

CIRCULAR ECONOMY FUNDING EXPLAINED

PART ONE: NAVIGATING THE FUNDING LANDSCAPE

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Introduction into this series on circular economy funding¹

“Circular economy funding explained” is a series of whitepapers created by EGEN to support you in identifying the most suitable funding strategy for your circular economy project or initiative. The whitepapers will introduce the reader to different funding types, their applicability for different circular economy projects, as well as in various (blended) funding strategies and successful projects and practices. Whether you are looking for funding opportunities for the public sector or private sector, this series intends to equip you with knowledge that will help you to define potential funding routes for your project.

¹ While the title includes the term “funding” which suggests that the focus is on grants and subsidies as types of financial support, also other types and sources of financing are covered in this whitepaper, i.e. equity, debt, alternative funding.

An aerial photograph of a dense, lush green forest. A winding river or stream flows through the center of the forest, creating a meandering path. The trees are thick and vibrant green, with some lighter green patches indicating different types of vegetation or perhaps sunlight filtering through the canopy. The river is a darker, more muted green, contrasting with the surrounding forest. The overall scene is serene and natural.

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1. NAVIGATING THE FUNDING LANDSCAPE

1. Navigating the funding landscape

Successful implementation of innovative circular economy projects requires access to a critical mass of investments. With the growth in circular awareness, public and private financiers have introduced dedicated programs or have added circular economy as a focus area to their existing instruments. As a result of this growth in capital market circular economy activity, a steep increase in the creation of debt and equity instruments related to the circular economy across private and public markets can be identified.² This increase in “circular funding” is good news for project promoters that want to implement a circular economy project. However, getting access to this funding is still not straightforward and can be a major hurdle for implementation.

This first whitepaper in the series “Circular economy funding explained” provides guidelines for project promoters to successfully navigate the funding landscape for their innovative circular economy projects. As a first step, we encourage project promoters to critically look at the current development stage of their project. The importance of this first step is shown in Figure 1. The figure

shows that projects have different “risk-return profiles” along their innovation curve. In the early stages of development, chances of failure are large as technological and business case risks also loom large. Over the course of the development of an innovation, risks decrease, as technical challenges are met, and the business case is becoming more solid.

With the change in risk level, the likelihood of returns changes as well. Although this might sound logical and intuitive, project promoters often fail to recognize what this means from the investors’ perspective. After all, an investor might be willing to take the risks of investing in a project that is in the first stage of development as they see value in the underlying idea (a future growth) of the project. This is different, however, from the value that is created by a mature project, where the value comes from a steady cash-flow. To cope with this changing “risk-return profile”, and thus the changing source of (potential) value, different funding types are developed. These funding types are better applicable for different stages of development.

