

Report

Nordic Roadmap for Circular Financing



A roadmap from the Transition Group for Circular Financing within the Nordic Circular Hotspot.

Preface



Fredrik Nilzén
Head of Group
Sustainability at
Swedbank AB

“We believe the circular economy will be a crucial lever in society’s transition to a sustainable future. We are committed to supporting our customers in this transition. Together we will learn and co-create optimal solutions in a business ecosystem where we, as a systemically important financial services provider, are an enabler for others.”

Peter
Munch-Madsen
Senior Advisor,
Nordic Innovation

“The financial actors, aspects and mechanisms are the backbones of the transition to circular business and sustainable solutions. The Vision 2030 of the Nordic Council of Ministers is to create the most integrated and sustainable region in the world. Given this vision Nordic Innovation continuously follows financial developments, outlooks and works that enhance circular business models. The Transition Group for Circular Financing is an important step to keep the Nordic countries ahead of actual market developments and showing the way forward globally.”

Anne Mieke
van der Werf
The chair of
the Kopgroep
Circulair
Financieren

The Dutch Kopgroep Circulair Financieren considers the financial sector as one of the main enabling stakeholders working towards a circular economy in 2050. The Roadmap created and presented to the Dutch financial sector in 2020 guides the sector towards financing circular propositions. We strongly support that this Roadmap is being used on an international level, while being challenged and improved by a multiple stakeholder group to increase access to finance to propositions with circular characteristics. The Kopgroep Circulair Financieren welcomes that some of the concrete actions to address bottlenecks in the financing of circular businesses can be found back in the Nordic roadmap for circular financing.

Key is that circularity must be an integral part of the assessment of all funding applications and investment decisions. This requires strong commitment and perseverance of the financial sector. We congratulate the Nordics to the development of their roadmap and encourage more international collaboration on the cross-country challenges that we are facing towards a circular economy!

An aerial photograph of a river winding through a lush, green, hilly landscape. The river is dark and narrow, with sandy banks. The surrounding terrain is covered in dense vegetation, with some rocky outcrops visible. The lighting suggests a bright, sunny day, casting soft shadows on the hills.

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Executive summary

The circular economy is a resource and energy efficient economic model, built on high value retention in products and materials. It is suggested as a core strategy to tackle the climate and environmental crises that face humanity. Business models that promote and drive value retention play a key role to achieve a more circular economy, and for circular business to thrive, financing of these circular business models is a must.

The Transition Group for Circular Finance is a working group within the Nordic Circular Hotspot. It was initiated by RISE (Research Institutes of Sweden) and aims to address challenges and develop solutions for financing of circular business models.

For debt capital, banks and credit institutions face challenges due to their limited knowledge of circular business models and difficulties in assessing the risks associated with these models. Their high risk aversion due to regulation, industry practice and norms make it difficult for certain companies to secure this type of financing. Circular ventures often involve longer payback periods and may lack traditional collateral, making it hard for these business ventures to fit into existing risk assessment frameworks. This challenge is particularly acute for start-up companies with no credit history.

For equity capital, the challenge lies in the lack of understanding of circular

businesses and their potential return on investment. Investment decisions are typically based on linear due diligence processes, which do not adequately consider the circularity potential. Additionally, the time horizons of equity investors may not align with circular business models, making it challenging for circular ventures to attract investment.

To address these challenges, this Nordic roadmap for circular finance has been developed. The roadmap is divided into three themes, where the industry actors themselves take lead in several of the activities, while other activities will need coordination between actors:

Knowledge and Capacity Building:

The goal is to engage financial actors and enhance their understanding of the circular economy, including the drivers and business potential of the circular transition. The roadmap suggests working actively with creating engagement, knowledge sharing, collaborating with other countries, and working with regulatory bodies.

Debt Financing: The goal is to integrate circular assessments into banks' risk-reward frameworks and credit processes, where relevant. Activities include collaborating with Dutch counterparts to develop circular risk models and metrics, creating more circular finance cases, and coordinating data collection on the cases.

Equity Financing: The goal is to include circular due diligence in private and public investment processes. Activities include collaborating with the Dutch team to develop circular metrics with a focus on investor needs, creating a "Circular investor strategy brief" with relevant KPIs and investment/exit strategies, and generating more circular finance cases.

The proposed activities will support the financial sector to achieve the 2030 goal: *"Financial actors have seized the opportunity of the circular economy, through integration and implementation of circular financing as a key factor in their business, including risk assessment and credit and investment strategy"*, and progress the sector towards the long-term vision: *"A financial market supporting a regenerative and inclusive economy"*.

Call to action:

The following steps need to be taken as soon as possible to ensure the progress of circular financing according to this roadmap:

- Financial actors of all kinds should continue to speed up the work to create more real examples of financing of circular businesses, by themselves and by teaming up with new partners. Check what you can do independently within your current mandate.
- Financial actors should proactively assess resource-related risks within linear business models to ascertain their validity, recognizing that the assumptions underlying the risk evaluation may be outdated due to the triple planetary crisis
- Continue to spread success stories to both internal and external audiences.
- A coordination platform needs to be created to engage more partners and create the basis needed for further work. Some kind of coordinating platform is a prerequisite both for structured data collection, for coordinated communication activities, for focused collaboration with regulatory bodies and for international development, including driving the risk assessment and metrics framework work together with the Dutch team.

