



# Information memorandum

**Riverrecycle Oy**

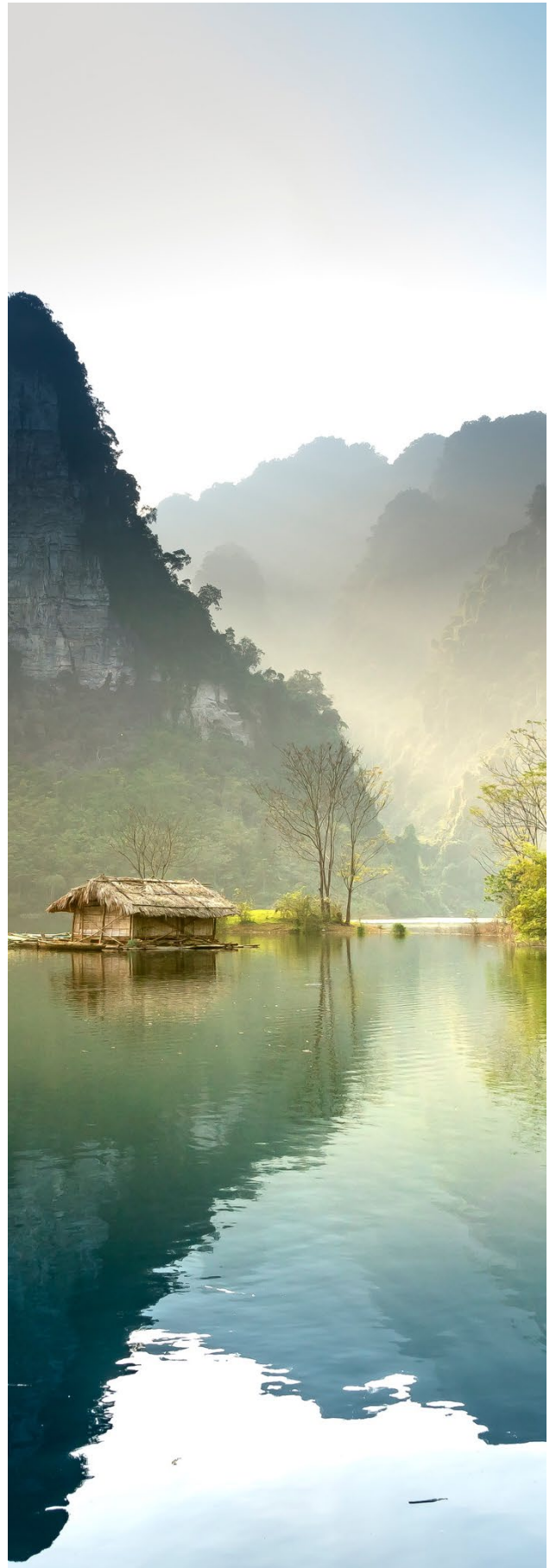
*Clean rivers. Recycle plastics. Protect oceans.*

***Please read this Information Memorandum carefully before investing.***

*The information contained in the Information Memorandum is provided by the company itself. Investor is not liable for any inaccuracies or omissions.*

*The company is responsible for the information presented. Each investor must decide for themselves whether or not they invest. Investor does not give any evaluation of the project's prospects of success.*

*The relevant information regarding this project, including a presentation of its risks, can be found in the Key Investment Information Sheet (KIIS), which is available on the project page.*



Content

- 1. Introduction..... 3**
  - 1.1. CEO's inviting statement..... 3
  - 1.2. Key investment highlights ..... 3
  - 1.3. Investment offer ..... 3
  
- 2. Overview ..... 4**
  - 2.1. Riverrecycle – company presentation ..... 4
  - 2.2. Products and / or services..... 5
  - 2.3. How it works ..... 6
  - 2.4. Business model..... 6
  - 2.5. Sustainability impact ..... 7
  - 2.6. Management team ..... 9
  - 2.7. Board of Directors ..... 10
  - 2.8. Advisors ..... 10
  - 2.9. Company structure..... 11
  - 2.10. Distribution of the company shares ..... 11
  - 2.11. Use of funds..... 11
  
- 3. Market..... 13**
  - 3.1. Market positioning..... 14
  - 3.2. Competitive environment ..... 14
  - 3.3. Competitive advantages..... 15
  - 3.4. News coverage, press, awards and/or patents..... 15
  
- 4. Financial figures and growth ..... 16**
  - 4.1. Key financial figures..... 16
  - 4.2. Explanation of the financial figures and forecast ..... 16
  - 4.3. Loans outstanding..... 17
  - 4.4. Valuation..... 17
  - 4.5. Options ..... 19
  
- 5. Exit scenarios ..... 20**
  
- 6. Risks..... 20**

# 1. Introduction

## 1.1. CEO's inviting statement

*"We are committed to combat plastic waste. We have a track record of doing it profitably. Charitable efforts lack financial credibility while investing in sustainable solutions and business model secures a cleaner future.*

*Join us in creating circular value chains with recycling tech, leading the charge for a healthier planet. You will wake up in the morning knowing you have done not only a sound investment, but also something tangible for the world."*

*Anssi Mikola, CEO and founder of Riverrecycle*

## 1.2. Key investment highlights

- Riverrecycle is one of the **most innovative** companies in the world in plastic waste recycling (World Economic Forum recognition)
- Creates, builds and maintains **new value chains** where none have existed
- **Diversified revenue streams:** currently CSR projects, plastic credit, and plastic board sales. Also exploring new business areas like processing bio-waste and waste-derived oils.
- **Profitable** since the beginning, with an average revenue growth of 60% for the same period
- Flexible and innovative use of available technologies, including own patented technology
- **Measurable positive impact** on host communities: financial, environmental, and social
- ESG principles reaching **10 of the 17 SDGs** – part of UN Global Compact
- **Makes tangible difference** in fighting plastic waste and preventing it getting into the ocean – has already removed over 2 million kg of waste from the waterways, reaching 3 million kg annual run rate

