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MID-TERM EVALUATION OF BUSINESS FINLAND'S RRP

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FOREWORD

Finland's Recovery and Resilience Plan (RRP) is called as the Sustainable Growth Programme for Finland. The goal is to support growth that is ecologically, socially and economically sustainable in line with the aims of the Government Programme. The Sustainable Growth Programme will boost competitiveness, investment, research, development and innovation, and efforts to raise skill levels. Funding for the Sustainable Growth Programme for Finland will be from the EU's one-off recovery instrument (Next Generation EU).

Focus of this study was to produce a mid-term evaluation of Business Finland's success in achieving the objectives associated with Sustainable Growth Programme for Finland (RRP).

This mid-term evaluation based on the guidelines of design evaluation, and it concerned RRP funding years of 2021-2023. Data used in the mid-term evaluation was funded projects that have been completed during 2022-2023, and the structure of ongoing projects. Main questions of this evaluation were as follows. How has Business Finland's RRP funding and other services succeeded to build most efficient portfolio for green transition and recovery for the pandemic, when considering the impact goals of the project? Moreover, what were the main results and impacts for input, behavioral and expected output additionality of the Sisu project?

The evaluation team of Sweco Finland Oy carried out this evaluation study. Business Finland wishes to thank the evaluators for their thorough and systematic approach. Business Finland expresses its gratitude to the steering group and all others who have contributed to the study.

Helsinki, February 2025
Business Finland

EXECUTIVE SUMMARY

The Sustainable Growth Programme (SGP) for Finland promotes ecologically, socially, and economically sustainable growth, funded mainly by the EU Recovery Plan 'Next Generation EU'. This plan consists of seven instruments, with the Recovery and Resilience Facility (RRF) being the largest. Member States must submit a national Recovery and Resilience Plan (RRP) to access RRF funding, and Finland's RRP is part of the SGP.

Business Finland (BF) has had the responsibility of implementing 470 M€ of Finnish RRF funding following the RRP. Targets set for the BF's RRP by the Finnish government, the Ministry of Economic Affairs and Employment, and EU Commission are: 1) Increase of R&D investments of companies, 2) Renewal of companies in green transition and digitalization, 3) Recovery of businesses hit by the pandemia, and 4) Increase of export business and visit income.

By the end of 2023 BF had granted around 447 M€ of RRF funding to companies and research organisations. The funding has been organized into three sub-projects: 1) RDI, 2) green transition investments and 3) recovery and has been implemented through 15 separate call streams. The largest share of the RRF funding has been granted to big companies. Most of the projects are on-going and need to be finalised by the end of 2025.

The mid-term evaluation completed in autumn 2024 assessed how BF has progressed towards the targets and what are the main anticipated results.

TIGHT TIMELINE HAS PUSHED RDI WORK TO PROCEED EFFECTIVELY BUT THE INVESTMENT PROJECTS WILL FACE DELAYS

The tight timeline has pushed the RDI work to proceed in ways which give already some indication of the results. Delays with investment projects caused by external factors are a high risk. The main direct results from projects are linked to product and process improvements, further directions and follow-up to RDI work and to progress with investments in production. Networking benefits have resulted especially from co-innovation and Leading Company initiative funded ecosystems. More fundamental new business model development or transforming the value chains were not the priorities in the projects.

BF'S RRF HAS BEEN SUCCESSFUL IN INCREASING R&D INVESTMENTS

The main target of BF's RRF funding was to stimulate innovations and increase the ambition level of the companies. The overall assessment of RRF's role increasing private sector RDI investments is very positive. Based on the interviews, the RDI projects also had clear linkages and future potential growth with export and green transition investments. Results from the projects focus on RDI and are especially linked to the various business and research ecosystems.

BF'S RRF RENEWAL IMPACTS FOR THE COMPANIES IN GREEN TRANSITION AND DIGITALISATION VARY IN DIFFERENT SECTORS

Renewal targets of green transition and digitalisation were integrated into all RRF calls. RDI and investment support strengthened existing viable innovation ecosystems. Their continued development will serve as a foundation for sector-specific renewal through more versatile ecosystems.

However, in travel and creative industries, funding mainly supported already digital IT firms, with limited ties to green transition. The most significant renewal results stemmed from investments in the Sustainable Travel Finland (STF) program, which promoted sustainable practices among travel companies.

Overall there was a large amount of SME beneficiaries from various sectors and a relatively large number of fast-growth start-ups. For the future renewal SMEs have potential for growth and renewal.

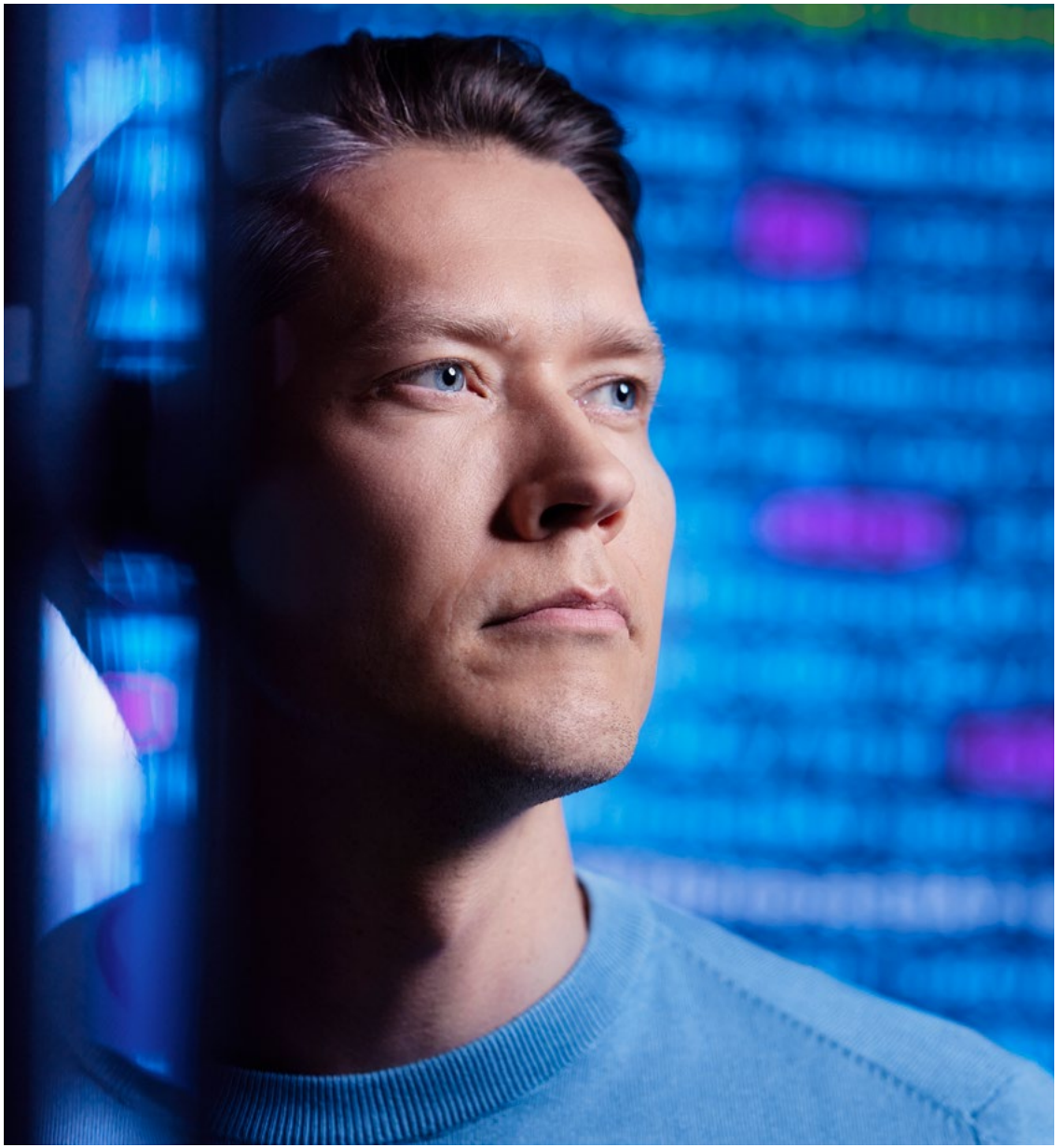
FUTURE ATTENTION TO THE REALIZATION OF EXPORT GROWTH AND GREEN TRANSITION INVESTMENTS

Programmatic actions implemented with RRF focused on export and these got very good feedback and reached a number of companies. Precise indications of actual growth in export due to these programs is not available. The RDI project interviews indicated positive indirect links to future expectations for export growth. Global markets and export are a "must" in green transition. In the same way green transition is an opportunity for inbound investments to Finland.

For the visit income growth the evaluation did not have indicators, but the success of STF program among the participating companies indicates some positive future results although the stop put on the further development of the program may be a drawback.