1. Background

1 The triple planetary crisis consists of climate change, biodiversity loss, and pollution.

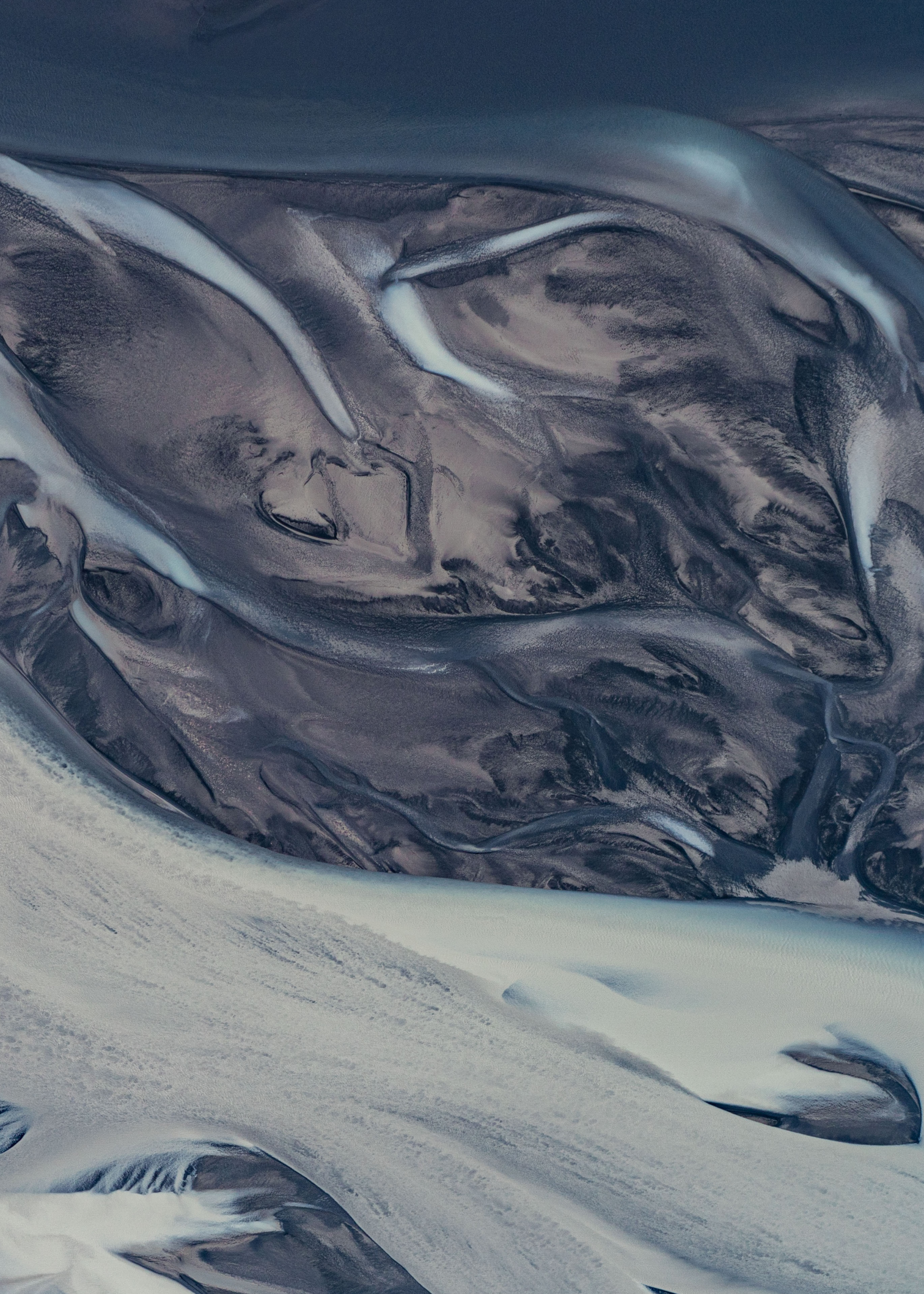
2 A circular economy is a system which maintains the value of products, materials and resources in the economy for as long as possible, and minimises the generation of waste. (Publications Office of the European Union, 2021)

3 Circular economy action plan (europa.eu)

The components of the triple planetary crisis¹ are all linked to the production and consumption of natural resources, material and products (EEA, 2023). For that reason a circular economy² based on high value retention in materials and products is one of the key strategies to tackle the crises and to deliver wellbeing to future generations (EEA, 2023). This is also stated as a goal for the development of the future European economy in the EU's Circular Economy Action Plan³.

The circular economy is a radically more resource and energy efficient economic model, built on high value retention in products and materials, an increasing share of services

and resource loops that feed used materials and resources back into the economy again and again. To enable a shift to such a radically different economy, traditional linear business models based on high volume, speed of throughput of materials, and without responsibility of end-of life, need to be phased-out. New business models based on longevity and high utilization of products (for example – but not limited to – through different product-as-a-service models) need to take their place. A key factor in enabling this transition is to enable financing solutions for these types of business models, as the shift will not happen without access to debt and equity capital.