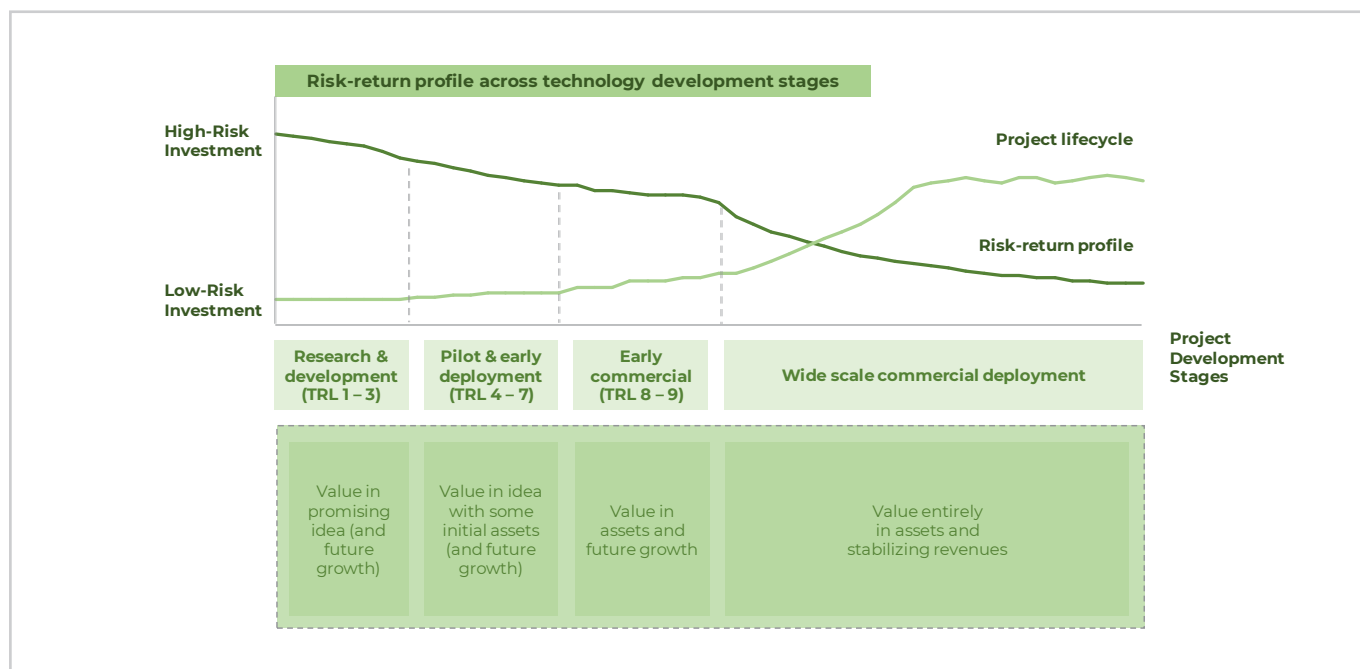


Figure 1 Risk-return profiles along the innovation curve

² [Financing the circular economy – Capturing the opportunity](#), Ellen MacArthur Foundation

An aerial photograph of a lush, green forest. A winding river or stream flows through the center of the image, surrounded by dense trees. The overall color palette is dominated by various shades of green, with some darker areas in the shadows and lighter areas where the sun hits the canopy.

2. WHAT FUNDING TYPE FITS THE RISK- RETURN PROFILE OF YOUR PROJECT?

2. What funding type fits the risk-return profile of your project?

Figure 2 shows again the “risk-return profiles” of projects, but this time highlighting the applicability of different funding types per development stage. While running the risk of oversimplifying things, we identify five broad groups of funding types: (1) grants & subsidies, (2) guarantees, (3) equity, (4) debt, and (5) alternative funding. Beneath, we will present these funding types one by one, highlighting the type of projects and development stage which they are most applicable for. We will also provide concrete examples of instruments and programmes. As the section dedicated to alternative funding discusses several examples of instruments, we will indicate project development stages applicable to each of them separately.

2.1 GRANTS & SUBSIDIES

Grants and subsidies are offered by governments at different governing levels as well as private foundations and imply that the funder gives money to support a project stimulating necessary developments. Subsidies are usually provided

with the aim of stabilizing the economy and influencing the levels of production or prices, while grants are direct financial contributions for activities that support policy objectives.³ Transition to a circular economy is one of the key priorities of the EU and its Member States, as it will help to decouple economic growth from resource use, reduce Europe's consumption footprint and emissions, enable resilient value chains and create new business opportunities, among other benefits.⁴ Therefore, to accelerate the required technological and societal changes, governments and philanthropic institutions award grants to activities that focus on research and development, demonstration of innovative technologies and concepts. Provided that the grantee complies with the contractual agreements, project promoters do not need to repay the money. Grants are applicable to circular economy projects that are at the research and development stage (TRL⁵ 1 – 3), pilot and early deployment (TRL 4 – 7) or early commercial stage (TRL 8 – 9).