FUNDS FOR RECOVERY ENDED UP TO DIFFERENT INDUSTRY THAN INITIALLY TARGETED

Recovery after the pandemic was a target set for the BF RRF funding. With respect to this target the RRF funding



has not been that successful. Funding ended up mostly to IT and consulting sector companies. Even some travel and creative industry companies responded that this funding was not that important for their recovery. Positive assessments mainly came from technology companies that were able to re-direct the work to RDI during pandemia.

BF HAS SUCCEEDED WELL IN IMPLEMENTING RRP

RRF was a one-time funding package following a national RRP which set the targets for BF. The space for BF to manoeuvre once the RRP was set and approved was very limited. Despite of time pressure, many targets, and new types of funding instruments, BF succeeded well in the implementation. It is apparent that similar EU funding opportunities will come again for BF to implement. The political decisions set additional requests to BF. Mid-term evaluation concluded with some lessons learned from the implementation of the RFF. Main conclusion was that there should be ways to improve the opportunity for BF to be involved already in the planning phase so that the targets and the implementation would be designed in such a way that BF is the best one for the implementation.

TIIVISTELMÄ

Suomen Kestävän kasvun ohjelma (Sustainable Growth Programme, SGP) edistää ekologisesti, sosiaalisesti ja taloudellisesti kestävää kasvua. Ohjelman rahoitus tulee pääosin EU:n elpymisvälineestä (Next Generation EU). Elpymisväline jakaantuu seitsemään tukivälineeseen, joista elpymis- ja palautumistukiväline (RRF) on kooltaan suurin. Jäsenvaltion on esitettävä kansallinen elpymis- ja palautumissuunnitelma (RRP), jotta se voi saada RRF rahoitusta. Suomen RRP on osa Suomen kestävän kasvun ohjelmaa.

Business Finland (BF) on vastuussa 470 miljoonan euron Suomen RRF-rahoituksen toteuttamisesta RRP:n mukaisesti. BF:lle asetetut tavoitteet ovat: 1) yritysten TKI-investointien lisääminen, 2) yritysten uudistuminen vihreässä siirtymässä ja digitalisaatiossa, 3) pandemiaa kärsineiden yritysten toipumisen edistäminen, ja 4) vientitoiminnan ja matkailutulojen lisääminen.

Vuoden 2023 loppuun mennessä BF on myöntänyt noin 447 miljoonaa euroa RRF-rahoitusta yrityksille ja tutkimusorganisaatioille. Rahoituksen jako on järjestetty kolmeen alaprojektiin: 1) TKI-toiminnan tuki, 2) vihreän siirtymän investoinnit ja 3) pandemiasta toipuminen, ja se on toteutettu 15 erillisen hakuprosessin kautta. Suurin osa RRF-rahoituksesta on myönnetty suurille yrityksille. Useimmat projektit ovat käynnissä ja niiden on valmistuttava vuoden 2025 loppuun mennessä.

Syksyllä 2024 toteutettu väliarviointi tarkasteli, kuinka BF on edistynyt tavoitteidensa saavuttamisessa, ja mitkä ovat tärkeimmät odotettavissa olevat tulokset.

TIUKKA AIKATAULU ON SAANUT TKI-TYÖN EDISTYMÄÄN TEHOKKAASTI, MUTTA INVESTOINTIPROJEKTIT KOHTAAVAT VIIVÄSTYKSIÄ.

Tiukka aikataulu on saanut TKI-työn etenemään ja jo tässä vaiheessa projektit pystyivät kertomaan odotettavissa olevista tuloksista hyvin. Investointiprojekteille ulkoisista tekijöistä johtuvat viivästykset ovat suuri riski. Projektien pääasialliset suorat tulokset liittyvät tuotteiden ja prosessien parantamiseen, TKI-työn jatkokehitykseen ja investointien etenemiseen tuotannossa. Co-innovation- ja Veturi-rahoitus ovat toimineet erittäin hyvin ja vahvistaneet innovaatio-

ekosysteemejä ja verkostoitumista. Enemmän liiketoimintaa muokkaava liiketoimintamallien kehittäminen tai arvoketjujen muutokset eivät ole olleet projektien prioriteetteja.

BF:N RRF ON OLLUT MENESTYKSEKÄS TKI-INVESTOINTIEN LISÄÄMISESSÄ.

BF:n RRF-rahoituksen pääasiallinen tavoite oli stimuloida innovaatioita ja nostaa yritysten TKI-toiminnan kunnianhimoa. Tässä tavoitteessa on onnistuttu hyvin. Haastattelujen perusteella TKI-projekteilla oli myös selkeitä yhteyksiä ja tulevaisuuden kasvupotentiaalia vienti- ja vihreän siirtymän investointien kanssa. Projektien tulokset ovat syntyneet erityisesti osana erilaisia liiketoiminta- ja innovaatioekosysteemejä.

VAIKUTUKSET YRITYSTEN UUDISTUMISEEN VIHREÄSSÄ SIIRTYMÄSSÄ JA DIGITALISAATIOSSA VAIHTELEVAT.

Vihreän siirtymän ja digitalisaation uudistustavoitteet on integroitu kaikkiin RRF-hakuihin. TKI- ja investointituki vahvistivat olemassa olevia toimivia innovaatioekosysteemejä. Niiden jatko ja kehittyminen on perustana sektorikohtaiselle uudistumiselle monipuolisempien ekosysteemien kautta.

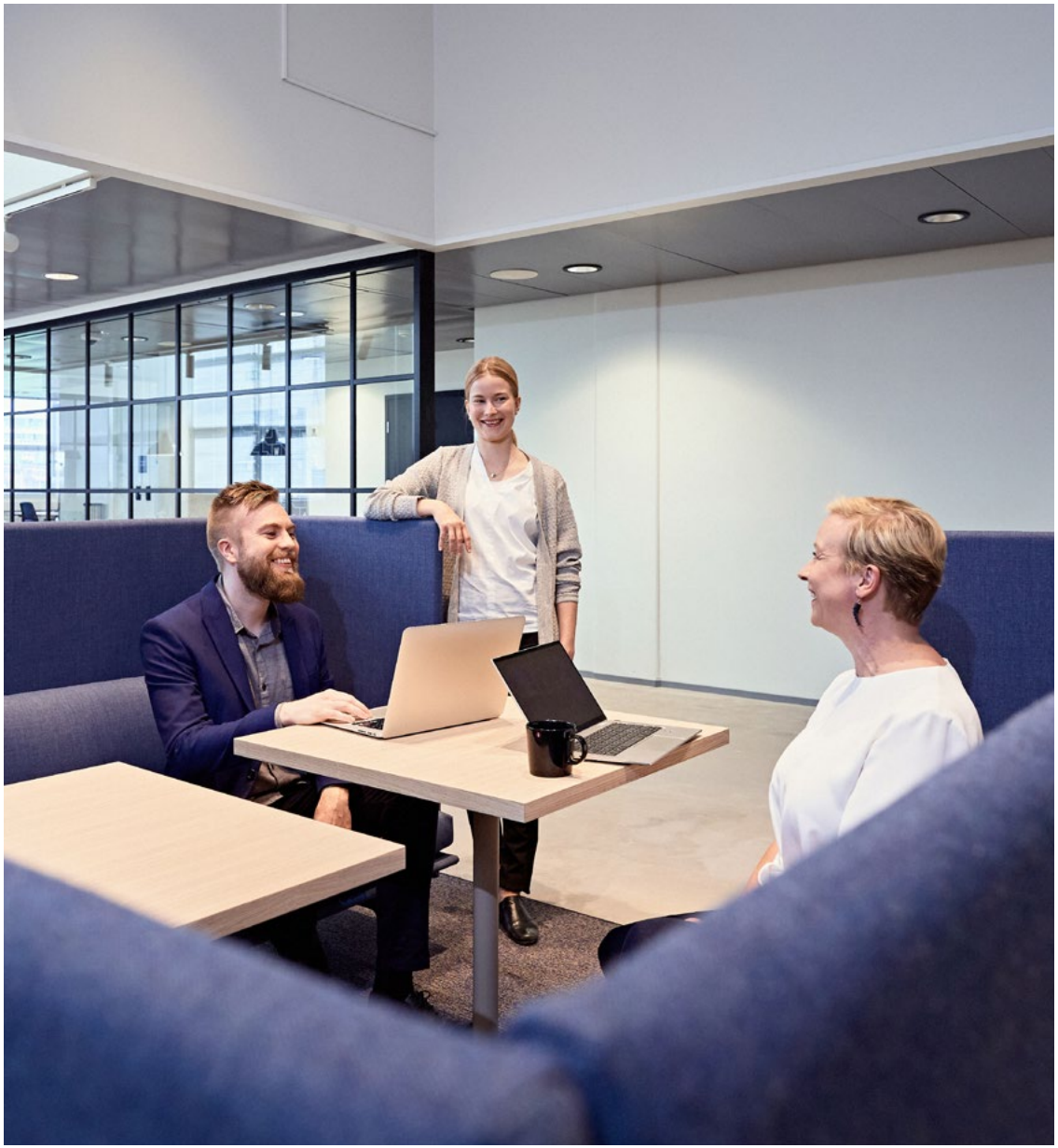
Matkailu- ja luovilla aloilla rahoitus tuki pääasiassa jo digitaalisia IT- tai konsulttiyrityksiä, ja projekteilla oli rajalliset yhteydet vihreään siirtymään. Merkittävimmät alan uudistustulokset syntyivät investoinneista Kestävä matkailu Suomi (STF) -ohjelmaan, joka edisti kestäviä käytäntöjä matkailuyrityksissä.