RESEARCH ON CIRCULAR FINANCE

Research on the topic circular economy has been steadily growing over the past decade. The topic of circular finance (which we define as actively including circularity considerations into loan and investment decisions), on the other hand, is much more recent in academic literature. Since Linder et al. (2017) made the first effort to describe the inherent risks of circular business models (CBM), many scholars who have focused on barriers to CBMs and circular economy transition in general have also mentioned that financial barriers might be an important consideration (Grafström and Aasma, 2021; Hartley et al., 2021; Tura et al., 2019; Vermunt et al., 2019). Two papers have deep-dived into possible solutions to lower the financial barriers. Both Toxopeus et al. (2021) and Fallahi et al. (2022) suggest solutions related to new types of collaborations and networking between actors in new circular business ecosystems, including different financial actors. This roadmap represents one approach to addressing these findings.

SUSTAINABLE FINANCE VS CIRCULAR FINANCE

Sustainable finance is a large topic that has developed immensely in recent years. For example, the number of sustainable finance-related regulations in G20 member states, major developing economies and other financial centres grew

from 103 to 388 between 2012 and 2022 (UNCTAD, 2023). In market size, since the first green bond was issued in 2007, the broad sustainable finance market has surpassed \$3 trillion (Sustainalytics, 2021). Based on the number of initiatives in this area that have developed, such as the UN Principles for Responsible Investments (PRI)⁴, and the broad interest in joining them it could even be argued that the topic is becoming mainstream. Although environmental aspects cover a broad spectrum beyond just climate issues, mainstream sustainable finance has mostly concentrated on climate change and cutting CO2 emissions. The Global Alliance for Banking on Values⁵ with more than 70 member banks globally, is actively driving sustainable banking with focus on social values and also on circular economy, so far this is a marginal activity in the finance sector though. We believe that there is a fundamental misunderstanding of how to tackle the triple planetary crisis, and a missed opportunity to not highlight the importance of resource use and the transition to a circular economy when addressing the E in the ESG-framework.

CIRCULAR FINANCE IN THE NORDICS

It is also interesting to note that the different circular economy strategies, roadmaps and programmes that exist in the Nordic countries rarely mention the finance perspective (e.g. Government Offices of Sweden, 2021;

⁴ <https://www.unpri.org/>

⁵ <https://www.gabv.org/>

Nordic Innovation, 2022). The Finnish playbook "Sustainable Growth with Circular Economy business models" from Sitra, is the exception in that it mentions that the finance sector is starting to embrace the circular opportunities (Sitra, 2022). While these initiatives are important to push the circular economy agenda in general, the lack of the financial perspective shows that the full impact of a circular transition is not understood. It also underlines the need for this roadmap. This was also emphasized in the evaluation report of the Finnish Circular Economy Programme, which pointed out that the financial steering instruments need to be significantly developed to support the transition (Finnish Government, 2023).

CIRCULAR FINANCE INITIATIVES AT THE EU LEVEL

The European Union has launched two Circular Economy Action Plans, the latest in 2020 (European Commission, 2020). The EU also clearly states that financing the circular economy is key to making it happen. Part of their effort are large grant-funded research programmes, such as Horizon and different regional support policy programmes. The Commission has also set up (in 2017) a CE Finance support platform (including the EIB, national promotional banks, institutional investors and other stakeholders) to enhance the link to existing finance instruments and potentially create new ones. They state that "the main challenge facing promoters of the circular economy looking out

to financing their projects, is the perception and assessment of risks" (European Union, 2019).

EU's sustainable finance package includes the taxonomy and a new ESG rating framework. One great step forward is that circular economy is one key area in the EU's Green Deal, such as including circular economy requirements in the European Sustainability Reporting Standards (ESRS) and the EU Taxonomy for sustainable activities, which are part of its sustainable finance package (European Commission, 2023).

OTHER CIRCULAR FINANCE INITIATIVES

While some private financing initiatives dedicated to circular economy exist, they are very limited. In terms of national and policy initiatives the only country or region that, to our knowledge, has created and published a circular finance roadmap before this one is the Netherlands. "The financial sector as a driver for the Circular transition" is a roadmap created by "Kopgroep Circulaire Financierien"⁶ under the Dutch Central Bank and includes actors from the Dutch financial sector, CE experts and academia (DNB, 2022). The Dutch roadmap is an inspiration for this work, and we have actively involved the Dutch team in our work to ensure that we continue pushing the circular financing area forward, rather than repeating work already done.

⁶ Werkgroep Circulaire economie (dnb.nl)

2. Method

The Transition Group for Circular Financing was created based on an idea from RISE, Research Institutes of Sweden. The idea emanated from earlier research in the circular finance area and in response to the search for topics for Transition Groups, within the Nordic Circular Hotspot. After an initial information meeting in December 2022, the group was created and the first group meeting took place in January 2023. Another three group meetings were organised across the spring and summer period. Each meeting involved between 8 and 14 participants and the following topics were discussed:

- The scope of the transition group work in terms of topics and deliverable.
- The Dutch circular risk model

- The Dutch circular metrics framework
- The content and structure of the roadmap

In addition to the Transition Group meetings for the full group, the RISE team has held seven validation meetings and interviews with bank and investor representatives and the Swedish Financial Supervision Authority (FSA), *Finansinspektionen*, to deep-dive into bank credit and due diligence processes, and to collect data on the cases. Two of the validation meetings were on-site (in Stockholm), and the rest of the meetings were online with the help of a digital whiteboard to enable a collaborative effort and joint discussions and decisions.