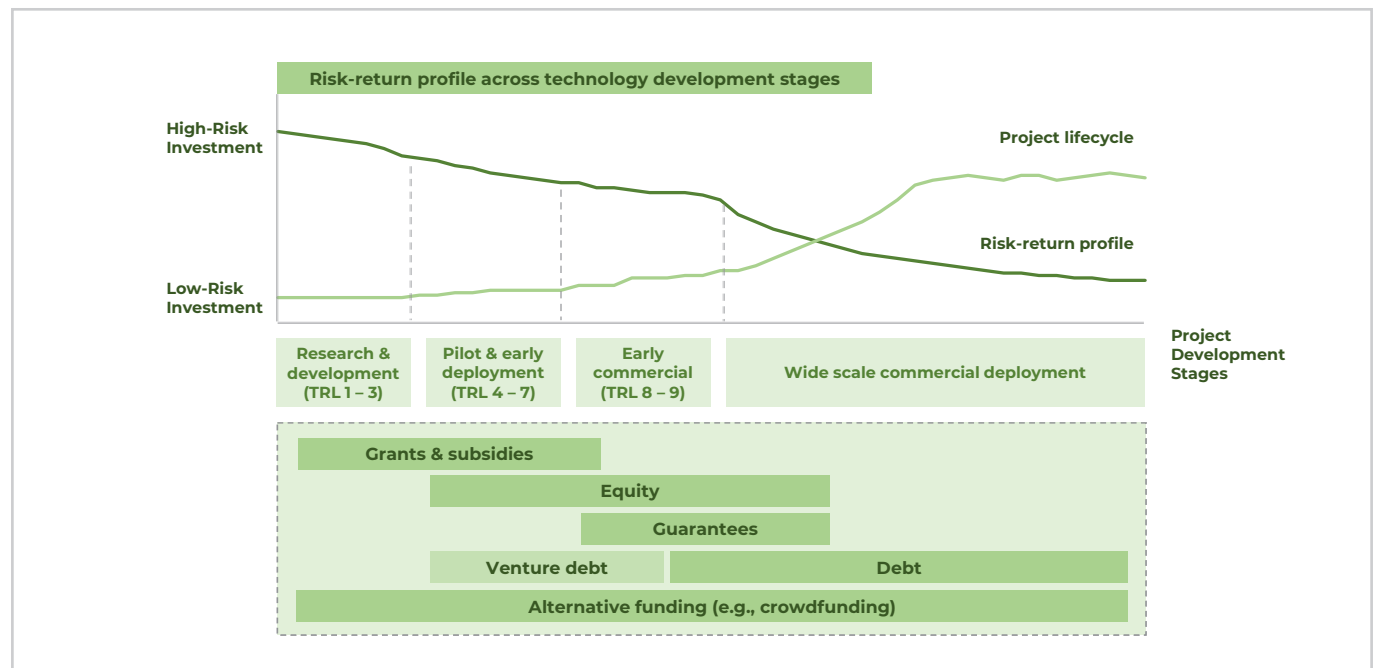


Figure 2 Technology readiness level and applicability of funding types per development stage

³ It is worth highlighting that in the day-to-day language the terms “subsidy” and “grant” are often used interchangeably.

⁴ [Circular Economy](#), European Commission.

⁵ Technology Readiness Level – a method for defining the maturity of a product and its relation to the market.

It is important to note that grants (and also guarantees) are increasingly being used to attract private finance from the market (for example, in the case of Innovation Fund or CEF AFIF). The second whitepaper in the series on blended finance will further elaborate on such practices.

Examples of European funding schemes that award grants for circular economy projects include Cohesion Policy funds, Horizon Europe, CBE JU, LIFE, European Institute of Innovation and Technology (EIT), Interreg: European Territorial Cooperation. Many Member States also have national and/or local funding programmes. More information about the existing funding programmes and examples of projects funded via grants at the EU level can be found on the ["Funding & tender opportunities"](#) platform of the European Commission.

EXAMPLE: HORIZON EUROPE

Horizon is one of the largest European funding programmes that funds research, development and innovation projects and runs for the period 2021 – 2027. The Horizon Europe programme is built up around different pillars and clusters. Relevant funding opportunities for innovative circular economy projects can be found in the pillar "Global Challenges & European industrial competitiveness", for example within Cluster 6 "Food, Bioeconomy, Natural Resources, Agriculture & Environment" and Cluster 4 "Digital, Industry, Space." Relevant calls might also be found under EU Missions. New calls are usually published bi-annually; the latest work programme can be found on the [EC website](#).

2.2 EQUITY

Equity is a funding type in which the funder invests money in return for shares in the project or company. The shares provide the funder a return from dividends or a profit upon sale at an increased value of the shares. This funding type can be suitable for innovative and disruptive circular economy ideas that are at pilot stage (TRL 4 – 7) or at a very early commercial stage (TRL 8 – 9), as well as for more mature projects which are starting to bring in a steady cash flow.

For innovative early-stage circular economy

projects, the most suitable types of investors include venture capital firms and business angels. Both venture capital firms and business angels focus on entrepreneurial companies and disruptive ideas that are expected to achieve a great impact and commercial potential in the short/mid-term, but which are risky and at a pre-revenue stage. However, while venture capital firms accept higher risks, they also expect higher returns on investment than other private equity investors. Good examples of private equity companies that focus on circular economy projects include [Closed Loop Partners](#) and [Circularity Capital](#) (see more details below).

Equity products with public support are also available at the EU, national (National Promotional Banks and Institutions), regional and/or local level. For example, the European Investment Fund have several equity instruments in their portfolios which they channel to organizations and projects working on topics that support EU policy objectives.