Kaikkiaan RRF-rahoitusta on saanut suuri määrä PK-yrityksiä eri sektoreilta, sekä suhteellisen suuri määrä nopeaa kasvua tavoittelevia start-upeja. Näissä yrityksissä on tulevaisuuden kasvupotentiaalia ja uudistumisen aihioita.

TULEVAISUUDESSA HUOMIO VIENNIN KASVUUN JA VIHREÄN SIIRTYMÄN INVESTOINTIEN HOUKUTTELUUN

RRF:n puitteissa toteutetut ohjelmalliset toimenpiteet keskittyivät vientiin, ja niistä saatiin erittäin hyvää palautetta ja ne tavoittivat paljon yrityksiä. Tarkkoja lukuja viennin todellisesta kasvusta näiden ohjelmien ansiosta ei ole saatavilla. TKI-projektien haastattelut nostivat esiin positiivisia epäsuoria yhteyksiä tulevaisuuden viennin kasvun odotuksiin. Globaaleilla markkinoilla toimiminen on vihreän siirtymän ytimessä. Samalla vihreä siirtymä tarjoaa mahdollisuuden investoinneille Suomeen.

Matkailutulojen kasvulle arvioinnissa ei ollut selkeitä lukuja, mutta STF-ohjelman menestys osallistuvien yritysten keskuudessa viittaa joihinkin positiivisiin tulevaisuuden tuloksiin. Ohjelman jatkokehityksen pysäyttäminen voi olla haitallista jatkolle. Joka tapauksessa kestävään matkailuun panostaminen on tärkeää tulevaisuuden matkailun kasvulle.



PANDEMIASTA TOIPUMISEEN KOHDENNETTU TUKI PÄÄTYI ERI YRITYKSILLE, KUIN ALUN PERIN OLI TARKOITUS.

Pandemian jälkeinen toipuminen oli tavoite, joka asetettiin BF:n RRF-rahoitukselle. Tämän tavoitteen osalta RRF-rahoitus ei ole ollut niin menestyksekästä. Rahoitus päätyi pääasiassa IT- ja konsultointialan yrityksille. Jopa jotkut matkailu- ja luovilla aloilla toimivat yritykset vastasivat, että tämä rahoitus ei ollut niin tärkeää heille pandemiasta toipumiseen. Positiivisia arvioita rahoituksen vaikutuksista saatiin pääasiassa teknologia-alan yrityksiltä, jotka pystyivät ohjaamaan työskentelynsä TKI-työhön pandemian aikana.

BF ON ONNISTUNUT HYVIN RRP:N TOTEUTTAMISESSA

RRF oli kertaluonteinen rahoituspaketti, joka seurasi kansallista RRP:tä. BF:llä oli hyvin rajallisesti liikkumavaraa, kun RRP oli asetettu ja hyväksytty. Aikapaineista, monista tavoitteista ja uusista rahoitusinstrumenteista huolimatta BF onnistui hyvin rahoituspaketin toteuttamisessa. On selvää, että vastaavia EU-rahoitusmahdollisuuksia tulee jälleen BF:n toteutettavaksi. Poliittiset päätökset asettavat myös BF:lle lisävaatimuksia, joihin on reagoitava nopeasti. Väliarviointi kokosi joitain oppeja RRF toteuttamisesta jatkoa varten. Pääjohtopäätös oli, että BF:n mahdollisuuksia osallistua suunnitteluvaiheeseen tulisi parantaa, jotta tavoitteet ja toteutus voitaisiin asettaa siten, että BF olisi tehokkain ja paras toteuttaja.

ABBREVIATIONS

AI	Artificial intelligence
BF	Business Finland
BioCirc	Bio and Circular Finland
DNSH	Do No Significant Harm
EK	Confederation of Finnish Industries
EU	European Union
GDP	Gross domestic product
IPCEI	Important Projects of Common European Interest
IT	Information technology
LUT	LUT University
MEE	Ministry of Economic Affairs and Employment
R&D	Research and development
RDI	Research, development and innovation
RRF	Recovery and Resilience Facility
RRP	Recovery and Resilience Plan
SGP	Sustainable Growth Programme
SME's	Small and Medium Enterprises
STF	Sustainable Travel Finland -program
SuMa	Sustainable Manufacturing Finland
VC	Venture capital
VTT	VTT Technical Research Centre of Finland

1 BACKGROUND AND OBJECTIVES OF THE MID-TERM EVALUATION

The Sustainable Growth Programme (SGP) for Finland supports growth that is ecologically, socially, and economically sustainable. Funding for the SGP for Finland comes mainly from the EU Recovery Plan 'Next Generation EU'. The EU Recovery Plan is divided into seven instruments, of which the Recovery and Resilience Facility (RRF) is the largest[1]. Member States must present a national Recovery and Resilience Plan (RRP) in order to receive RRF funding. Finland's RRP forms part of the Sustainable Growth Programme for Finland.

Business Finland (BF) has had the responsibility of implementing 470 M€ of Finnish RRF funding following the RRP. BF has had specific targets for the RRP set by the Finnish government, the Ministry of Economic Affairs and Employment, and EU Commission for the use of RRF funding (see Table 1).

BF started the planning of the implementation of its part of RRP in early 2021 and created a separate project (Sisu project) to ensure that RRF calls and related processes are organised in a timely and customer-friendly manner so that BF can meet the targets set. BF completed a design evaluation 2022 to address the operational aspects of RRP and RRF funding and to develop an impact assessment framework for BF's RRF[2]. Sisu project

1 Ministry of Finance Finland (2021)
2 Hjelt et al. (2022)

TABLE 1. BUSINESS FINLAND'S TARGETS FOR THE USE OF RRF FUNDING

Renewal of companies in green transition and digitalization	Increase of R&D investments of companies
Recovery of businesses hit by the pandemia	Increase of export business and visit income
BF brand value (organization to be trusted which help BF in budgetary discussions in the future)	Specific KPIs defined later according to agreements between the Commission and ministries. Impact analyses will be made.

final report[3] was prepared at the end of 2023 after the BF's RRF funding had been allocated. The evaluation plan of the Sisu project indicated the need for completing a mid-term evaluation of BF's RRP in 2024. The present report consists of that mid-term evaluation.

The main objectives of the mid-term evaluation are the following:

- How have Business Finland's RRP funding and other services succeeded in building a project portfolio that advances the green transition and recovery from the pandemic, when considering the impact goals of the project?
- What are the main results and impacts for input, behavioural and expected output additionality of Business Finland's activities in RRP (the Sisu project)?

Detailed evaluation questions and their coverage in the final report are described in Table 2.

The mid-term evaluation has been completed by a consortium team of Sweco Finland Oy and Sweco Sverige AB between September – December 2024. The evaluation is based on desk studies, an analysis of quantitative information provided by BF, and interviews (36 interviews with companies and research organisations, and six stakeholder interviews).

Simultaneously during the autumn of 2024 other evaluations commissioned by BF and closely linked to RRF funding have been carried out. These were the final evaluations of four programs and the evaluation of the Leading Company instrument. The evaluation team has coordinated the work with other evaluations so that, e.g., the same persons have not interviewed more than once.