## 1.3. Investment offer

Company:	Riverrecycle Oy
Industry:	Recovery of sorted materials
Founding year:	2019
Number of employees:	14
Website:	<a href="http://www.Riverrecycle.com">www.Riverrecycle.com</a>
LinkedIn:	<a href="https://www.linkedin.com/company/Riverrecycle/">https://www.linkedin.com/company/Riverrecycle/</a>
Entrepreneur:	Anssi Mikola
Financial product:	Equity
Funding target (minimum):	500,000
Maximum issue size	1,500,000
Price per share:	12.50
Equity offered:	15.99%
Offered units:	120,000
Number of existing shares:	622,200
Fully diluted shares:	692,200
Pre-money valuation:	7,880,750.00
Campaign page:	<a href="http://www.invesdor.com/rounds">www.invesdor.com/rounds</a>

## 2. Overview

### 2.1. Riverrecycle – company presentation

<b>Background</b>	Riverrecycle is a Helsinki, Finland based environmental company with the aim of creating financially sustainable solutions to the ocean plastic problem. Founded in 2019 by Anssi Mikola (CEO) the company currently collects waste from rivers at a rate of over 3 million kg/year in the Philippines, Indonesia, India, Bangladesh and Ghana.
<b>Mission statement</b>	<i>We clean the plastic away from rivers by creating a sustainable business.</i>
<b>The problem</b>	The world's plastic production is currently around 360 million tons per annum and growing. The value of this production is approximately €540 billion annually. Most (90%) of this plastic goes to waste; only a small fraction is currently circulated. Currently, a large proportion of the plastic waste is not collected methodically and ends up with too full landfills and rivers, through which they float to oceans.
<b>The solution</b>	Riverrecycle builds a structure for collecting plastic waste away from the river. The collectors concentrate the floating debris, which is then lifted from the river, sorted and transported for further processing (to plastic boards or waste-derived oil). Riverrecycle gathers a coalition of partners and establishes a local company to run the operation according to Riverrecycle's principles. The concept is replicable and scalable to fit varying conditions in each country.
<b>Strategy</b>	Riverrecycle aims to set its local operations at strategic places along major rivers, where it will be relatively easy to collect enough plastic to be processed. The long-term goal is to be able to process ca 3 million tons of plastic waste annually. Riverrecycle has established already nine projects and has a further pipeline with a combined value of well over €50 million altogether.
<b>Current earnings logic</b>	Riverrecycle has currently two active cash flow streams: 1) Corporate Social Responsibility (CSR) sales to private and public sector clients; and 2) plastic credits which it collects from trading platforms for the plastic it collects. The CSR sales represent project sales, whereas plastic credit sales represent collection volumes. The company has currently started to add the sales of recycled plastic boards to the mix.
<b>Future additional revenue streams</b>	Going forward, Riverrecycle has identified three new additional revenue streams, namely plastic board production, waste-derived oil production and water hyacinth processing. The former two are natural extensions of recycling of plastic waste and close the loop for fully circular economy. The water hyacinth is a new business opportunity, comprising of organic materials for processing.

## ***Long-term vision and strategy***

Riverrecycle was born from a vision that something should be done to prevent plastic reaching the world's oceans – by the time the plastic waste hits the seas, there's very little we can do any more. So, the best way to protect the oceans is to stop the plastic waste at the waterways.

Riverrecycle grew from the idea of collecting the plastic waste effectively through its patented technology solution, to a company providing a whole circular value chain as a service. We realized that customers and stakeholders need more than just technology – they need a system that works, and not only collects but also effectively helps the collected plastic waste to find a second life. From that moment, Riverrecycle's true identity as a solution provider was formed.

The long-term solution lies in the creation of a profitable business in recycling the low value plastics currently ending up in rivers. Riverrecycle's target is to be able to process over three million tons (75% of all river-borne plastic) waste annually. This would make a real difference in the world. While Riverrecycle concentrates on the rivers, its success is expected to encourage other companies to join the suit to eradicate all plastic waste.

Riverrecycle reaches to the above goal by two strategic steps:

- 1) Selling CSR projects that offer public and private entities an opportunity to benefit from tangible ESG results, and be part of creating a sustainable business model in the target countries; and
- 2) Creating and selling new products from collected and processed plastic waste to both local and international markets.

Riverrecycle has during the years 2020-2023 successfully executed the first strategic step, also adding the sales of plastic credits from waste collected into its revenue mix. Now in early 2024, Riverrecycle has entered the second strategic phase by opening its first facilities for plastic board and waste-derived oil production.

## **2.2. Products and/or services**

Riverrecycle provides a sustainable solution to the worldwide issue of plastic pollution in waterways. The company collects plastic waste from rivers and converts it into boards and waste-derived oils, which can be used as construction or raw materials.

Riverrecycle's main service – a river-cleaning project - is an attractive option for corporate companies seeking to achieve their environmental, social, and governance (ESG) objectives, as well as governmental bodies or communities impacted by river pollution. The company's comprehensive waste management system not only addresses the immediate issue of plastic pollution but also promotes job creation and environmental improvement. It is important to note that Riverrecycle's approach is not limited to a one-time cleanup but rather adopts a long-term solution that delivers environmental, social, and economic benefits.

From the plastic collected from the rivers, Riverrecycle also obtains plastic credits from international platforms that trade the respective credits to large companies. This is a recurring revenue stream.

## 2.3. How it works

A river cleaner is installed to collect plastic waste from the water. At the same time, there is the implementation of a waste management system to collect household and other waste. The waste collected is sorted and sent for recycling. Revenue from recycling sustains the system and the river cleaner.

Once the river is clean, the cleaner is removed, but the land waste management system continues to benefit the community and generate income. This last part is expected to take many years if not decades – it requires the rest of the waterway communities to have changed their ways of acting as well. Thus, Riverrecycle expects to be in business for decades to come.

## 2.4. Business model

The Riverrecycle model accrues benefits from multiple revenue streams:

- Environmental project implementation as a service: a unique offer extended during the project development stage to development aid agencies, CSR funds, and philanthropic organizations. Currently, the main clients include Coca-Cola Foundation, ICTSI Foundation, British government (SMEP), and Huhtamäki plc.
- Sales revenues from plastic credits, which Riverrecycle sells to OceanWorks, a plastic credit trading platform.