EXAMPLE: CIRCULARITY CAPITAL

Circularity Capital is a venture capital firm founded in 2015 that supports growth and innovation in the circular economy. Circularity Capital invests in scaling businesses that focus on creating value across the following circular economy themes: alternative ownership models, circular products and materials, and circular solutions aimed at enabling resource productivity (i.e. asset life extension, enabling multiple consumption cycles, reducing waste). Circularity Capital seeks circular businesses that have a clear circular value creation potential, operate in sectors with growth fundamentals, have a proven revenue model and commercial traction, and have committed management teams and well-defined realization strategies. More information can be found on the website of [Circularity Capital](#).

2.3 GUARANTEES

Loan guarantees are commitments in which a third party takes over (part of) the debt obligation in the case the borrower defaults. Loan guarantees aim, for example, to facilitate the access of micro, small and medium-sized businesses to formal lending and support them with mitigating the risk of non-repayment. Both public and private organizations can offer loan guarantees. Public

guarantees, provided by public authorities, can mobilize financial institutions (i.e., private banks) to invest in highly innovative projects which show a higher default risk, including innovative circular economy projects. On the European level, examples of loan guarantee instruments relevant for circular economy projects and initiatives are guarantee products developed as part of the InvestEU Fund (e.g., EIF guarantees).

EXAMPLE: GUARANTEE PRODUCTS MANAGED BY THE EUROPEAN INVESTMENT FUND UNDER INVEST EU

The InvestEU Fund is part of the InvestEU Programme. The fund offers EU guarantees to support private and public investments in four policy areas: sustainable infrastructure; research, innovation and digitization; small and medium-sized businesses; and social investment and skills. Backed by the EU budget, the InvestEU Fund implementing partners, including the European Investment Bank (EIB) group, give out guarantees to financial intermediaries (i.e. National Promotional Banks or Institutions, specialized providers of microfinance and social finance, traditional banking players, alternative lenders). These intermediaries use the guarantee from the implementing partner either as a direct guarantee or as a counter-guarantee to secure guarantees they issue to their banking partners (sub-intermediaries), allowing them to grant loans to small and medium-sized businesses. The list of [guarantee instruments](#) and selected [financial intermediaries per Member State](#) can be found on the website of the European Investment Fund (part of the EIB Group).

2.4 DEBT

Debt is a contractual agreement between a borrower and a lender. The borrower pays back the loan according to a specific schedule, usually with a specified (annual) interest rate. Debt is most suitable to finance large investments that the borrower cannot afford to pay with its own capital. Traditional debt funders (e.g., commercial banks) typically seek some sort of asset backing, for example, in the form of a factory or trading assets. There are two main types of debt: loans and bonds, although the latter is only available to larger types

of companies.

Loans are usually provided by public or private banks and are granted only on the basis of a solid financial track record, company or personal liability and/or guarantees. For this reason, debt financing – and notably loans – are mostly suitable for circular economy businesses or projects that are already generating a stable cash-flow and are at least at early commercial stage (i.e. scale-up or growth-stage, or TRL 8 - 9)) or at a wide scale commercial deployment. Loans are provided by public (i.e. EIB) and commercial banks, development banks, provincial/municipal development companies and funds, National Promotional Banks and Institutions (NPBIs), and private debt funds (i.e. pension funds).

Bonds are often used in situations when a bank loan is insufficient to cover investment costs. Bonds allow the issuer to raise capital and spread the debt over several individuals and lenders. Bonds represent a promise by a borrower to pay back their principal and also a fixed or variable interest on a loan. Bonds usually have a longer maturity (5-30 years) and have a bullet repayment structure, and can be publicly traded (i.e. via a broker or privately).

Apart from this, hybrid forms of debt exist as well – for example, venture debt provided by [EIB](#). [Venture debt](#) is a loan that can be obtained by an early stage company that requires liquidity between equity funding rounds. Raised equity is a prerequisite for obtaining this type of a loan with the remuneration being linked to the equity risk. This type of a product is meant to complement venture capital financing. Hence, venture debt is a suitable funding type for projects at the pilot stage (TRL 4 – 7) and early commercial stage (TRL 8 – 9).