3 Business Finland (2023a).

TABLE 2. EVALUATION QUESTIONS AND THE LOCATION OF THE RELATED ANALYSIS IN THE REPORT

EVALUATION QUESTION	LOCATION OF THE RESULTS IN THE REPORT
A. STATISTICAL ANALYSIS	
1. What are the results of Business Finland on RRP-funded companies (new companies, growth of turnover, exports, value added and employment, internationalization)?	Throughout the report relevant statistics are presented
B. INPUTS	
1. How has RRP funding and other services by Business Finland improved inputs to green transition and digitalization of beneficiaries?	Chapters 2, 3, 4 and 5
2. How has RRP funding improved a recovery of businesses hit by the pandemic. Are there any growth effects?	Chapter 5
3. What kind of critical obstacles and possibilities have been found? How the input effects could be improved in the future?	Chapter 6
C. ACTIVITIES (BEHAVIORAL ADDITIONALITY)	
1. How has the RRP funding succeeded to activate new business models and solutions that improve green transition and digitalization?	Chapter 6
2. How has RRP funding increased public R&D funding in general and is there other impacts on private R&D and innovation funding?	Chapter 3
3. Which other Business Finland services have had the most significant complementary roles in delivering impacts from R&D funding within the Sisu project?	Chapters 6.3
4. How have beneficiaries created new value added networks and partnerships?	Chapter 3
D. RESULTS AND OUTCOMES	
1. What new business models and solutions of beneficiaries will increase the green transition possibilities	Chapter 6
2. What kind of investments in green transition, innovation, digitalisation and the data economy have grown?	Chapter 4
3. How R&D, jobs, turnover and exports have grown in Finland? (growth and leading companies)	Chapter 5
4. Can we already indicate impacts on economy and society how spearheads of Finnish international growth are strengthening, and what are Finland's strengths on sustainable development globally?	Chapter 6
E. HOW TO CONTINUE?	
5. Based on the funded portfolio of R&D projects and other activities, how well do they fulfill the goals of Sustainable Growth Programme for Finland?	Chapters 3, 4, 5 and summary in Chapter 6.1
6. What kind of critical obstacles and possibilities have been found? How could the impact of the Sisu project be improved?	Chapter 6.3

2 BUSINESS FINLAND AND RRP

2.1 THE SISU PROJECT

The EU's Recovery Plan and following funding packages were introduced with a tight timeline in 2021 and Finnish public funding authorities had to react quickly to define the processes for the implementation. Business Finland (BF) understood early on that if the funded projects need to be completed by the end of 2025, quick actions were required. BF was among the first funding authorities to define the processes for implementing their part of Finnish RRP. Because the RRF funding package is a one-time exercise, the operationalisation was defined as a separate BF project and a clear execution plan was prepared. This Sisu project defined management structures for the project, processes for identification of customers, activation of customers, internal and external communication, follow-up and reporting, impact analysis and interfaces with funding processes.

BF decided that BF's normal funding instruments and services were to be used to the extent possible. One specific instrument BF used for RRF was the investment support for companies. BF piloted this type of investment support instrument during 2021 before the start of RRF. Some of the potential projects from that call later got RRF funding. With investment support BF worked closely with the Ministry of Economic Affairs and Employment which organised an energy investment support program with RRF funding. There were also RRF specific funding criteria and reporting requirements that created a need for additional instructions for applicants and changes in the BF IT systems. An example of a specific requirement is that all the projects funded by the RFF need to fulfil the Do No Significant Harm (DNSH) criteria[4]. At the time when BF started to make the funding decisions in 2021, some of the guidelines and instructions from the European Commission were still pending and these have also been adjusted over the years. The Sisu project final report estimates that the BF's own operational costs of implementing RRF between 2021 and 2023 were approximately 10 M€[5]. These costs do not include the work of managers and BF's global network.

4 The analysis of the use and guidelines for DNSH in public funding in Finland has further worked with in a large EC funded project DNSH in Finland between 2022 – 2024. Ministry of Environment. (2024)

5 Business Finland (2023a) Sisu final report

The Sisu project ended 31.12.2023 when all the RRF funding had been admitted. However, auditing, payments, reporting, and impact evaluations continue until 2026. A separate final report of the Sisu project concluded that the project met the objectives and milestones set for it. The mid-term term evaluation confirms the conclusion that BF succeeded well in implementing RRP. Some details are elaborated in Chapter 6.2.

2.2 BUSINESS FINLAND'S RRF FUNDING

Business Finland had an allocation of RRF funding of 470 M€. Based on the negotiations and revisions of the Finnish RPP, some budget adjustments were done over the years. By the end of 2023 BF had granted external funding worth of 447 M€[6]. Funding was organised through 15 separate call streams structured around three Sisu sub-projects reflecting the objectives set for BF. A short summary of these is provided next, and Chapters 3, 4 and 5 have further details of the calls.

CALLS TO INCREASE INVESTMENTS IN RDI

- **Lead company competition.** In BF's leading company challenge competition, participating companies suggest projects providing solutions to major future challenges. Leading companies are the ones which operate globally and have the capacity to make major additional investments in RDI in Finland. The maximum amount of funding is 20M€ for a leading company and 50 M€ for ecosystem partners. RRF funding was used to organise a lead company competition and also two calls for co-innovation projects around leading companies' projects.
- **Calls for key enabling technologies.** Calls were organised for specific technology areas in microelectronics, 6G, artificial intelligence and quantum computing.
- **Calls for innovation infrastructures**. One call was organised in 2022 providing investment funding for testing and piloting environments. This type of innovation infrastructure funding was new for BF, and BF co-operated closely with Academy of Finland to organise the funding.
- **Call for growth companies**. General RDI funding support was organised as an on-going call following normal BF funding practices.

INVESTMENT SUPPORT TO GREEN TRANSITION

- **Calls for circular economy investments.** Three investment support calls were organised for re-use and recycling of key materials and industrial side streams.

6 The mid-term evaluation uses throughout the report the project funding data provided by BF in September 2024 unless mentioned otherwise.

- **IPCEI calls.** Important Projects of Common European Interest (IPCEI) represent a significant contribution to economic growth, jobs, the green and digital transition and competitiveness. BF organised three IPCEI calls in 2021 in hydrogen and microelectronics sectors.
- **Calls for spearhead technologies.** Two investment support calls were organised targeted to batteries industries.

BUSINESSES IMPACTED BY THE PANDEMIA – FOCUS SECTORS TRAVEL AND CREATIVE INDUSTRIES

- **Travel RDI.** One targeted RDI call was organised for travel industries in 2022.
- **Calls for creative industry pilots.** Three targeted calls and a supporting program was designed for the creative industries.
- **Programmatic activities.** Support for the internationalization of Finnish companies was organised through three export programs: decarbonizing industries, low carbon solutions for the built environment, and innovative health and well-being solutions.[7]

Figure 1 presents an overview of the granted funding over the subprojects and by specific call streams. Table 3 summarises the use of the different funding instruments and services for these calls. The following specific features are worth highlighting:

- Lead Company funding is provided by similar funding instruments as general BF's RDI funding and in the statistics these projects are classified as Research, development and piloting funding services. Also, the IPCEI investment funding to the hydrogen sector and microelectronics is in the statistics part of the Research, development and piloting service.
- Co-innovation funding services have special conditions. In a co-Innovation project participants jointly work together to generate new knowledge and innovations. There are separate parallel projects that share the same goals. Typically, a public research project and coordination of the co-innovation ecosystem are carried out in parallel with at least two company projects.
- For the creative industries calls a specific funding instruments was used based on the BF's Tempo instrument. Funding is provided up to 50 000 € and the funding follows de minimis rules. Here, the normal requirements for international growth were loosened to better fit the RRF goals to support recovery.

On top of external funding, BF's Visit Finland has used by the time of the mid-term evaluation an additional 10M€

7 Business Finland. (2023)

to develop travel sector services. This funding has been used among others to develop digital tools and to implement Sustainable Travel Finland -program (STF)[8]. The STF program and STF mark were pre-existing services and program of the Visit Finland department of BF, but prior to RRF funding it had been quite modest and lacked the tools to transform the whole travel sector.

In addition to targeted export programs and the STF program, RRF funding was closely connected to BF's other programs. Existing programs offered ready channels for

8 Some of the work continues until the end of 2024.

FIGURE 1. OVERVIEW OF BUSINESS FINLAND'S RRF EXTERNAL FUNDING. EUROS INDICATE THE GRANTED FUNDING.