Starting in 2024, the above two revenue streams will be complemented with the following:

- Sales of recyclables (granules or processed plastics, PET bales).
- Sales of recycled products - commercial merchandise produced from our recycling plants, which include recycled plastic boards, and waste-derived oil.
- Payment for waste management services, implemented with or without the Extended Producer Responsibility (EPR) schemes. The planned system streamlines collection, pre-treatment, and recycling, which generates revenue for the waste management services provided to households and businesses.

The Riverrecycle model presents advantages for all relevant stakeholders. Primarily, it enhances the living environment, safeguards biodiversity, and is cost-effective for municipalities and administrations. Additionally, it helps boost the local economy through investments.

Secondly, Riverrecycle provides a solution for companies and organisations that operate in the consumer-packaged goods sector and are currently under societal and legal pressures to reduce plastic waste and increase recycling rates. Specifically, our model is available as an environmental service that can be procured to satisfy the requirements for extended producer responsibility quota and provides clear and measurable ESG impact. Riverrecycle offers these stakeholders project solutions that are readily implementable, which enable them to effectively offset and reduce their plastic footprints.

Thirdly, Riverrecycle offers recycled products to large corporations facing regulatory pressure to use recycled components in their final products. Our sustainable solution helps businesses comply with regulations and meet changing market demands.

Riverrecycle follows a comprehensive inbound and outbound marketing strategy. The company employs a combination of digital, traditional, paid, and free channels for lead generation. Networking with businesses and organisations in related industries is done through trade shows

and conferences. Additionally, Riverrecycle uses email marketing and social media to generate leads, posting on Twitter, LinkedIn, Instagram, and Facebook on both its own and partners' accounts.

Furthermore, Riverrecycle has established a community engagement and communication program that aims to create a robust presence in the local business and community scene to attract more customers.

## 2.5. Sustainability impact

For Riverrecycle, sustainability impact measurement is easy – it simply is the mission and purpose of the entire business itself. But let us break this into smaller pieces.

Sustainability impact encompasses a wide range of factors that contribute to the long-term well-being of the environment, society, and economy, namely:

1. **Environmental Stewardship:** This involves minimizing negative environmental impacts such as pollution, resource depletion, habitat destruction, and climate change. It also includes promoting conservation, biodiversity, and sustainable resource management.
2. **Social Equity:** Ensuring that sustainability initiatives benefit all members of society, particularly marginalized and vulnerable populations. This involves promoting social justice, equity, and inclusion in decision-making processes and outcomes.
3. **Economic Prosperity:** Creating economic systems that are resilient, inclusive, and equitable, while also being environmentally sustainable. This may involve promoting sustainable business practices, supporting local economies, and investing in renewable energy and clean technologies.
4. **Long-Term Thinking:** Fostering a mindset that considers the long-term consequences of decisions and actions on future generations. This includes planning for resilience to climate change, resource scarcity, and other challenges.
5. **Collaboration and Partnerships:** Recognizing that addressing sustainability challenges requires cooperation among governments, businesses, civil society organizations, and individuals. Building partnerships and collaborations can leverage collective expertise, resources, and influence to drive positive change.
6. **Transparency and Accountability:** Ensuring that organizations and individuals are transparent about their sustainability practices, impacts, and goals. This includes setting measurable targets, tracking progress, and being accountable to stakeholders for their actions.
7. **Innovation and Technology:** Harnessing innovation and technology to develop sustainable solutions to complex challenges. This may involve advancements in renewable energy, sustainable agriculture, waste management, and other fields.
8. **Education and Awareness:** Increasing public awareness and understanding of sustainability issues and empowering individuals to make informed choices and act. Education plays a key role in building a culture of sustainability and driving behavioural change.
9. **Resilience and Adaptation:** Building resilience to environmental and social shocks, such as extreme weather events, natural disasters, and economic downturns. This involves preparing for and adapting to changing conditions while minimizing negative impacts on people and the planet.
10. **Cultural Preservation:** Recognizing the importance of preserving cultural heritage, traditions, and identities, which are often intertwined with sustainable practices and environmental stewardship.

Overall, achieving sustainability impact requires a holistic approach that considers the interconnectedness of environmental, social, and economic systems, and involves collaboration, innovation, and long-term thinking.

Riverrecycle contributes to ten of the UN's Sustainable Development Goals, bringing positive change to the environment and communities affected by plastic pollution. Our efforts have yielded measurable and concrete improvements in environmental conditions and the livelihoods of those living amidst plastic waste. To implement these goals, Riverrecycle collaborates with local entities and non-governmental organizations to educate community leaders, young people, and members of the public on the circularity of our projects and the benefits of sustainable household waste management.

As a concrete example, Riverrecycle's Citarum Repair Project trained 4,586 people on how to collect plastic waste more efficiently. Riverrecycle's river cleaning system gathers waste close to the banks for collection by over 25 waste pickers, who now have a more stable livelihood.