3. Problem description

To better understand the roadmap structure and the suggested steps and activities of the roadmap, it is necessary to first understand some aspects of the problems relating to circular finance. We limit our scope to financial actors such as banks, institutional investors, venture capital firms and the like.

There are two types of financial capital, which are fundamentally different:

- Debt capital, such as loans or credits, where the creditor gains access to finance for a set period of time, in return for paying interest. Banks and other credit institutes, which account for a large portion of debt financing, use the funds from their depositing customers to finance loans issued to creditors. These actors are heavily regulated in terms of which risk levels they are allowed to take. They profit from interest revenue and the main business driver is creditors' payback capacity of loans. The payback capacity is often based on credit history and on a triple assessment of the creditor's management, the business case and the available collateral at the creditors. The credits can take different forms, such as bank loans, bonds, factoring or leasing.

- Equity capital, where the investee receives finance in return for selling shares of the company to the investor. In many cases the equity capital financing is financed by the

investors' own money or acquired fund for special investment purposes. Equity financiers live from future profits and the main business driver is the potential for scaling up and future Return on Investment. Equity investors could take different shapes, such as start-up founders, venture capital investors, private equity funds or institutional investors.

There is also a fundamental difference between companies and ventures that are new to their business and do not have any historic track record (we call these start-ups) and companies that have been around for a while and have already proven their business model (we call these mature companies). Even if the circular business models and ventures are new to the mature companies, they still have a credit track record, which is important in relation to financier assessments.

In figure 1 the problem descriptions and suggested solutions of circular financing have been structured into a high-level four-field analysis based on these different types of capital and types of companies.

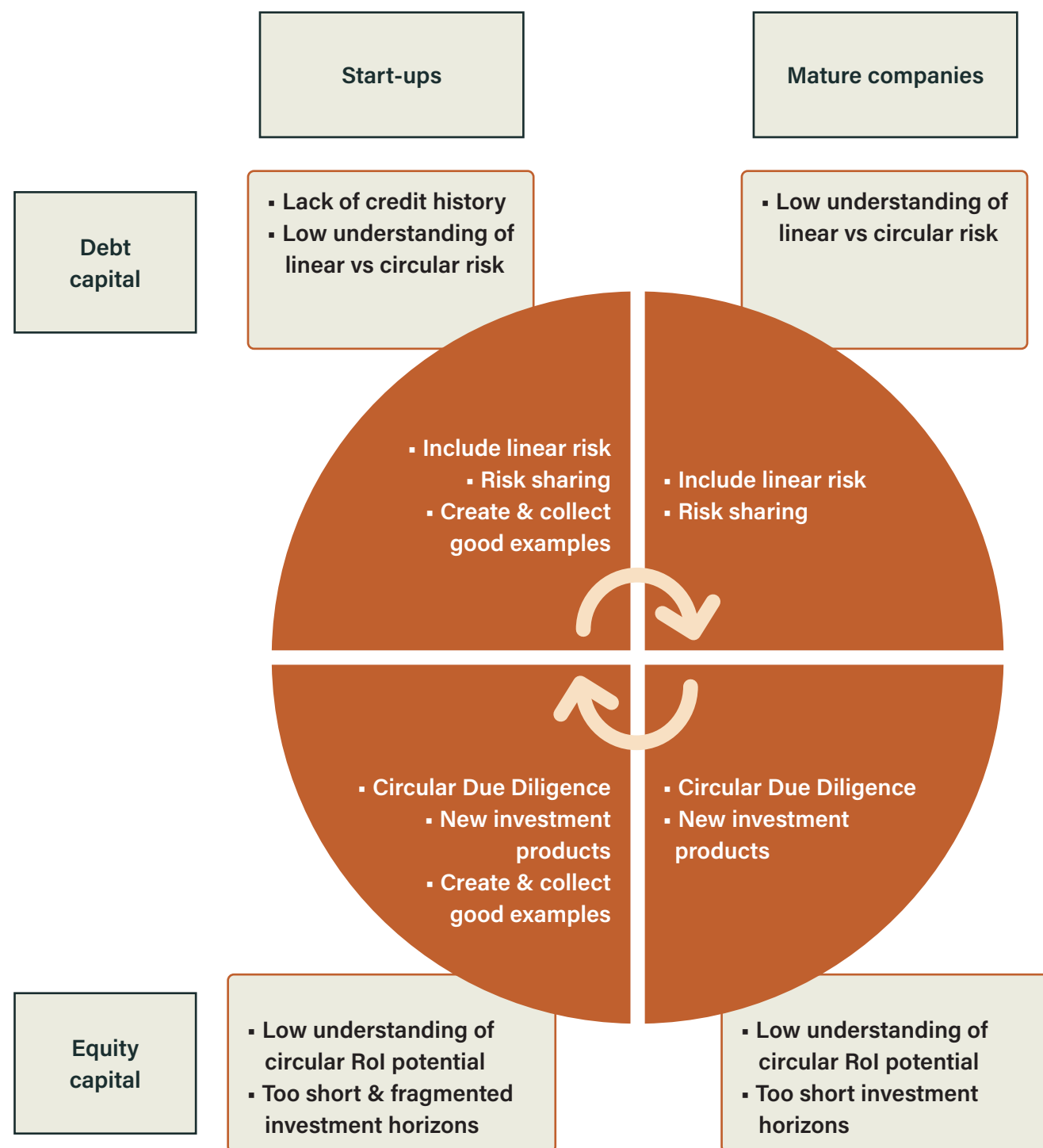


Figure 1. High-level description of the challenges and possible solutions for circular financing, based on the capital type and the company type.