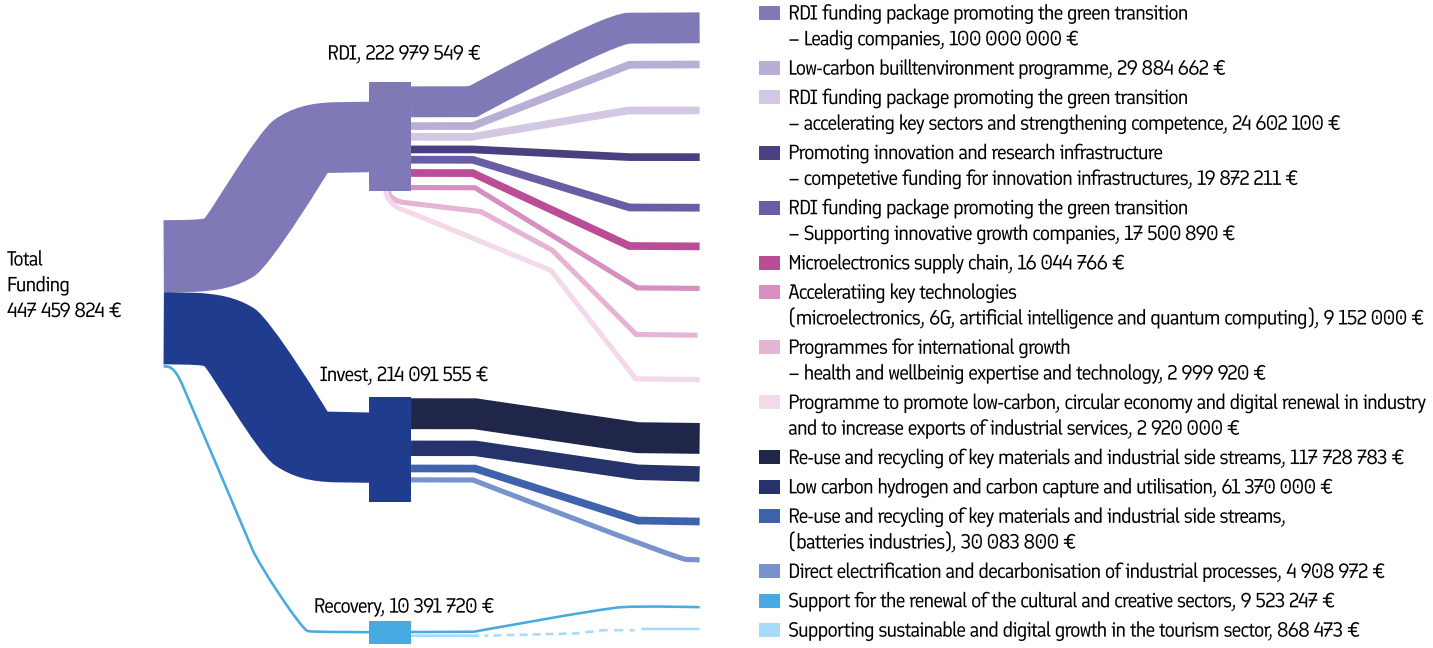


TABLE 3. BUSINESS FINLAND'S FUNDING SERVICES USED FOR RRF.

BF'S FUNDING SERVICE	NUMBER OF PROJECTS	TOTAL €
Three funding services for co-operation between companies and research organizations: • Co-Innovation, Research partner	35	22 805 204 €
• Co-Innovation, Company partner	54	19 058 628 €
• Co-Research	31	15 155 734 €
Research, development and piloting funding for projects*)	91	212 377 351 €
Innovation and research infrastructure investment	12	9 827 423 €
Innovation cluster funding for ecosystem building	10	10 210 970 €
Innovative public procurement	1	100 000 €
Energy - investment support	5	4 908 972 €
Circular economy - investment support	43	146 649 161 €
Creative industries tailored instrument to provide support for business development plans (based on Tempo)	113	6 366 381 €
Total	**395**	**447 459 824 €**

*) Includes also Leading Company funding of 100 M€ and Hydrogen sector IPCEI investment since these funding instruments were classified in this way in the data provided by BF.

marketing the calls and RRF objectives were also matching with the objectives of the specific programs. Table 4 summaries the BF programs RRF funding was connected to.

Bio and Circular Finland (BioCirc) is the biggest of the programs using RRF funding. The RRF funding for BioCirc covered also many projects that were circular economy investment support. For other programs the RRF funding was mostly co-innovation funding. One should note that the connection of the RRF funding to specific BF programs has been done by the BF personnel preparing funding decisions. The BF program persons also did active marketing of the RRF opportunity to selected customers which had

potential projects which would match with RRF criteria. One should note that all of the program projects from the years 2021-23 were not funded by RRF.

TABLE 4. TOTAL NUMBER OF PROJECTS AND GRANTED RRF FUNDING PER BUSINESS FINLAND'S PROGRAM.

BF PROGRAM	TOTAL NUMBER OF PROJECTS	TOTAL FUNDING GRANTED (€)
Non-program specific	279	242 741 943
Bio and Circular Finland*	54	91 011 460
Sustainable Manufacturing Finland*	11	46 166 250
Smart Mobility and Batteries from Finland*	18	32 044 610
6G Bridge	1	14 700 000
Decarbonized Cities	17	9 399 141
Hydrogen and Batteries	1	4 500 650
Smart Energy Finland*	6	3 757 400
Decarbonized Maritime	2	1 479 000
Smart Life Finland	4	1 066 970
Personalized Health	2	592 400

*Final evaluations of these programs[9] are on-going in autumn 2024 at the same time as the RRP mid-term evaluation.

9 Bio and Circular Finland focused on boosting exports of Finnish bio- and circular economy solutions, with special emphasis on the plastic and packaging industries. Sustainable Manufacturing Finland focused at manufacturing ecosystems, with a special emphasis on the machine tool industries, (opto) electronics and photonics, and companies involved in industrial digital transformation. Smart Mobility and Batteries from Finland aimed to create and develop ecosystems, new business operations, exports and international solutions from Finnish companies in fields of mobility solutions, logistics and batteries and electrification. Smart Energy Finland focused on different kinds of energy-related ecosystems and testbeds, both in Finland and internationally.

2.3 RECIPIENTS OF THE RRF FUNDING

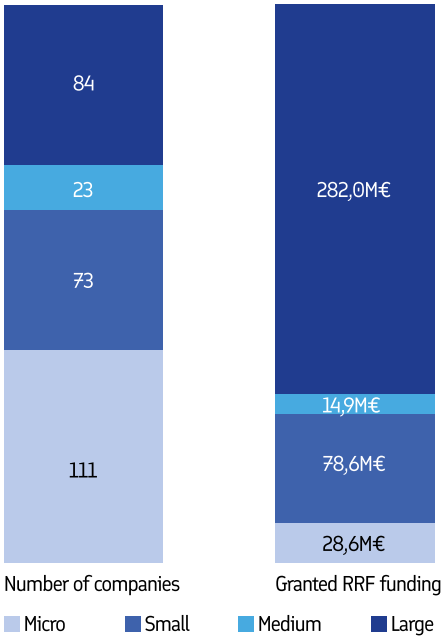
Business Finland completed the RRF funding decisions by the end of 2023 and all of the projects should be finalised by the end of 2025. In total there are 307 organisations receiving funding, 291 companies and 16 research organisations. 184 of the companies are micro or small in size (See Figure 2). The largest share of the RRF funding went to big companies (Figure 2). Five leading companies alone together received 100 M€ RRF funding. A large number of the SMEs received smaller creative industries support max 50 000 €. More details of the organisations receiving funding are provided in Chapters 3, 4, and 5.

By September 2024, 132 projects (33 %) of the total of 395 projects had ended. 194 projects (49 %) had submitted their interim report. Altogether 28 % of the granted funding has been paid by the time of the mid-term evaluation (see Table 5).

TABLE 5. DISTRIBUTION OF RRF FUNDING TO COMPANIES AND RESEARCH ORGANISATIONS.

	FUNDING DECISIONS (GRANTED FUNDING IN TOTAL)	PAID FUNDING AS OF SEPTEMBER 2024	PAID % OF TOTAL
Companies	409 498 886 €	115 805 562 €	28 %
Research organisations	37 960 938 €	11 346 404 €	29 %

FIGURE 2. DISTRIBUTION OF THE NUMBER OF COMPANIES AND THE GRANTED RRF FUNDING BY THE SIZE OF THE COMPANIES.



3 ROLE OF RRF IN INCREASING RDI INVESTMENTS

TABLE 6. RDI TARGETED RRF CALLS.

RDI SUB-PROJECT CALLS	GRANTED RRF FUNDING	NUMBER OF PROJECTS
RDI funding package promoting the green transition – Leading companies	100 000 000 €	5
Low-carbon built environment programme	29 884 662 €	67
RDI funding package promoting the green transition – accelerating key sectors and strengthening competence	24 602 100 €	51
Promoting innovation and research infrastructure – competitive funding for innovation infrastructures	19 872 211 €	21
RDI funding package supporting the green transition – Supporting innovative growth companies	17 500 890 €	44
Accelerating key technologies (microelectronics, 6G, artificial intelligence and quantum computing)	16 044 766 €	11
Accelerating key technologies (microelectronics value chain)	9 152 000 €	2
Programmes for international growth - health and wellbeing expertise and technology	2 999 920 €	10
Programme to promote low-carbon, circular economy and digital renewal in industry and to increase exports of industrial services	2 920 000 €	3

3.1 RRF INPUT TO RDI

Targeted RRF funding to RDI was spread through different BF funding instruments in nine calls (see Table 6). In total the granted funding was 223 M€, representing 50% of BF's total RRF funding. 100 M€ of this was targeted to five leading companies. An RRF-specific feature was a separate call to provide funding for innovation and research infrastructure investments. It should be noted that the RDI targeted calls and projects are linked to RRF investment funding which is described in more detail in Chapter 4. The top ten companies other than leading companies and top ten research organisations receiving most of the funding are listed in Tables 7 and 8. VTT was the largest recipient of the RDI funding with a total of 16 projects. VTT was also the coordinator of most of the co-innovation funded ecosystems.

