TIPC engages with the public sector via a global network of researchers, policy makers and funding agencies who want to address the UN's Sustainable Development Goals. The consortium, with policy experimentation at its core, enables managers, policy makers and other actors to recognise, realise and evaluate opportunities that contribute to the move beyond system optimisation to achieve fundamental, lasting systems change.















12 Principles of a Transformative Investment Philosophy

Who should apply these investment principles?

The principles are a type of shorthand designed to aid investors in achieving systems change. They are a catalyst for fresh thinking, dialogue and decision making that is guided by systems change. The principles focus primarily on the role of private investors but are also applicable to and relevant for public actors, including in their linking with private investments. Whether focused on private companies or listed securities markets, across asset classes – with specific fiduciary and market-return responsibilities or with the ability to accept concessionary returns – all types of private investors can benefit from embedding these 12 principles in their research, analytical and decision-making processes.

The Panel and research team have worked to ensure that these principles can catalyse challenging dialogue and decision making in any investment process. In reflecting the constraints within which many investors operate, these principles are also consistent with achieving positive financial value. Their deployment within investment practices even has the potential to help uncover (and even create) new investment opportunities in overlooked areas with high transformative potential. In the current context of ever-increasing uncertainty, change and frequency of shocks, these principles can also contribute to shielding investors from exposure to profound systemic risks. However, the role for ‘experimental capital’, as well as non-investment-related complementary actions, remains necessary and important.

Goal-setting principles	1  Transform the system	2  Think long term	3  Include & give voice
	4  Visualise Desirable futures	5  Enhance portfolio synergies	6  Embrace Uncertainty
	7  Contextualise in transition dynamics	8  Open up, don't lock in	9  Be a world-builder through collective action
Sharing and learning principles	10  Experiment with transformative tools	11  Foster interdisciplinary research	12  Share learnings

Goal-setting principles

Principles to set the course for and catalyse thinking on making transformative investment part of an organisation's practices

1



Goal setting

Transform the system

Transformation is the goal. Target systems change and deploy capital in a way that accelerates the Second Deep Transition.

Target transformative potential rather than optimise specific impact outcomes or ESG criteria. Systems change is the only way to achieve a sustainable and desirable future. Accelerating this change process would limit the magnitude of the negative outcomes of the current dominant system and draw out a desirable alternative. In this sense, transformative investing transcends definitions of impact investing and ESG investing, although it has elements in common with both these investment types. Values, governance and incentive structures would also benefit from the overall goal of transformation.

2



Goal setting

Think long term

Focus on long-term systems change. Visualise outcomes in decades.

It may take many years of investing to achieve the impacts of systems change. Nevertheless, efforts must be made towards building desirable worlds in the long term, not towards marginal relative optimisations in the near term. Financial returns would not necessarily take as long to materialise as system change outcomes, as markets anticipate future financial flows in asset prices. However, investment structures that allow for a patient approach, such as evergreen funds or funds that incentivise long-term holding periods, are more aligned with this principle of long-term change.

3



Goal setting

Include & give voice

Inspire stakeholder participation, including the ultimate owners of capital. Be accountable to them.

Invite local communities and key stakeholders – such as buyers, suppliers and workers – to have a voice in assessing transformations that may significantly affect their lives. Make a conscious effort to be transparent, to offer such stakeholders broad-based engagement in the decision-making process, and to start a discussion about how to enhance stakeholders' and community participation (including the fair allocation of costs and benefits). Experiment, in collaboration with other investors, to determine the best way to implement this in practice. Ultimately, broad participation and ownership will lead to higher support, more understanding and greater implementation. Transparency and broad engagement are particularly relevant: transition dynamics should be grounded in a shared vision for a desirable future.

Investment strategy-related principles

Principles that support the decision-making process when developing a strategy for investing in transformation

4



Investment strategy

Visualise desirable futures

Visualise desirable future worlds.

Investors would benefit from defining the high-level characteristics of the preferred future world they seek to enable; developing, as far as possible, a visualisation of the characteristics of that future; and incorporating these in their investment strategies. The desirable worlds generated in the Panel process (see [Annex 2](#)) can provide a useful starting point. However, many more scenarios and future world visions are freely available as alternatives. Investors may also conduct similar world-building exercises to those undertaken by the Panel and research team.