→ **CASE 1.**
 Nordea helped IceBear to issue a €35 million **green bond** to build a facility to produce pallet blocks out of recycled waste wood.

The production is powered by renewable energy from its parent company Kvitebjørn Energi and the surplus energy from the production is harnessed to heat water, which is sold for weed control and other environmentally friendly uses.

IceBear was able to secure the **green bond** based on the project's strong green profile as well as **proven credit record** of its parent company. Cicero Shades of Green gave the project its higher green rating – dark green – in a second party opinion.

<https://www.nordea.com/en/news/how-a-green-bond-helped-this-circular-economy-producer-get-off-the-ground>

CHALLENGES

For debt capital there is a general challenge with a low level of knowledge of circular business models targeting high value retention, and of non-recognized inherent risks of current linear models. Furthermore, banks' and credit institutions' high-risk aversion due to regulation, industry practice, norms and time perspectives result in challenges for certain types of companies to gain access to debt finance. This makes the assessment and comparison of risk levels between circular and linear ventures difficult, at the same time as the long-term profitability potential of the circular models cannot be incorporated into the normal time frames of debt repayment. When standard collateral is not available (for example because the products involved have low values and/or no

structured second-hand markets) it increases risk. While mature companies can rely on historic track records, at least to a certain extent, the problem often becomes acute for start-up companies with no or limited credit track record (see case 1 ↑).

For equity capital, there is a similar lack of knowledge about circular businesses and their potential for future Return on Investments. Current investment decisions are taken based on due diligence processes based on linear economy reasonings. Time horizons for investors that could benefit start-ups, such as Venture Capital are often too short, and publicly traded companies' timelines are inherently short-term. At the same time the institutional capital, such as pension funds, which have longer time horizons cannot invest directly in

→ CASE 2.

Lisa& – a Product-as-a-Service financier – partnered with Refurbly, a second-hand electronic retailer, to successfully launch their **rental offering** Refurbly Flex. Through financing from Lisa&, Refurbly can now offer its customers a flexible and superior rental offering of second-hand electronics. Lisa& financing is purpose built for subscription-based PaaS models where it supports its partners with non-dilutive financing through a credit model that looks at the value a company can build from these business models and the actual value of the underlying objects.

Customers can rent electronics with a fixed monthly price through Refurbly Flex, while Refurbly has a **sustainable business model that is profitable**, supported by financing from Lisa&.

<https://www.breakit.se/artikel/37621/refurbly-ska-hyra-ut-begagnade-mobiler-lanserar-ny-tjanst>

→ CASE 3.

PayEx – a **payment solutions** subsidiary of Swedbank – helped Synsam with a PaaS offering for glasses.

The subscription service includes service, insurance, change of frames, and new prescription. Synsam is using **traditional factoring** to finance the circular business model, where PayEx becomes responsible for invoicing the end-customer.

Synsam was available to secure **bank financing** for the circular business model due to proven **credit history**.

<https://www.payex.se/nyhetsrum/efter-att-vi-forstatt-synsams-utmaningar-och-behov-radde-samsyn-kring-hur-vi-skulle-losa-dem>

small companies and would need new investment funds (or fund-in-funds) for circular ventures to be able to invest in the circular transition.

In summary, there are some general challenges in the lack of knowledge of circular business models and the inherent longer time perspectives of circular ventures. More specifically the challenges of obtaining debt capital are linked to risk assessments and the challenges of equity capital are linked to lack of circular aspects in due diligence processes and suitable investment products.

POSSIBLE SOLUTIONS

To tackle the low level of knowledge about circular business models in the finance industry, there is a need to focus both on communicating the success stories that already exist (something that we start doing in this roadmap), at the same time as new

good examples and cases are needed. We therefore suggest that all different types of financial actors (whether banks, credit institutes, venture capital or other investors) that want to push for and be part of a future circular economy, take on the challenge of creating and communicating successful circular financing cases, sharing industry leading practices, as appropriate. Banks can take some risk within their current mandate, venture capitalists can develop due diligence processes and decide exit strategies that align more with circular businesses. This can be done now, by practitioners themselves, without any delay.

At the same time, we suggest that there is a need for a joint structured effort, across the ecosystem, to collect and document the cases that are created. Data that should be collected for the cases includes time series of profitability, return on investment,

payback times, product values etc. This knowledge will go directly into the further development of risk and due diligence processes, as well as into collaborative efforts to find new solutions for risk sharing and the development of new investment products. It could also, at an aggregate level, further the research in the field.

Finally, it is important that communication and knowledge building happen not only at a Nordic level, but that this is done and coordinated with other similar initiatives globally, as much as possible. This will strengthen the break-through potential of this activity.

For debt financing, there is a need to update risk processes in relation to both linear and circular risk. In addition to this, we believe that different types of solutions for risk sharing will be important for a successful and timely circular transition. The risk sharing could be in the form of collaboration

between different private and public actors, that take different roles when financing a circular venture. Some actors might specialise in leasing or factoring solutions for new types of products (see case 2 and 3 ↑), while others act as refinanciers and spread their risk over larger portfolios. In some cases, three parties (including end-customers) might be needed in the collaboration (see case 4 →) and sometimes a joint debt/equity financing arrangement might be the best solution. Within private-private risk sharing models, the industry itself is likely best suited to developing and framing these innovative solutions.