TABLE 7. 10 COMPANIES GRANTED MOST OF THE RRF RDI FUNDING. LEADING COMPANIES AND IPCEI FUNDING ARE EXCLUDED ALTHOUGH THESE PROJECTS ARE IN THE STATISTICS CLASSIFIED TO RDI.

10 COMPANIES THAT GRANTED THE MOST RDI FUNDING*	GRANTED RRF FUNDING
One Click LCA Oy	3 505 000 €
Synbio Powerlabs Oy	2 990 000 €
Kiilto Oy	2 956 000 €
Black Donuts Oy	2 339 700 €
SSAB Europe Oy	1 625 968 €
Spinnova Oyj	1 602 750 €
OSTP Finland Oy Ab	1 441 000 €
Digital Workforce Services Oyj	1 357 500 €
Haltian Oy	1 250 000 €
Pyhäsalmen Kvanttikiinteistöt Oy	1 050 000 €

* Leading company and IPCEI funding excluded

TABLE 8. 10 RESEARCH ORGANISATIONS GRANTED MOST OF THE RRF RDI TARGETED FUNDING.

10 RESEARCH INSTITUTES THAT WERE GRANTED THE MOST RDI FUNDING	NUMBER OF PROJECTS	GRANTED FUNDING, €
Teknologian tutkimuskeskus VTT Oy	16	15 163 223
Aalto-korkeakoulusäätiö sr	13	5 851 360
Tampereen korkeakoulusäätiö sr	8	4 444 641
Lappeenrannan-Lahden teknillinen yliopisto LUT	4	2 693 000
Oulun Yliopisto	4	2 011 000
Åbo Akademi	3	1 590 500
Vaasan Yliopisto	2	1 176 000
Hämeen ammattikorkeakoulu Oy	2	1 081 584
Jyväskylän yliopisto	3	862 200
Luonnonvarakeskus	1	559 000

3.2 OBSERVATIONS OF THE RDI ACTIVITIES

RDI PROJECT EXECUTION AND RESULTS ARE DIVERSE

The funded RDI projects utilized diverse project execution styles in the collaboration between research institutions and companies. Considering the goals and timelines of the projects, the activities focused on conducting scientific studies and developing methods to scale up technology from a piloting phase to an industrial level, conducting research and testing sustainability issues in laboratory environments as well as testing new technologies in real-world environments and applications, and investigating sites for carbon dioxide storage or developing new materials or calculation tools to improve sustainability. In several projects there is a clear linkage to the investments

with activities related to purchasing and setting up equipment or building research infrastructures for open access. They ranged from clearly science-based projects focused on building a solid knowledge base for further product or service development to strongly co-innovative ones aiming at producing new technologies or services for commercialization (see also Chapter 6.2).

Generally, the RDI projects completed with RRF funding do not differ much from regular BF innovation funding projects. The RRF specific features of tighter timelines and support for innovation infrastructures seem to, however, have positive effects on the execution. Based on the interviews, the RRF funding has succeeded in stimulating innovation and broader RDI processes from science-based co-research projects to piloting of new production processes. This is particularly visible in projects that require intensive testing and proof of concept actions where the support for research infrastructures has also played a key role.

CO-INNOVATION PROJECTS GET VERY GOOD FEEDBACK ON THEIR ROLE IN ENHANCING PARTNERSHIPS

Based on the interviews, the co-innovation practices work well and get very good feedback. In total, RRF funding has been used for strengthening of around 30 innovation ecosystems over different areas (see Table 9). The networking and building of new partnerships are identified as having strong added value for the projects. The projects show strong benefits from the networking on not only sharing knowledge, but in particular the anticipated effects that the strengthening of networks has had on boosting and developing potential new business opportunities. This is particularly highlighted in the co-innovation projects where the collaboration is strongly at the interface of science-based innovation and markets.

The focus and structures of RRF funding provided clear incentives for facilitating collaboration and sharing knowledge between different types of partners. This has, for example, improved understanding of market demands and requirements for sustainable solutions. It has as such guided product and service development, speeded up the development of laboratory and real-life testing environments. Furthermore, it has led to improvement and reshaping of practices and increased understanding of new customer bases. From a human resource point of view, the networking has increased access to specialised expertise that individual companies (especially SMEs) may otherwise not possess. On the other hand, the experts' broader access to networks has also increased their opportunities within their field, particularly for researchers with an interest in business development. There is increased understanding of how they contribute their knowledge and skills also outside academia to advance sustainability-focused solutions and the green transition in general.

RRF investment support to research infrastructures has been instrumental in boosting funding for co-innovation efforts and has speeded up the RDI work overall. Although most of these projects investing in research infrastructures are not yet completed, the technical planning phase and co-operation with companies and research institutes to prepare for the following piloting and testing have been useful. Particularly in the co-innovation projects the pooled resources aimed at tackling specific shared challenges have positively affected the expected impacts. Similarly, the increased public funds have been successful in de-risking private investments, thus encouraging companies to invest in innovative sustainability solutions and RDI work. This seems to function particularly with the SMEs that may have limited ability to invest but have strong interest in collaborating with research institutions in developing their products and strengthening their market potential. Overall, the RRF funding, particularly when pooled with other public funding, has enabled companies to take bigger risks and has facilitated the speedy development of new products and services in collaboration with research institutions. There is some evidence that RDI processes have speeded up due to the tight timelines and the structure of the funding.

RRF FUNDING HAS SUPPORTED INCREASE IN RDI INVESTMENTS

The linkages to increases in RDI funding are complex and multidirectional. Based on the analysis, the RRF funding has in itself not increased RDI funding but has had an indirect effect on it by boosting the pooling of RDI funding from multiple sources. Particularly bigger projects and consortia have sought follow-up funding from European Union sources based on the project results opening up new research directions and partnerships. Alongside this, the RRF funding and its tight schedule have facilitated networking both between researcher and companies as well as among companies, which has made it easier to attract private investments. The RRF specific features have enabled projects to adapt to changing circumstances and needs of the market, while simultaneously pushing partners to make best use of the funding during a short period of time. Short timeline for the projects has also improved risk management – risks are recognised earlier and re-directing the work has been somewhat quicker.

However, the interviews also show that there are gaps in understanding the realities of the innovation process. The tight timetables of the projects have been challenging for projects especially in cases where company partners have changed often or left the collaboration mid-process and where innovations need to move fast in order to keep track of the changing market. In several projects there

are discrepancies in how quickly the pathway can progress from ideas, research and piloting to viable businesses and market-ready products and services. Changes in regulations or funding requirements mid-project have had negative impacts particularly on the companies' commitment to the project. The analysis highlights that the consortia need to have a clear, shared, and realistic understanding of the market demand as well as the innovation process – from both the business and the research perspectives. This allows them to focus their efforts to scale, e.g., emerging technologies and platforms or research infrastructure services to industrial levels in a sustainable way.

TABLE 9. LIST OF CO-INNOVATION PROJECT ECOSYSTEMS THAT HAVE RECEIVED RRF FUNDING.

NAME	SHORT DESCRIPTION	COORDINATOR
ACTOR	ACTOR is a Finnish R&D project that aims to increase the productivity of construction and decrease its carbon emissions through process automation.	Aalto
AIXCON	The project aims at systemic change in the construction industry by developing new data-driven methods and tools that enable intelligent and continuously learning processes in the construction ecosystem.	Aalto, VTT
CaNeLis	The goal is to create future climate-neutral ship structures that can operate safely and economically in environments challenged by climate change, while also considering the principles of sustainable operations for the shipyard and shipbuilding network.	Aalto
CIRP-5G	Centralized Intelligent and Resilient Protection Schemes for Future Grids Applying 5G	Vaasa University
DataMust	Accelerating carbon neutrality in the built environment, promote the development of secure solutions, and optimize the energy consumption of digital infrastructure.	VTT
Drolo2	Business opportunities for partially or fully automated, intelligent and 5G-connected multifunctional drone concepts	VTT
E! Celtic USWA, Wirepas	Development of advanced wireless communication technologies	Wirepas Oy
EMMA2	Developing a selection tool for high-power linear actuators that validates their robustness, checks system integrability through simulation and experimentation, and establishes innovative business solutions to promote green and digital transitions in the NRMM ecosystem.	Tampere University