5



Investment strategy

Enhance portfolio synergies

Take a portfolio approach to multiple-system change.

Consider how to construct a portfolio (or a set of investment vehicles or policy programmes) for building a new meta-regime (for example, a circular economy) across systems. Investing across various aligned solutions can help accelerate growth and decrease risk across the portfolio, as niches can support one another.

6



Investment strategy

Embrace uncertainty

Expect a high level of investment risk and a need for experimental capital.

Transformation comes with uncertainties. Transition pathways are hard to predict, and transformative investments are likely to be associated with a relatively high level of risk. High risks may lead to correspondingly high financial rewards (for example, in venture capital or growth investing), but this may not always be the case. To ensure transformative solutions can be scaled, experimental capital must be incorporated into blended finance structures, either alone or in a layered structure. This kind of funding can help kickstart solutions and fund proofs of concept. Funding could take the form of donations, concessionary capital, public funding or in-kind support. Experimental capital can create transformative investment opportunities that then become attractive to market-driven investors.

Investment process-related principles

Principles that can help inspire, shape and stretch the investment process of an organisation

7



Investment process

Contextualise in transition dynamics

Actively consider each investment in its relationship with ongoing Deep Transition dynamics.

Deep Transitions require multiple change processes involving many interacting actors over a long period and across a wide range of spatial contexts. Investments alone cannot create or steer a Deep Transition process. Instead, they can contribute to ongoing change processes and may be able to modulate their direction. Contributions (in this case, investments) can be made more effective by assessing if and how they connect to and influence transition dynamics. By focusing on transition-related intervention points and associated transformative outcomes, it is possible to develop and exploit a deeper understanding of systems change and Deep Transition dynamics in the investment process.

8



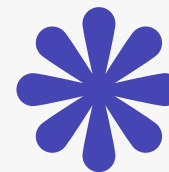
Investment process

Open up, don't lock in

Avoid lock-in solutions that impede deeper systems change.

Investors and science, technology and innovation policy makers should consider carefully whether investments support systems optimisation or systems change, not just in a single system but across multiple systems. At times, investing in systems optimisation may be necessary as a stepping stone towards systems change. However, it could also end up blocking the potential for transformation and locking systems into unsustainable pathways, thus preventing change from happening. The potential lock-in of existing systems and the clash between short-term systems optimisation and long-term systems change should be taken into account when considering potential investments.

9



Investment process

Be a world-builder through collective action

Foster collective action among actors who commit to systems change.

Transformational change requires parallel shifts in all aspects of a socio-technical system. Investors and policy makers gain from seeking opportunities to partner and collaborate with one another and with other actors to influence a system on multiple levels. One example of such an opportunity might be creating transition-enabling bundles, a package of complementary actions that includes investments and policy commitments. Collaborations can be established between investors with different risk-reward expectations (for example, through blended finance structures), between investors and policy makers, and with buyers, suppliers, intermediaries and other market participants. These collaborations can help decrease the inherent risk of investing in new niches and accelerating their expansion, and they may help to create investable opportunities where there are gaps.

Principles for experimentation, sharing and continuous learning

Principles to support improvement and learning in the journey towards transformative investment

10



Sharing & learning

Experiment with transformative tools

Experiment with the transformative investment tools and support their development.

Play with transformative investment tools and methods from the Deep Transitions framework. Contribute to their development as well as that of additional practices over time. Help strengthen the field of transformative investment and enhance its applicability to a broader base of investors.

11



Sharing & learning

Foster interdisciplinary research

Foster interdisciplinary research and collaboration to advance and realise the potential of transformative investments.

Experimentation is necessary to support transformative investment. For example, a mix of researchers, investors, futurists, storytellers and graphic designers collaborated actively to shape the Panel process and its products, including these principles. Sustained interdisciplinary collaboration is a vital part of continued research efforts to assess, measure and monitor investments' transformational potential and performance over time. Learning and unlearning need to take place, by actors across the board. Making connections between research and investment practices and inviting other disciplines as equal experimentation partners will enrich investment practices with system transition knowledge while also helping to deepen and further the academic agenda.