## 2.6. Management team

Name	Position	Background
<p>Anssi Mikola  <a href="https://www.linkedin.com/in/anssi-mikola-87324/?originalSubdomain=fi">https://www.linkedin.com/in/anssi-mikola-87324/?originalSubdomain=fi</a></p>	<p>CEO &amp;            Founder</p>	<p>A successful serial entrepreneur who has founded three other businesses prior to Riverrecycle, many of which have turned out to be leaders in their respective fields. Anssi has done three exits which have generated significant returns to the shareholders. He is a well-respected thought leader in environmental matters and frequents as a speaker and panelist in international conferences worldwide. Anssi holds a Master of Science degree in Engineering from Aalto University in Helsinki.</p>
<p>Tina Nyfors  <a href="https://www.linkedin.com/in/tina-nyfors-b9258/">https://www.linkedin.com/in/tina-nyfors-b9258/</a></p>	<p>CFO</p>	<p>A distinguished international career in financing (e.g., EBRD, EU technical assistance coordination; private equity, corporate finance, financial management, and investor relations). She won the silver medal at the Swiss Stock Exchange for excellence in investor relations and is one of the few Nordic IR certificate holders at the London Stock Exchange. She is also a turnaround expert and has advised several companies in strategic financing. Tina holds a Master of Science degree in Economics from Aalto University in Helsinki, and an MBA from IMD, Switzerland.</p>
<p>Vy Dinh  <a href="https://www.linkedin.com/in/vy-dinh-06813952/">https://www.linkedin.com/in/vy-dinh-06813952/</a></p>	<p>Director, River            cleaning            operations</p>	<p>Starting as researcher, Vy has rapidly established in herself in business climbing from customer success manager to lead Riverrecycle's prestigious plastic credit operations. Vy holds a Bachelor's degree from University of Economics Ho Chi Minh City, and a Master's degree in Creative Sustainability from Aalto University.</p>
<p>Danang Winarto  <a href="https://www.linkedin.com/in/danang-akhdiat-winar-to-57b24b2b/">https://www.linkedin.com/in/danang-akhdiat-winar-to-57b24b2b/</a></p>	<p>Director,            Mechanical            recycling</p>	<p>Danang has truly solid experience in civil engineering, site management, construction, and project leadership in waste management. He is expertly expanding Riverrecycle's business to the next level, namely mechanical recycling. Danang holds a Bachelor's degree in Civil Engineering from Universitas Pancasila, and a Master of Science in Environmental Science from Universitas Gadjah Mada.</p>

The professional international team of Riverrecycle comprises of 14 individuals altogether, located in Finland, Vietnam, Singapore, the Philippines, India, Indonesia, Ghana, and Bangladesh. In addition to this, the company employs some 113 waste workers in its site locations.

## 2.7. Board of Directors

Name	Position	Background
Anssi Mikola	Chairman	Founder and CEO of Riverrecycle (see above)
Eira Eklund-Mikola <a href="https://www.linkedin.com/in/eira-eklund-mikola-29563a2a1/">https://www.linkedin.com/in/eira-eklund-mikola-29563a2a1/</a>	Deputy Member of the board	Licensed psychologist and psychotherapist, supervisor, trainer, and an entrepreneur in her specialized field, Eira is well-known and publicly acclaimed expert. She holds a Master of Psychology degree from University of Helsinki and has several licences and certifications in psychology.
Tina Nyfors	Secretary of the Board	CFO of Riverrecycle (see above)

Riverrecycle's intention is to complement the Board composition, and to establish a professional Board of Directors subsequent to the completion of the equity round.

## 2.8. Advisors

Name	Position	Background
Eric Solheim <a href="https://en.wikipedia.org/wiki/Erik_Solheim">https://en.wikipedia.org/wiki/Erik_Solheim</a>	Advisor	Former Norwegian Minister of Environment, Chair of the OECD Development Assistance Committee, Under-Secretary-General of the United Nations and Executive Director of the United Nations Environment Programme. He is a member of the Norwegian Green Party and has held various roles focusing on environment and development both in government and international organizations.
Jaap Zandbergen <a href="https://www.linkedin.com/in/jaapzandbergen/">https://www.linkedin.com/in/jaapzandbergen/</a>	Advisor	Jaap Zandbergen has over 25 years of experience in the Textile and Design Industry, serving as CEO in various sectors including interior textiles, clothing, and technical textiles for the chemical industry. He is known for his extensive experience with diverse cultures, drawn from his broad sales and sourcing experiences across Japan, China, Asia, Europe, and North America. Zandbergen has also worked on eco-innovative projects with EASME under the EU Program H2020 and has been involved in plastic recycling and fashion design strategies to prevent waste.
Tomi Nyman <a href="https://www.linkedin.com/in/tomi-nyman-0738b8/">https://www.linkedin.com/in/tomi-nyman-0738b8/</a>	Advisor	Tomi Nyman is an advisor specializing in the circular economy, bioeconomy, and renewable energy sectors. With a rich background in the plastics and chemicals

industry since 2001, he has held leadership roles, sales, strategy, and business development positions at companies like Woodly, Pöyry/AFRY, Neste, IMCD, and VTT. He aims to reduce global emissions by 1 Gt by promoting systemic changes to reduce material and energy consumption. Nyman is also an entrepreneur and business angel, actively involved in start-ups and advising stock-listed companies.

## 2.9. Company structure

Riverrecycle Oy is a Finnish limited liability company, established in 2019 in Helsinki. It has two classes of shares, class A (voting) and class B (non-voting). Both share classes have identical economic rights. Class A shares are founder shares, and class B is reserved for the investors.

Riverrecycle Oy has five fully owned subsidiaries (limited liability companies) for operational purposes. They are located in Singapore, India, the Philippines, Ghana and Indonesia. Currently India and Ghana are dormant companies, and the activities in Philippines and Indonesia are now starting to be built up. Riverrecycle Oy's subsidiaries are:

- Riverrecycle Asia-Pacific Pte. Ltd.
- Riverrecycle India Private Ltd.
- Riverrecycle Philippines Inc.
- PT Riverrecycle Operations Indonesia
- Riverrecycle Ghana Ltd.

## 2.10. Distribution of the company shares

	<i>Shareholder</i>	<i>Shares A</i>	<i>Shares B</i>	<i>Ownership</i>	<i>Votes</i>
1.	<i>Anssi Mikola</i>	<i>600 000</i>		<i>96,43%</i>	<i>100,00%</i>
2.	<i>Impact Ventures</i>	-	<i>15 500</i>	<i>2,49%</i>	<i>0,00%</i>
3.	<i>Paul Lillrank</i>	-	<i>4 500</i>	<i>0,72%</i>	<i>0,00%</i>
4.	<i>Pasi Mehtonen</i>	-	<i>2 200</i>	<i>0,35%</i>	<i>0,00%</i>
	<i>Total</i>	<i>600 000</i>	<i>22 200</i>	<i>100%</i>	<i>100%</i>

## 2.11. Use of funds

The main purpose of the fundraising round is to enable the company to expand and scale up its activities. This involves investments in the plastic board production, reserving and developing available river sites, scaling up the nascent waste-derived oil production as well as hiring and training new people to the team. Some working capital flexibility is also necessary to bridge the timing gaps between customer payments, as project sales occur as per milestones.