FinnH2	Improving Finland's know-how and competitiveness in electrolysis and hydrogen technology	VTT, LUT, Aalto University
FUSE	Future Shipping Electrified (FUSE) focuses on operational and business models for shipping electrification, software life cycle simulations, learning systems and the utilisation of innovative digital twin solutions	Åbo Akademi University
Hiper	High Performance Cellulose-Based Composites (HiPer) aims to generate a completely new product portfolio based on lightweight, sustainable composite materials.	VTT
IFORGE	ICT for Resilient Green Electrification (IFORGE) focuses on prototyping and evaluating ICT infrastructure in a laboratory environment to implement, model, and simulate protection systems, control, and monitoring for decentralized electrical grids and substations, with the goal of realizing, testing, and validating use cases for real decentralized electrical grid systems.	Aalto University
LiveCol	The LiveCol project will develop and validate new methods and tools to enable design and construction teams to collaborate through real-time 3D data sharing and communication in virtual 3D environments.	Tampere University, VTT
LOIKKA	The project's goal is to halve the CO2 emissions generated from concrete production.	Aalto
MASCOT	Materials for CO2-neutral processes in resource-intensive industries (MASCOT) aims to tackle the material challenges in emerging fossil-free processes of circular economy and hydrogen technology	VTT
NEXR	Next Extended Reality (NEXR) aims to boost the growth, enhance the competitiveness, and foster the sustainable development of the Finnish creative industries by developing an innovative paradigm for the design, deployment, and adoption of Extended Reality (XR) technologies.	Tampere University
ROBA	The target of ROBA is to create robust algae systems so that in 2030, microalgae are contributing substantially to carbon capture, are reliably sourced, sustainable and scalable raw material for a large variety of applications and play a part in the bioeconomy, both in Finland and worldwide.	VTT
Silent Engine	The project will seek new silent and vibration-free solutions to help the Finnish powertrain industry meet the criteria set for noise, vibration, and sustainability.	University of Vaasa
SmartBio	Smart Systems and Biotechnology Center (SmartBio) aims to ensure the education and skill levels of future experts by developing research infrastructure to enhance our capabilities in studying and providing research services related to the comprehensive utilization of biomass and by-products, enabling the development of new applications and products through modern biotechnological methods and digital tools for more optimal biomass utilization.	Hämeen ammattikorkeakoulu Oy

Sonic Move	Creative and Expressive Sonification of Human Movement. The project investigates the use of human body movements in the synthesis of sound and tactile feedback and its use in dance and rehabilitation applications.	VTT Human Sensing solutions, Aalto University Sound and Physical Interaction Group and HUMEA Lab at UEF
SWARM	SWARM aims to study and develop automatic control based on infrastructure building information modelling and real-time environmental observation of a swarm of construction equipment at an infrastructure construction site.	University of Oulu
Synjet	Seeking solutions for increasing the conversion efficiency and profitability from sustainable feedstocks to valuable products, focusing especially on aviation fuels.	University of Jyväskylä, VTT and Åbo Akademi University
Telavalue	Aims to solve sustainability and waste problems related to current textile system through circular economy.	VTT, LAB University of Applied Science and Turku University
UrbanMill	UrbanMill co-innovation project is developing enabling technologies to utilise highly mixed plastic waste as feedstock for chemical recycling producing high quality plastic materials complementing current recycled plastics.	VTT
VOF	Visualising Our Future Public Realm Together (VOF). The research project helps Finnish architectural companies to implement the green transition by increasing commonality and seizing the opportunities brought by digitalization and service design applied to architecture, as well as visualising the design processes of public buildings and urban spaces.	Aalto University

4 BUSINESS FINLAND'S RRF BOOSTING GREEN TRANSITION INVESTMENTS

4.1 RRF INPUT TO INVESTMENTS

The decision to use RRF funding for green transition and digitalisation investments was an addition to BF's normal funding instruments. Public investment support to Finnish companies has been provided by the Climate Fund, Finnvera, Tesi or by the Ministry of Economic Affairs and Employment (MEE). BF's RRF investment support was targeted to three main streams: 1) energy, 2) circular economy, 3) batteries (See Table 10). Table 11 lists the companies that were granted the largest investment support projects.

ENERGY INVESTMENTS

For the energy sector, BF granted 61,3 M€ to two Low carbon hydrogen and carbon capture and utilisation projects (IPCEIs - Important Projects of Common European Interest calls) and around 4,9 M€ to five industrial electrification projects (see Table 10). The Ministry of Economic Affairs and Employment (MEE) also had an energy investment support program using RRF funding and BF has worked closely with MEE to organise the calls and funding processes. In 2022-2024, the MEE has granted a total of approximately 469 M€ in RRF energy aid to ~~77~~ projects.[10]

CIRCULAR ECONOMY

The largest part of the RRF investment support was targeted to circular economy, in total 118 M€. Three separate calls were made, the last one implemented in June – September 2023. Altogether 36 companies received support, and the granted funding varied between 15 M€ and 126 000 €. Most of the projects (~~27~~ out of 40) were linked to the Bio and Circular Finland program. The companies represented different industry sectors, e.g., waste management, textiles, food industries. With circular economy calls BF has done funding decisions more than what was planned as a precautionary action if some of the projects will be delayed.

10 Ministry of Finance Finland (2024), press release

TABLE 10. INVESTMENT TARGETED RRF CALLS.

INVESTMENTS SUB-PROJECT CALLS	GRANTED RRF FUNDING	NUMBER OF PROJECTS	NUMBER OF COMPANIES
Re-use and recycling of key materials and industrial side streams	117 728 783 €	40	36
Low carbon hydrogen and carbon capture and utilisation	61 370 000 €	2	2
Re-use and recycling of key materials and industrial side streams (batteries industries)	30 083 800 €	5	4
Direct electrification and decarbonisation of industrial processes	4 908 972 €	5	5

TABLE 11. 10 BIGGEST PROJECTS THAT HAVE BEEN GRANTED INVESTMENT SUPPORT FROM BF RRF.

10 BIGGEST RRF INVESTMENT PROJECTS	GRANTED RRF FUNDING €
Solar Foods Oyj	33 646 250 €
Neste Oyj	27 723 750 €
Adven-FMG Sodium Sulphate Solutions Oy	15 000 000 €
Novana Oy	15 000 000 €
Infinited Fiber Company Oy	14 983 875 €
eniferBio Oy	12 224 475 €
Forchem Fine Chemicals Oy	10 475 850 €
Fortum Battery Recycling Oy	10 000 000 €
Nordkalk Oy Ab	6 571 950 €
Mirka Oy	5 892 000 €

BATTERIES

Specifically for investment projects related to batteries, BF granted 30 M€ to 4 companies. The granted funding varied between 15 M€ and 136 000 €. One should note that there were also a number of battery industries related RDI projects of which most were co-innovation projects. These projects were linked to the Smart Mobility and Batteries from Finland program that ended in December 2022. The companies represented different industry sectors, e.g., waste management, robotics, telecom, and automotive industry.

Among the ones that received biggest investment support there were three start-ups:

- **eniferBio Oy** – Biotech start-up using fungal fermentation to upcycle agrifood industry byproducts into nutritious mycoprotein ingredients. Technology is older one, but VTT researchers took up the commercialization in 2020.
- **Infinited Fiber Company Oy** – New technology transforming textile waste into premium-quality circular fibres for the textile industry. Technology is based on the VTT's development work.
- **Solar Foods Oyj** – Research based start-up (VTT and LUT). Innovation to turn emission-free electricity and captured CO2 into edible calories. In other words, growing food out of thin air.

There should be no great surprise that there is an overlap in companies receiving investment support previously also were granted RDI funding. Large investment projects are naturally linked to the RDI activities of the companies. Preceding the investment decisions there is a long history of extensive research. Based on the interviews, the companies that received RRF investment support had also a long track record of previous BF or Tekes support for their business development. Out of the in total 45 companies that have received investment support from RRF, five had also on-going RRF funded RDI projects.

4.2 OBSERVATIONS OF THE INVESTMENT ACTIVITIES

RRF INVESTMENT SUPPORT IS VERY WELL RECEIVED

The companies consider the RRF opportunity to provide support for investments as a very positive change. This helps to justify the company´s investment decisions and speeds up the progress to market solutions. Interviews show that the most common types of results from the projects are progress with production or piloting units, and some also report RDI progress and new products or services. However, increased export and new business models are reported by only few interviewees.

The investment projects often go hand-in-hand with co-innovation RDI projects. The companies that were granted investments support often have a long history with BF. At the same time, the amount of fundings granted are relatively small and a national scale-up funding instrument is still needed. Some interviewees indicated that the effect of public funding as a catalyst for other investors is less than what has been anticipated.

The hype concerning green transition has changed to a more realistic view, but there is still a strong belief in the market opportunities. Recent developments, like the unfortunate decision of Neste to stop the hydrogen project, may change considerably the actual payments.

The RRF risk assessment from BF's point of view was updated in autumn 2024 and the highest risk was that projects are not going to be completed in time[11]. The risk of not getting especially investment projects done in the given timetable is now even higher than before.