Within private-public risk sharing, one example of risk sharing is state (or governmental) guarantees, where the loan is provided by a bank or credit institute and the state takes the risk of payback through issuing a state guarantee. This could be used to derisk both longer payback times and

→ CASE 4.

Linxfour – a **Pay-per-Use financier** – helped Engel to provide a financing solution for its customer to replace 5 injection moulding machines with a total value of €4,100,000 via **Pay-per-Use**. The replacement helped the end-customer to increase efficiency, save energy costs, minimize CAPEX, and reduce the balance sheet size.

Linxfour purchased the machines from Engel, and then leases the machine to Engel's customer via a Pay-per-Use solution.

The end-customer was available to change to a **Pay-per-Use** solution due proven credit history, the possibility to estimate the planned utilization, and due to the possibility to connect the machines online.

<https://www.linx4.io/post/engel-launches-pay-per-use-new-usage-model-offers-more-flexibility-and-assurance>

lack of collateral. The set-up is similar to development banks' "first loss" guarantees for projects in developing countries.

For equity financing, the due diligence process is central and needs updating in terms of linear and circular effects on Return on Investment and possibly also in terms of investment and exit strategies, specifically the time horizons of the latter. The adoption of technology-based innovation into due diligence processes could be a reference point (see case 5 →). Since equity financing is less regulated than debt financing, we believe that these steps, given that they are undertaken at a large enough scale, could make a great difference. The possibility of creating joint debt/equity financing arrangements (as mentioned above) (see case 6 →) is another opportunity,

that could be taken on in a collaborative effort with debt financiers.

There is, however, also a need for more structural change. This involves attracting more private and institutional investors, for example by creating investment products that would allow the institutional long-term investors, where large amounts of capital are sitting, to invest in small and scaling circular businesses. One first step towards such a structural change could be achieved by setting up new investment products and funds (maybe also fund-in-funds) dedicated to circular ventures. The Nordic scale is probably the smallest possible scale for this to happen driven purely by the market. Another option is for states to actively drive this by setting up funds with the mission of supporting the circular transition.

→ CASE 5.

Unconventional Ventures – an **investment firm** focused on startups led by diverse founders – led a funding round to invest in Ocean Oasis. Ocean Oasis raised **capital** to further test and scale their offshore technology that will use wave energy to desalinate seawater to freshwater.

Ocean Oasis was able to raise **capital** based on the anticipated impact of their technological solution.

<https://www.oceanoasis.co/raises-capital/>,
<https://www.unconventional.vc/ocean-oasis/ocean-oasis-article/>

→ CASE 6.

The Finnish Climate Fund – a **state-owned investment fund** – helped Wastewise Group with a €4,2 million **capital loan with a conversion right** used for the construction of new recycling lines. Wastewise's technology is suitable for hard-to-recycle plastics, and the pyrolysis oil generated by the process can replace crude oil in plastic and other chemical production, and thus decrease the use of virgin materials.

Each pyrolysis plant is estimated to have an annual emissions reduction at 0.4 million tonnes of CO₂-eq over a ten-year period.

Wastewise was able to secure the **capital loan** based on its **impact criteria**, such as emission reduction potential, as well as meeting the Climate Fund's precondition criteria.

<https://www.ilmastorahasto.fi/en/portfolio/wastewise/>

4. Roadmap

To tackle the challenges identified and structure the efforts to deliver the solutions suggested, we have created the Nordic roadmap for Circular Financing. It lays out some activities and step that we suggest are important to start delivering solutions and speed up the transition to circular business models in the Nordics. We present the roadmap in the three different themes, that were identified in the problem description: Knowledge and capacity building, Debt financing and Equity financing, see figure 2.

Roadmap 2023 – 2030

	2023	2024 – 2025	2026 – 2030
Knowledge and Capacity Building	Launch event roadmap	Seek broader international collaboration	
	Build engagement, broaden network and create stable platform for continued work	Communication activities (Industry events, opinion pieces, webinars etc.) focusing on disseminating results from the Debt and Equity tracks	
	List and drive regulatory and policy changes needed (state guarantees, funds etc.)	Necessary public risk sharing and investment products in place	
Debt financing	Co-create and test NL frameworks		Implement Circular risk assessment
	Create more real circular financing cases (through short-term risk taking, collaboration between actors and hybrid debt/equity solutions)		Implement new Circular finance instruments
	Systematically collect case data and results		
Equity financing	Co-create and test NL frameworks	Develop risks and metrics (from NL) to DD format (incl. entry points for change)	Implement Circular finance Due Diligence frameworks incl. metrics
	Create more real circular financing cases (through collaboration between actors and hybrid debt/equity solutions)		
	Systematically collect case data and results		

Figure 2.
The Nordic roadmap for circular finance



4.1. Long-term Vision

The long-term vision of Nordic Circular Finance roadmap is to achieve: *"A financial market supporting a regenerative and inclusive economy"*.