One of the key factors to success in this field is the ability to find suitable locations by riverside to set up the projects and general operations. Riverrecycle has been successful to get involved in negotiations along six of the ten most polluting rivers in the world. Hence, it is essential that the company is able to develop and gain those sites. With those actions, Riverrecycle “reserves” to itself some prime locations on the market and strengthens its market position.

The target amount of the equity round is €1,500,000, but the company has scalable plans that could be implemented as follows:

**Scenario I – Minimum funding of €500,000 collected in the financing round**

With €500,000, Riverrecycle will be able to start plastic board production in small scale in Philippines and Indonesia. Most of the raised funds (ca 80%) would be used for this purpose. Ca 20% would consequently go to expand the river sites, and to conduct respective feasibility studies on them.

**Scenario II – €1,000,000 collected in the financing round**

With €1,000,000, Riverrecycle would be able to scale up its plastic board production to three locations, with much larger plastic waste processing capacity. Furthermore, it could gain several suitable river sites and leap-start developing them simultaneously. 75% of the funds raised would be used for production facilities.

**Scenario III – €1,500,000 funding collected in the financing round**

With €1,500,000, Riverrecycle would be able to implement not only mechanical but also chemical recycling facilities in several locations. Two new teams and operational hubs could be established, which would greatly strengthen the operational capabilities on the ground. 70% of the funds would be allocated to the new facilities, the rest would be split between new river sites and working capital for business development purposes.

### 3. Market

#### *Corporate Sustainability and Responsibility (CSR)*

In terms of CSR (corporate sustainability and responsibility) projects, the market is growing rapidly. A diverse range of stakeholders has accelerated demands for financially material sustainability information and for firms to integrate sustainability into their wider business strategy. New regulations, such as the EU's Corporate Sustainability Reporting Directive and mandatory reporting requirements aligned with the Task Force on Climate-Related Financial Disclosures, are consolidating this shift and changing the way firms view sustainability management. Some countries (such as India) already regulate that companies have to spend certain percentage of their revenue to sustainability purposes.

For the entire NGO and charitable market, an estimate of USD 313.3 billion has been given to the 2023 market size, expected to grow to USD 331.7 billion in 2024<sup>1</sup>. The market studies expect the strong growth to continue in the next few years – the market is expected to reach USD 411.2 billion in 2028 at a compound annual growth rate of 5.5%. Much of the growth is attributable to the growth in CSR activities, and especially by corporates.

Companies are giving higher priority to CSR as part of their vision to support social causes. Moreover, millennials show a preference for brands committed to social causes, leading to an uptick in CSR expenditure by companies. According to a June 2023 report from Zipdo, a US-based online directory, companies focusing on environmental, social, and governance (ESG) factors tend to outperform industry peers by 4.8% annually. Notably, 76% of companies report on CSR to mitigate brand reputation risks, and 64% of CEOs consider CSR as a core element of their business strategy. Consequently, the upward trajectory of CSR is expected to positively impact the NGOs and charitable organizations market, fostering growth in the forecast period.

Most of the market players are struggling to find projects of suitable size – larger projects find customers significantly easier. Riverrecycle aims to target these potential customers with attractive, scale-up-ready solutions that it can implement worldwide, thus saving the NGO's, foundations, and corporations a lot of trouble. The challenge of this market is that it moves quite slowly, hence the mitigation is to make sure one has sufficient number of negotiations underway simultaneously.

#### *Recycled materials market*

Riverrecycle operates in several market scopes, such as the global plastic waste management market, the waste to-fuel market, the recycled plastic market, the plastic lumber market, and the alternative building materials market.

- **Global Plastic Waste Management Market:** Valued at \$32.91 billion in 2019, this market is expected to grow to \$41.58 billion by 2027 with a CAGR of 3.1%, with collection holding the largest market share in 2019. Investments to end plastic pollution are increasing, with significant commitments from global alliances and financial institutions.
- **Recycled Plastic Market:** In 2022, this market was valued at \$47.6 billion and is projected to reach \$69.2 billion by 2030, growing at a CAGR of 4.8%. The Asia Pacific region dominates the market, with building and construction as the fastest-growing segment.
- **Plastic Lumber Market:** Forecasted to reach \$8.24 billion by 2025, growing at a CAGR of 6.90% from 2020-2025, with the recycled plastic segment holding the largest share.

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<sup>1</sup> Research & Markets, February 2024.

- **Alternative Building Materials Market:** Valued at \$189.8 billion in 2020 and is expected to reach \$330.3 billion by 2030, growing at a CAGR of 5.8%. The recycled plastic segment is expected to witness the highest growth rate.

Risks in these markets include regulatory changes, fluctuations in raw material prices, and evolving consumer preferences. For example, a shift in regulatory frameworks regarding plastic usage or recycling can impact the waste management and recycled plastic markets.

The markets where Riverrecycle operate are highly fragmented, and there is a big difference between purely local and international markets. Riverrecycle intends to sell to the local markets in the early stages of the recycled material production when the scale is still small; for larger scale, international distributions channels and clients will be sourced. Negotiations and product testing with international partner candidates are already underway.

### 3.1. Market positioning

Riverrecycle's marketing positioning is oriented towards the "environment clean-up & remediation market." The company operates in a growing market, with the amount of plastic collected from waterways increasing. The market size is significant, from USD 104.6 billion in 2021 to USD 158.8 billion by 2026, and it is expected to grow at a CAGR of 8.7% during 2021–2026. Furthermore, the environmental remediation market in the Asia-Pacific region is expected to grow at the highest CAGR during the forecast period.

Riverrecycle is well-positioned in the market. It has been one of the first true environmental enterprises and has gained positive reputation with its track record. The current challenge is to be able to tackle all business opportunities and bring them to fruit swiftly.