12



Sharing & learning

Share learnings

Value transparency and share learnings by making them open source.

This principle requires that stakeholders make available their lessons, data and insights, successes and failures, near misses, scrapes, surprises and unexpected outcomes. Open-source materials help foster replication and subsequent take-up by other investors and science, technology and innovation policy makers. We are at the initial stages of putting transformative investment into practice. Therefore, the willingness to share learnings and compare notes is vital for its evolution and endurance.

For a deeper dive into the Investment Philosophy and how to put it into action, read the full report.

The Transformative Investment Philosophy, encapsulated in the 12 principles above, provides a framework for guiding thought and action in the investment community and broader society. Yet they are not an end point; they are a beginning.

The sustained interdisciplinary collaboration between the Panel and the research team in co-creating the Philosophy can be seen as a prototype for how cross-disciplinary efforts can work towards achieving transformation. To that end, effectively leveraging this opportunity requires a focal point for continued efforts to disseminate transformative investment principles, put them into practice, and learn from experimentation.

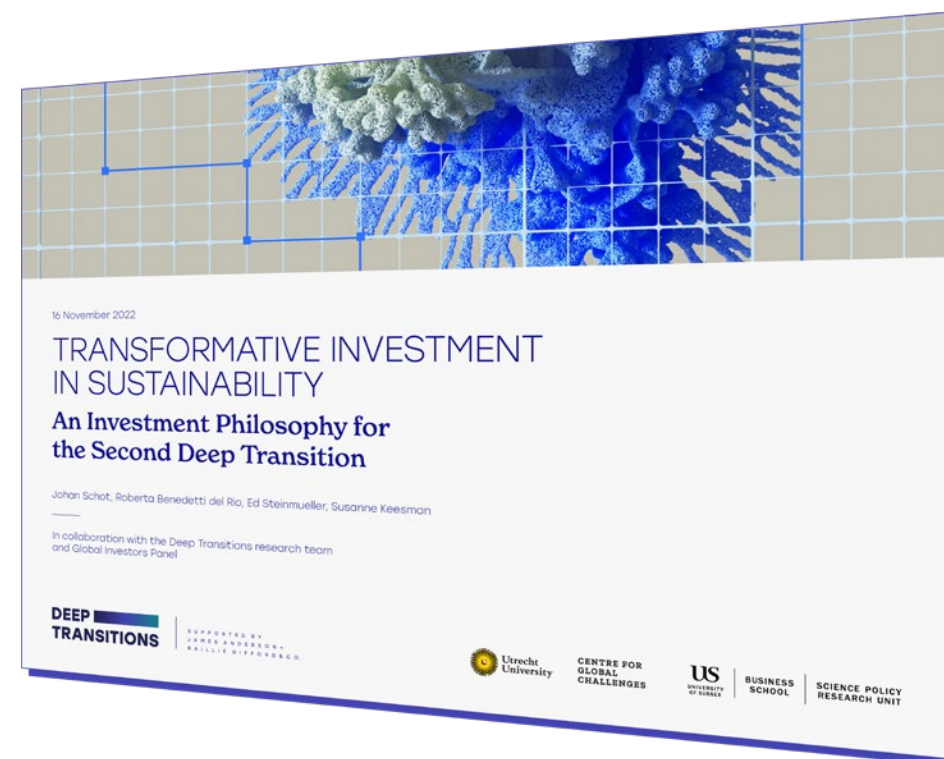
[Download the Investment Philosophy ↗](#)

Begin a bold journey towards transformation

Beginning in 2023, the Deep Transitions Lab will act as the seed of a global community brought together by a shared ambition to invest in systems change. The Lab will serve as a platform within which to learn about, experiment with and disseminate the results of new forms and strategies of transformative investment.

If you would like to discuss how we might collaborate in your own systems-change work; request an information pack on the Deep Transitions Lab; or for any other inquiry:

[Contact us ↗](#)



© 2022 Deep Transitions project

DEEP ■
TRANS
ITIONS