This vision statement is based on the UN's 17 sustainable development goals (SDGs)⁷, which have been adopted by 178 nations, among them all the Nordic countries. The SDGs are, directly or indirectly, referred to in the sustainability strategy and sustainability policy documents of many of the Nordic financial actors (Nordea, n.d.; Länsförsäkringar, 2022). It is also in line with UN PRI, which many financial actors have committed to. The word regenerative refers to an economy where the world's ecosystems are regenerated and the degradation of them has stopped, in line with the environmental goals, while inclusive economy refers to the social development goals.

4.2 Roadmap Short to Medium term (2030)

To work towards the long-term vision, the roadmap sets out the following goal for 2030:

"Financial actors have seized the opportunity of the circular economy, through integration and implementation of circular financing as a key factor in their business, including risk assessment and credit and investment strategy."

The roadmap is divided into three different themes, each of them with a distinct goal and a list of suggested actions. The long-term vision, the 2030 goal and the goals of the three themes are summarized in figure 3.

7 THE 17 GOALS | Sustainable Development (un.org)

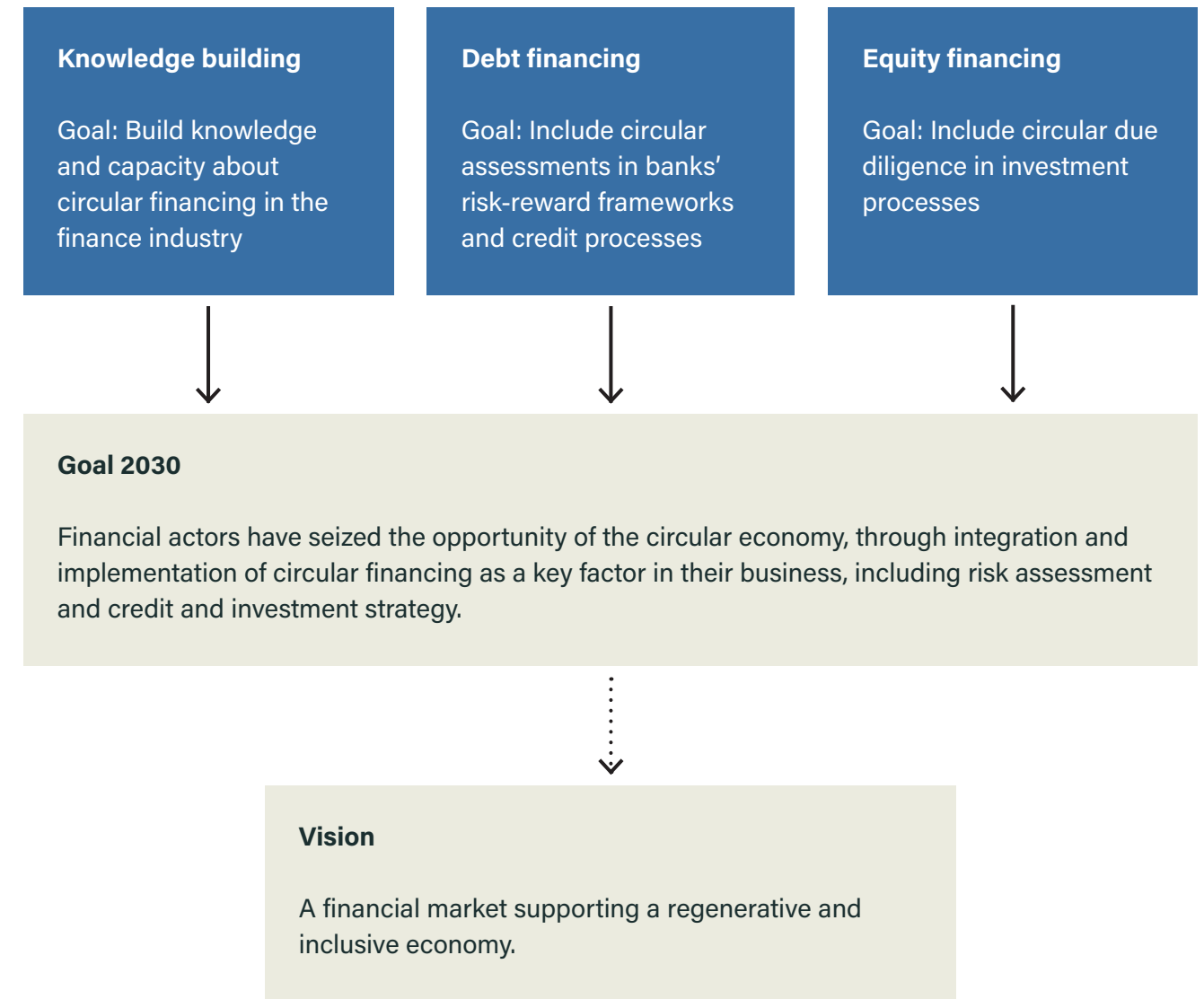


Figure 3. Vision, goal and the three themes of the roadmap.

	2023	2024 - 2025	2026 - 2030
Knowledge and Capacity Building	Launch event roadmap	Seek broader international collaboration	
	Build engagement, broaden network and create stable platform for continued work	Communication activities (Industry events, opinion pieces, webinars etc.) focusing on disseminating results from the Debt and Equity tracks	
	List and drive regulatory and policy changes needed (state guarantees, funds etc.)	Necessary public risk sharing and investment products in place	

- Coordination needed
- Industry development and collaboration
- Teaming with NL

4.3 Knowledge and Capacity Building

Theme goal: Build knowledge and capacity about circular financing in the finance industry.