### 3.2. Competitive environment

Riverrecycle operates in the environmental services and technology sector, specifically focusing on cleaning rivers and removing plastic waste to prevent it from reaching the oceans. Its competitive environment includes a range of organizations, from non-profits and startups to established companies and public-private partnerships, all working towards mitigating water pollution and promoting sustainability. Here are key components of Riverrecycle's competitive landscape:

1. **The Ocean Cleanup:** One of the most widely recognized initiatives, The Ocean Cleanup designs and deploys systems to clean up plastic pollution from the oceans and intercept it in rivers before it can reach the sea.
2. **Clear Rivers:** Based in the Netherlands, Clear Rivers focuses on preventing and removing plastic pollution from water bodies through projects like the Litter Trap, which captures plastics in rivers and canals.
3. **Osprey Initiative:** Known for the "Litter Gitter" device, Osprey Initiative offers a small, portable trash collection system designed to capture and remove litter from water bodies, demonstrating a direct competitive solution to Riverrecycle's efforts.
4. **WasteShark** by RanMarine Technology: This is an aquadrone designed to clean water bodies by autonomously collecting waste and data about the water quality, presenting a high-tech solution to water pollution.
5. **Seabin Project:** The Seabin is an automated marina trash collector that captures floating debris, oil, fuel, and detergents, showing another innovative approach to reducing water pollution.
6. **Government and municipal initiatives:** Many local and national governments around the world have launched their own efforts to clean rivers and water bodies, often through public-

private partnerships. These initiatives can be both collaborative and competitive, depending on the nature of their implementation and funding.

7. **Other startups and innovations:** The growing global concern over plastic pollution in water bodies has spurred numerous startups and technological innovations aimed at addressing this issue (e.g., Plastic Fischer). These range from blockchain-enabled recycling platforms to biodegradable materials development, all of which contribute to a broader ecosystem of solutions where Riverrecycle operates.

It is worth noting that some of the competitors (as a matter of fact, a good number of them) are not actually companies but non-profit organizations or specific projects. This puts Riverrecycle in a favourable position, as the company can demonstrate continuity and sustainability in its operations in quite a different way. This has enabled Riverrecycle to become one of the largest companies in the world in its field. It is also noteworthy that Riverrecycle's unique situation makes it a potential co-operation partner with the above-mentioned entities.

To put matters into perspective - In terms of revenue derived from recovery and recycling of plastic waste, Ocean Cleanup had a revenue of USDD 0.69 million in 2022, and Plastic Fisher (the closest competitor to Riverrecycle) had a revenue of USD 0.5 million<sup>2</sup>. For the same period, Riverrecycle recorded a total revenue of EUR 1.3 million.

### 3.3. Competitive advantages

Riverrecycle's competitive advantage lies in its specific combination of technology, approach to river cleaning and the scalability of its solutions. However, the diverse and growing field of competitors and collaborators highlights the importance of innovation, partnerships, and effective implementation in achieving success in the environmental services sector.

### 3.4. News coverage, press, awards and/or patents

Riverrecycle has generated a significant amount of interest through its activities, awards, and recognitions. A summary of these is attached to this Information Memorandum separately. A wealth of materials can also be found from the company website [www.Riverrecycle.com](http://www.Riverrecycle.com).

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<sup>2</sup> The Insigth Partners market research report, September 2023.

## 4. Financial figures and growth

Riverrecycle has been exceptional as a start-up to maintain its profitability throughout its path from the start, while maintaining strong growth. Part of the reason for this are the multi-year projects, which have secured part of the next year's revenues and therefore enabled the company to reach to new areas simultaneously. Riverrecycle closed the year 2023 with €1.6 million in revenue, which was in line with its budget and estimates for the year, and slightly higher profitability than expected. For the year 2024, the company expects its revenue to reach €2.7 million. Out of this, roughly half consists of sales to existing clients (CSR sales) and already agreed plastic credit sales.

### 4.1. Key financial figures

(000 EUR)	Actual				Planned		
Financial year	2020	2021	2022	2023	2024	2025	2026
<b>Total revenue</b>	<b>418,44 €</b>	<b>1 074,96 €</b>	<b>1 295,97 €</b>	<b>1 584,61 €</b>	<b>2 721,34 €</b>	<b>4 361,00 €</b>	<b>7 313,44 €</b>
Cost of materials + external services [COGS]	- 17,71 €	- 23,55 €	- 149,02 €	- 224,36 €	- 1 487,35 €	- 2 295,30 €	- 3 942,00 €
<b>Gross profit</b>	<b>400,73 €</b>	<b>1 051,41 €</b>	<b>1 146,95 €</b>	<b>1 360,25 €</b>	<b>1 233,99 €</b>	<b>2 065,70 €</b>	<b>3 371,44 €</b>
Personnel expenses/staff costs	- 70,69 €	- 138,32 €	- 111,46 €	- 177,94 €	- 212,00 €	- 248,00 €	- 311,00 €
Other operating expenses	- 287,21 €	- 780,57 €	- 826,36 €	- 745,32 €	- 479,25 €	- 791,14 €	- 806,40 €
<b>EBITDA</b>	<b>42,83 €</b>	<b>132,52 €</b>	<b>209,13 €</b>	<b>436,99 €</b>	<b>542,74 €</b>	<b>1 026,56 €</b>	<b>2 254,04 €</b>
Depreciation	- €	- 92,53 €	- 111,31 €	- 235,61 €	- 219,85 €	- 280,85 €	- 331,85 €
<b>Operating result [EBIT]</b>	<b>42,83 €</b>	<b>40,00 €</b>	<b>97,82 €</b>	<b>201,38 €</b>	<b>322,89 €</b>	<b>745,71 €</b>	<b>1 922,19 €</b>
Interest income/interest result	- 7,17 €	- 8,76 €	- 35,16 €	- 55,11 €	- 35,69 €	- 35,37 €	- 15,33 €
Taxes	- 7,17 €	- 6,25 €	- 12,58 €	- 29,42 €	- 57,44 €	- 142,07 €	- 381,37 €
<b>Net income after taxes (NIAT)</b>	<b>28,49 €</b>	<b>24,99 €</b>	<b>50,08 €</b>	<b>116,85 €</b>	<b>229,76 €</b>	<b>568,27 €</b>	<b>1 525,49 €</b>
Revenue Growth %	N/A	156,90 %	20,56 %	22,27 %	71,74 %	60,25 %	67,70 %
EBITDA Growth %	N/A	209,39 %	57,81 %	108,95 %	24,20 %	89,14 %	119,57 %
Number of employees	6	10	12	13	15	18	20

### 4.2. Explanation of the financial figures and forecast

Riverrecycle started its operations amidst the pandemic, which curtailed some of the envisaged earlier growth in its revenue. However, the company has enjoyed a robust growth environment, nevertheless, consisting of solely project sales until the year 2023, when the opening of the plastic credit market started. In 2023, the plastic credit revenue amounted to approximately €200,000.