EXAMPLE: DEBT FINANCE VIA PUBLIC BANKS

Public banks are financial institutions that are controlled and funded by governmental bodies. The goal of public banks is to support the implementation of EU or national governmental policies, including the transition to a circular economy. The European Investment Bank group (EIB group) is the largest multilateral development bank in the world and provides debt financing that is also applicable to circular economy projects and initiatives – and notably a venture debt product. It also provides other types of

financial instruments, such as equity and guarantees – notably through the European Investment Fund (EIF). The European Bank for Reconstruction and Development (EBRD) is another public bank that operates in many central and (south-) eastern European countries. The EBRD focuses on different sectors and topics, such as agribusiness, municipal infrastructure, manufacturing, property and tourism, and others. Within most of the targeted sectors strong ties with and opportunities for innovative circular economy solutions exist. Another example is national Promotional Banks and Institutions (NPBIs) which usually operate at country level and aim to support national and regional governmental objectives and targets.

2.5 ALTERNATIVE FUNDING

A non-exhaustive list of alternative funding types includes crowdfunding, lease financing, green bonds and social impact bonds. In comparison to traditional funding, which provides amounts of money from one or a few sources, crowdfunding allows to obtain many small amounts from a much larger group of individuals (sometimes hundreds or even thousands). Crowdfunding is more suitable for small-sized circular economy initiatives, as it could potentially allow to obtain up to 100% of the required capital. In the case of large-scale projects, crowdfunding can be combined with other funding types. It is worth mentioning that borrowers sometimes compensate those who support them not via a financial return but, for example, by offering them free products, significant discounts or some special treatment. While crowdfunding is mostly used at the research and development stage (TRL 1 – 3) and at the pilot stage (TRL 4 – 7) of a circular economy project, it can be tapped into at more mature stages of the project as well.

Lease financing is another type of alternative funding, which broadly consists of two types – financing lease and operational lease. In the case of a financial lease, the lessee becomes the legal owner of an asset after the contract period, while with an operational lease, the asset will be returned to the lessor. Under both leasing models, the initial investment made by manufacturers and product owners is compensated only in the long term, requiring a special type of financing. Financial institutions offer financing for lease services, which allows manufacturers and product owners to fund

investment costs associated with assets and offer a lease contract to their customers against a periodic payoff (financial lease) or rent (operational lease). Lease financing is mostly applicable to projects at early commercial (TRL 8 – 9) and wide commercial deployment stages.

Another type of alternative funding – green bonds – can be particularly relevant for circular economy projects, as they apply to projects that address climate and/or environmental sustainability issues. Green bonds can be issued by banks, financial institutions and large corporations as well as by regional governments and cities (i.e. Gothenburg), and usually have favorable interest rates.

As another funding type, social impact bonds enable private investments in projects that focus on societal impact. This is an instrument with a higher financial risk for private investors, as the return on investment or its repayment is dependent on the achievement of the expected social outcomes by the project. Social impact bonds are issued by public sector entities and governmental institutions. The issuing organization usually works closely with the implementing entities (i.e., social entrepreneurs or social impact companies) and the investors.

Both types of alternative funding – green bonds and social impact bonds – are suitable for low- to medium-risk lenders (e.g., regional government, city, large corporation) but could be used to finance circular economy projects at early commercial (TRL 8 – 9) and wide commercial deployment stages.

EXAMPLE: BNP PARIBAS LEASING SOLUTIONS

BNP Paribas Leasing Solutions enables asset financing and focuses on several major equipment markets including logistics equipment, technology equipment, agriculture, office equipment, transportation, IT & telecommunications, construction and public works, healthcare, materials handling and specialized technologies. BNP Paribas Leasing Solutions offers a number of finance solutions. For example, the business finance lease aims to support both manufacturers and dealers that offer equipment as well as businesses that are in need of this equipment but might not be able to afford these assets upfront. Instead, the business finance lease

allows businesses to get access to the latest equipment in return for a regular more affordable rental amount. At the end of the lease contract, an asset should be returned to the leasing company (i.e. a manufacturer). More information about BNP Paribas Leasing Solutions and its finance solutions, like finance lease and operating lease, can be found on the website of BNP Paribas Leasing Solutions. While an example of BNP Paribas Leasing Solutions is provided here, a lot of other organizations on the market provide such financial products.

An aerial photograph of a lush, dense green forest. A winding river or stream flows through the center of the forest, creating a meandering path. The trees are thick and vibrant green, with some lighter green patches indicating different types of vegetation or perhaps sunlight filtering through the canopy. The overall scene is serene and natural.

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3. ACKNOWLEDGEMENT

3. Acknowledgement

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