The launch of this roadmap is the first stepping stone in the process of enhancing and deepening the understanding of the specifics of the circular economy among financial actors in the Nordics. The next step is to continue to engage the financial sector, to broaden the group and to create a stable platform for the continued work (similar to the Dutch solution “Kopgroep Circulaire Financiering”). Based on that, a number of communication activities, including those related to the new cases that will be developed, can be launched. This will

further drive knowledge about the business opportunities for circular finance and the capacity within the industry to drive change.

A core strategy for this theme is to seek broader international collaboration. The circular finance agenda is a topic in certain countries such as the Netherlands but there is a great need to involve more countries, and we are certain that the interest and activity will continue to grow worldwide. It is therefore key to team up with financial actors and similar initiatives in other countries, both to share experience and knowledge, as well as for the specific activities that relate to international regulation and policies.

In parallel, a coordinating actor will be needed to continue the process to understand and, if necessary, work to change the national and international regulatory frameworks, which set the rules of risk assessments in the bank sector. We aim to work together with national FSAs, as well as with relevant international bodies, such as the Basel Committee and the European Bank Authority. This will be a first step to better understand the regulatory landscape and the potential need for change. If the facts show that proper and scaled-up credit risk assessment of circular projects and companies cannot happen without regulatory change, the team will work to make this happen.

The communication plan and the coordination activities could best be run by a coordinating actor, while the communication activities themselves (whether industry events, webinars, opinion pieces or similar) are best run by the financial actors themselves.

	2023	2024 - 2025	2026 - 2030
Debt financing		Co-create and test NL frameworks	Implement Circular risk assessment
		Create more real circular financing cases (through short-term risk taking, collaboration between actors and hybrid debt/equity solutions)	Implement new Circular finance instruments
		Systematically collect case data and results	

- Coordination needed
- Industry development and collaboration
- Teaming with NL

4.4 Debt Financing

Theme goal: Include circular assessments in banks’ risk-reward frameworks and credit processes.

For banks to be able to drive the circular transition, there is a need to review and potentially develop the credit risk processes, which is an important hindrance to increasing the scope of circular credit today. This would need to happen in close collaboration and co-creation with local FSA:s, as to ensure regulatory compliance and oversight.

A number of activities will go on in parallel within this theme. An activity that was already started as part of the work with this roadmap is to collaborate and give feedback on the Dutch

roadmap’s work with developing a circular risk model and a circular metrics framework. This work will continue in the coming 1-3 years and will require a coordinating role. This theme also includes the creation of more circular finance cases, to learn from, to showcase in the knowledge building theme, and to build the experience required to push industry and regulatory bodies in the right direction. The bank partners of the Transition Group and signatories to this roadmap commit to continuing this work, together and individually. It is also open for banks and credit institutes outside this group to join and be part of the journey ahead.

	2023	2024 - 2025	2026 - 2030
Equity financing		Co-create and test NL frameworks	Develop risks and metrics (from NL) to DD format (incl. entry points for change)
			Implement Circular finance Due Diligence frameworks incl. metrics
		Create more real circular financing cases (through collaboration between actors and hybrid debt/equity solutions)	
		Systematically collect case data and results	

- Coordination needed
- Industry development and collaboration
- Teaming with NL

4.5 Equity Financing

Theme goal: Include circular due diligence in investment processes.

For equity investors, the main hindrance to scaling up circular investments is not a limiting risk assessment framework, but rather the current time perspective of Return on Investments, and the need for new metrics and KPIs to be included in due diligence processes to properly evaluate the investments' circularity potential.

Here as well, a number of activities will go on in parallel. Within this theme there will be continued work with the Dutch team to give feedback and develop their circular metrics framework. This will be done with a special focus on investor needs and due diligence processes, to ensure that the

outcome will be in a directly usable format for investors. Activities here will also include developing a "Circular investor strategy brief", which includes both useful circular KPIs and investment and exit strategies. The work will require a coordinating role.

Finally, this theme also includes the creation of more circular finance cases, to learn from, to showcase in the knowledge building theme and to build the experience required to push both industry and regulatory bodies in the right direction. The investor partners of the Transition Group and signatories to this roadmap commit to continue this work, together and individually. It is also open for any investor outside this group to join and be part of the journey ahead.

5. Call to Action



The following steps need to be taken as soon as possible to ensure the progress of circular financing according to this roadmap:

- Financial actors of all kinds should continue to speed up the work to create more real examples of financing of circular businesses, by themselves and by teaming up with new partners. Check what you can do independently within your current mandate.
- Financial actors should proactively assess resource-related risks within linear business models to ascertain their validity, recognizing that the assumptions underlying the risk evaluation may be outdated due to the triple planetary crisis
- Continue to spread success stories to both internal and external audiences.
- A coordination platform needs to be created to engage more partners and create the basis needed for further work. Some kind of coordinating platform is a prerequisite both for structured data collection, for coordinated communication activities, for focused collaboration with regulatory bodies and for international development, including driving the risk assessment and metrics framework work together with the Dutch team.

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Report

Nordic Roadmap for Circular Financing



A roadmap from the Transition Group for Circular Financing within the Nordic Circular Hotspot.