As the business model was only emerging during 2020-2022 and external services were difficult to obtain during the pandemic, Riverrecycle had to conduct a large part of the activities by its own crew. Hence, the COGS were suppressed relative to other operating expenses. This is expected to change now from the year 2024 onwards, which will then change the constellation of the gross profit to be more in line with the original business model and industry practice.

Riverrecycle envisages to conduct the initial investments by itself to show the proof of concept, but the larger scale investments are supposed to be carried out by local joint ventures and/or co-operation partners. Hence, Riverrecycle anticipates that its heaviest financial strain would be over in a few years'



time, reflected then by lightening of the financing expenses. The company intends to increase its operating team moderately but reserves the right to see where the increased capabilities would best be located. It is unlikely to increase its staff significantly at the headquarters, preferring to bring more resources to the field in its operating areas.

### 4.3. Loans outstanding

At the year-end of 2023, Riverrecycle had a total amount of interest-bearing debt worth €997'185 outstanding. Out of this, €839,000 consist of two facilities: 1) €550,000 from Business Finland (Valtiokonttori), which is a seven-year facility for research and development, with favourable interest rate (1%). Riverrecycle will start serving this debt in 2024, and it is expected to be fully served by the end of the year 2027. The second loan of €289,000 is from an industrial partner, who financed the early machinery and technological development, thereby securing a long-lasting partnership that continues today. This financing is a bullet facility with 5% interest per annum, and due in 2025, unless refinanced or brought into the fold of the continuing co-operation.

Riverrecycle has used various smaller working capital facilities over the years bridging the gap between client payments. These have then been paid back as soon as the customer payments have arrived. At the moment, Riverrecycle has entered into financing discussion with two reputable financing institutions to establish larger, more favourably priced financing facilities for this purpose and to be able to support its investment requirements.

As a part of Riverrecycle's seed capital in earlier years, the company received 320'000 EUR of convertible capital loans from private individuals. The convertible capital loans, including any accrued but unpaid interests, will be converted into new series B shares of the company after this share offering.

### 4.4. Valuation

#### Comparable analysis

There are no public listed comparable companies in riverine plastic waste collection, so the nearest comparable industry would be general waste collection services. In general, this market total industry revenue amounts to USD 51.7 billion with an operating margin of 8.3%, and the CAGR of the industry over the next five years is estimated to be 1.4%<sup>3</sup>. This applies to established, steady-state companies. The industry has shown resilience and steady growth, and thus has made itself potentially attractive investment opportunity.

Some of the key trends in the industry include a shift towards sustainable processes. Additionally anticipated implementation of more sustainable operations and joint efforts with recycling and renewable energy affiliates will occur. These practices will allow companies to raise prices for their services and retain a higher profit after installation costs. These trends are already visible for companies like Riverrecycle, who are able to reach higher-than-industry-average margin levels.

On steady-state public comparables<sup>4</sup>, the valuation matrix looks like follows:

	EBITDA margin	Revenue growth	EV/Sales	EV/EBITDA
<b>Low</b>	0.9%	-16.1%	1.7x	11.3x
<b>Median</b>	20.1%	-1.9%	3.8x	19.3x
<b>High</b>	27.7%	6.0%	5.7x	305.7x

<sup>3</sup> Industry Overview for Waste Collection Services, Davidson Capital Advisors LLC, 2021 & PitchBook

<sup>4</sup> Waste Management, Republic Services, Waste Connections, Casella Waste Systems, Stericycle, Clean Harbors)

Based on the above valuation matrixes and taking Riverrecycle’s forecast of 2026 as a proxy for more steady-state stage in the company development, and further recognizing that Riverrecycle’s revenue growth and margin levels would put it amongst the industry high performers, we would get an EV range of **€41.7-43.5 million** (we believe that the high multiple of 305.7x is a market anomaly, and thus use the median multiple for the EBITDA-based valuation).

Looking closer<sup>5</sup>, companies within the recycling subsector of waste management, which would include plastic waste collection and recycling, have their own valuation multiples. Ranking per company size in terms of revenue and/or EBITDA generated, the following pattern emerges:

Company size	EV/Sales	EV/EBITDA
Revenue of USD 1-5 million	3.5x	
Revenue of USD 6-10 million	3.7x	
Revenue of USD 5-10 million	4.2x	
EBITDA of USD 1-3 million		5.9x
EBITDA of USD 3-5 million		6.8x
EBITDA of USD 5-10 million		7.3x

Consistently using Riverrecycle’s 2026 forecast as a proxy compared to the steady-state companies, we would have an EV valuation range of **€ 13.3-27.1 million**.

### Discounted cash flow analysis (DCF)

Riverrecycle is best valued through DCF valuation, as this reflects its diversified revenue model perhaps most comprehensively. In order to do this, the model has been extended to further years to accommodate the growth and investing stage, and maturing business model.

<u>Valuation analysis (DCF)</u>	2024	2025	2026	2027	2028	2029	2030	2031	2032
Free cash flow	-836	102	1 039	1 885	4 728	10 102	12 990	15 107	22 690
Discount factor	1,0000	0,5487	0,4064	0,3011	0,2230	0,1652	0,1224	0,0906	0,0671
Discounted cash flows, present value	-836	56	422	568	1 054	1 669	1 590	1 369	1 523
Terminal value									4 761
Total cash flows	-836	56	422	568	1 054	1 669	1 590	1 369	6 284
<b>NPV of cash flows</b>	<b>12 176</b>								
Current debt	1 375								
<b>Current valuation (Equity value), MEUR</b>	<b>10 801</b>								
<u>Sensitivity analysis on equity value</u>									
NPV of cash flows, no terminal value	11 660								
NPV of cash flows, WACC 10%	169 384								
NPV of cash flows, WACC 15%	76 366								
NPV of cash flows, WACC 20%	42 530								
NPV of cash flows, WACC 25%	25 503								
NPV of cash flows, WACC 30%	16 335								
NPV of cash flows, WACC 35%	10 801								
WACC	35 %								
Growth factor (TG)	3 %								

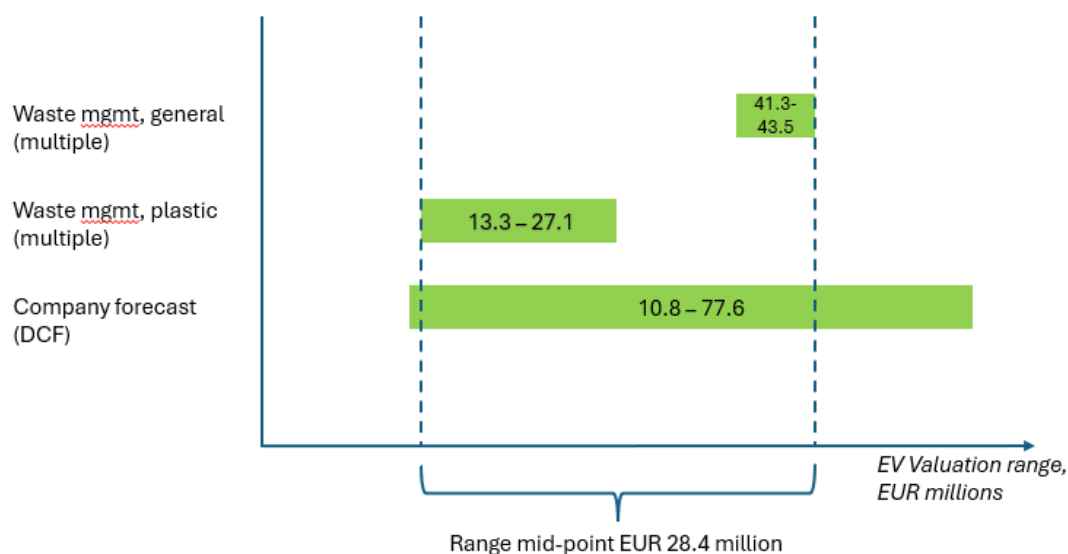
As generally known, the discounted cash flow model is quite sensitive to the weighted average cost of capital (WACC). Currently, Riverrecycle’s cost of interest-bearing debt is an average of 8.1%. For the cost of equity, we have used a long-term interest rate of 5% and industry beta of 0.7 (the industry is less volatile than the overall market). Using year-end 2023 figures, this would then yield a WACC of 8.94% for the company (assuming an expected market return of 15%). However, whilst theoretically correct, we believe this is on the low side given the uncertainties of a company still in

<sup>5</sup> First Page Sage, 11 February 2024.

its developmental stage. Hence, we run the valuation sensitivities with a WACC range of 10-35% as seen in the table above. Valuation range has also been calculated without terminal value.

### Summary and conclusions

Comparing the various valuation methods together, we arrive to the following picture:



Whilst it would be tempting to claim the mid-point of the valuation range as the fundamental value of Riverrecycle, we believe that the discounted cash flow gives a more reliable basis for analysing the company value (even if here adjusted at the upper end to curb the most extreme upside, as done in the comparison table above). We have as well taken the view that the lower end of the range is safer given the uncertainties the company still faces to grow its business further, and the low liquidity of private equity. Also, we need to take into consideration some further leverage that might be needed or even beneficial to augment the shareholder returns.

Hence, we come to the following calculation:

Enterprise value (EV)	€10.8 million
Less current net debt	€1.4 million
Less additional leverage	€1.6 million
<b>Equity value</b>	<b>€7.8 million</b>

The above valuation is naturally based on management forecasts and current market conditions and would need to be revisited from time to time.

The above calculation yields a valuation of €12,50 per share, which is the price of the offering.

## 4.5. Options

Riverrecycle's shareholders have given an allocation of 70,000 options to be granted to key employees, stakeholders, and co-operation partners. The intention is to establish an option program after the equity round to serve this purpose, and to secure the long-term incentives of all

identified key people. The envisaged option program would amount to approximately 10% of the company's capital calculated in fully diluted basis.

## 5. Exit scenarios

The environmental services sector, including plastic waste management, has been experiencing heightened consolidation. This trend is partly due to the attractive nature of these companies to private equity and infrastructure funds, with several significant acquisitions noted in recent years, indicating a robust interest and potentially high valuations for companies in this space<sup>6</sup>.

Due to these factors, Riverrecycle anticipate that the most likely exit scenario for its investors is a trade sale to a large waste management company or alternatively a multinational company seeking permanent ESG solution. In such case, it could be expected that the valuation range should follow the multiple levels shown above, derived from public sources. While specific valuation numbers for individual plastic waste collection companies are hard to pin down without direct financial disclosure, the sector's growth trends, investment interest, and the strategic importance of waste management and recycling services suggest that companies operating in this space could command significant valuations. The increasing focus on sustainability and the circular economy further underscores the potential for growth and investment in these companies.

Alternatively, after growing its operations significantly, Riverrecycle could consider an IPO. In such case, the company would consider the location of the listing most carefully to ensure the maximum liquidity for the shareholders, and to achieve the best brand recognition for the business. It is at this stage far too early to assess where such listing would take place. Nevertheless, it might turn out to be an interesting exit opportunity for the investors.

## 6. Risks

Riverrecycle considers its main risk factors to be the following:

- 1) Operational risks related to project implementation in various locations
- 2) Regulatory changes affecting the industry
- 3) Technology efficacy and managing technology functionality across the board
- 4) Funding sustainability for larger-scale operations
- 5) Scalability of solutions across different geographies
- 6) Retaining and growing of key people and the next management generation
- 7) Global warming, which may cause unexpected weather conditions to be mitigated thus increasing operating costs

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<sup>6</sup> Waste Dive, 27 November 2023.