MATERIALISATION OF THE RESULTS IS OFTEN ALREADY VISIBLE OR EXPECTED IN THE SHORT TERM

Most interviewees report concrete results of the project, with comments such as "The factory is there, products are out. 80 % of the (on-going) project has been realized already", and "We have already seen some results,

11 Business Finland (2024c).

and implemented them". One interviewee described how the company collected and analysed data concerning a bottleneck in a part of its production line, made an algorithm and tested it. The result when implementing it in the production has been a 30 % increase in the production. Another interviewee describes the project as a model one; a new line of production has been built, producing material for consumers and industrial customers.

GREEN TRANSITION INVESTMENTS CREATE ECONOMIC BENEFITS FOR THE SOCIETY

In October 2024 it was estimated that in total in Finland there are green transition related investment plans of 600 projects which sum up together to 270 billion €. Of these around 14 billion € is already in the implementation phase. Majority of the planned investments proceed to the implementation in 2030s. Confederation of Finnish Industries – EK - maintains and updates an extensive database of the green transition investments[12]. Although the overall RRF investment funding is small relative to total amount of green transitions investments, the information of the impacts to society of this type of investments provides a benchmark for future growth considerations.

The potential role of the green investments for the economy and society is big. A recent study ordered by EK together with other industrial associations examined the impacts of investments on GDP, taxes and jobs[13].The study used on assumption that 20% of the planned investments would materialize being an estimate of 58 billion €. Analysis was done for five main areas of green investments: 1) hydrogen and hydrogen steel, 2) batteries, 3) bioproducts and bioenergy, 4) solar, wind and nuclear power, 5) others. The three first ones are of interest for BF's RRF investment funding. The main conclusions from those sectors for the economic impacts are the following[14]:

- **Hydrogen and hydrogen steel:** The impact of hydrogen projects would be high, but most of the projects are still at an early stage. There are 48 projects under the hydrogen theme in the EK's database. In terms of numbers, there is a significant number of projects that can only be classified as hydrogen electrolysers. Measured in euros, the emphasis is on projects that, in addition to electrolysis, aim to produce hydrogen products or hydrogen steel. An estimate of 4 billion € investments based on the current projects corresponds with work of 31 000 man years and 1 billion € taxes.
- **Batteries:** In October 2024 there were 15 battery related investment projects in the database of which 8 were anode and cathode material plants. These

12 Confederation of Finnish Industries – EK (2024) Green investments in Finland - Elinkeinoelämän keskusliitto

13 Gaia Consulting (Sweco Finland) (2024)

14 The report has more profound and detailed analysis of the used estimates, maximum values, and breakdowns by years.

have a major economic impact in relation to the size of the investment. An estimate of 4,3 billion € investments based on the current projects corresponds with work of 35 000 man years and 1,2 billion € taxes.[15]

- **Bioproducts and bioenergy**: In October 2024 there were a total of 105 projects under the theme of bioproducts and energy, which are very different in quality and size (e.g., large forest industry bioproduct mills and small biogas plants). There projects are also often more mature than the other sectors and the estimated expected investment volume is 25 billion €. This is estimated to correspond with work of 82 000 man years and 2,8 billion € taxes.

Although BF's RRF total investment funding to these three areas is relatively modest, the projects funded are already in the implementation phase and relatively mature. They are also spearhead projects focusing on technologically challenging areas. This creates showcases for Finnish companies for the future.

15 The hydrogen economy, that is, the roles hydrogen can play alongside low-carbon electricity to reduce emissions of greenhouse gases, is a growing area in Finland end elsewhere. Recent developments, with the Neste decision to re-evaluate its renewable hydrogen plan and withdraw from investing into a 120 MW electrolyzer and Ørsted´s decisions to abandon wind-powered green hydrogen projects and to close plans to produce e-methanol using renewable hydrogen from wind power, is not good news for the development. Investment decisions will be made with different schedules than previously envisioned.

5 RECOVERY, RENEWAL, AND GROWTH OF BUSINESSES

5.1 RRF INPUT TO RECOVERY

RRF funding aimed to support industries suffering most during the COVID 19 pandemic and create opportunities to recover even in times when the industry's regular operations were on pause. BF's RRF Funding was not crisis funding, but since BF had been partially responsible in making funding decisions to crisis funding as well, this might have caused some confusion in the targeted industries during the first RRF calls. Although both crisis funding and RRF funding were for RDI activities, they had somewhat different minimum requirements that were stricter in the RRF funding phase than in crisis funding.

TABLE 12. RECOVERY TARGETED RRF CALLS.

RECOVERY SUB-PROJECT CALLS	GRANTED RRF FUNDING	NUMBER OF PROJECTS
Support for the renewal of the cultural and creative sectors	9 523 247 €	111
Supporting sustainable and digital growth in the tourism sector	868 473 €	18

The objective of recovery funding was to target the travel industry to conduct RDI projects and for creative industry companies to pilot new services. Both industries were recognised as industries who were highly and directly impacted by the pandemia and would require secondary activities in order to keep their business development going. Two specific RDI calls were organised for these industries (see Table 12). Creative industries projects were funded up to 50 000 € and followed de minimis rules. A majority of those projects have concluded at the time of the evaluation or are close to the final reporting phase. Travel industry projects were normal RDI or co-innovation projects with varying budgets up to 350 000 € of granted funding. Most of these larger projects are on-going.

On top of these two identified industry sectors and related calls, specific export promotion programs were organised for decarbonization of industries, low-carbon build environment and for health and wellbeing. For travel industries, the Sustainable Travel Finland (STF) program produced sustainability tools. These are further discussed in Chapters 5.3 and 5.4.

5.2 OBSERVATIONS OF RRF'S ROLE IN RECOVERY

RRF FUNDING TARGETED TO RECOVERY WAS MODEST

Over the whole RRF funding portfolio, the funding targeted for the identified most affected sectors was modest in comparison to other calls (2% of total RRF funding, see Chapter 2) and the impacts in recovery have thus also been relatively small. On the other hand, the amount of companies that received the funding from these calls was by far the biggest compared to other calls, so the funding has reached a wider group of companies and through the projects, even wider networks of companies.

Some interviewed creative industry companies noted that they in fact were not hit especially hard by the pandemia. Quite the contrary, they had the biggest offer catalogue they had ever had due to rising demand on entertainment to be consumed at home, and for instance TV and film productions were shut down for a short period of time. For these companies, the RDI development funding opportunity came at the wrong time since they did not have the capacity to shift to RDI development mode when they actually had more than enough projects ongoing.

RECOVERY FUNDING WAS NOT USED BY THE SECTORS THAT SUFFERED THE MOST

Most of the RRF funding ended up in the hands of software developers and management consultancies due to the criteria set for the funding. Out of the 94 companies that received funding from the creative industries call, 66 were in software development or management consulting[16]. Most of the projects have creative industries as end clients, or the substance of the project deals with some sort of creative content, but the companies that benefited most from the creative industry call were not themselves representatives of the creative industry. For these software developers the funding might have been critical in order to survive and recover from the pandemia by providing them with the opportunity to develop new services and products and pilot them, and those products might in some way help the creative industry end customers to be more efficient or creative. However, in terms of how effective the funding was in helping creative industries to recover from the pandemia, this funding lacked desired impacts.

Companies with the most serious difficulties during the pandemia were unable to swich to RDI and piloting due to lack of personnel with the capabilities to do such projects, and the RRF funding still required own funding that especially small and micro companies would have lacked in the height of the pandemia. A fifth of all recovery projects are still ongoing, which in part shows how the ability for these companies to absorb even relatively small amounts of money and transform that into results and finalised projects is relatively low.

Many companies outside of the creative and travel industries, when asked about the recovery aspect of RRF, did bring up how the RDI funding was very beneficial and

16 Analysis is based on the Standard Industrial Classification (TOL) classes of the companies

even critical for the regular BF clientele. The support for their new and ongoing RDI projects helped them to keep the development work going during the pandemia and to prepare themselves for investments in the future.

5.3 OBSERVATIONS OF RRF'S ROLE IN RENEWAL

RENEWAL TARGET WAS EXPLICITLY DESIGNED FOR CREATIVE INDUSTRIES CALL

One of the key targets of the RRF funding was to increase and scale up digitalisation and green transition in different industries, especially in those that were not yet on the pathway to green transition or digitalisation. In BF's RRF funding this was an overarching topic that had to be considered with each funding decision, but the topic of renewal seems to be especially interesting in the context of creative industries. The call for creative industries was specified to provide "Funding for the renewal, sustainable growth and digitalization of creative sectors", and the objective was to *"increase the RDI intensity of the creative economy in the long term and to strengthen cooperation between companies and research organizations in the creative economy, thus promoting the renewal of the creative economy. Funding will be allocated in particular to projects that modernize companies' digital business environment and promote the green transition."*

The funding was at the end channelled mostly to software and management consulting companies which fulfilled the funding criteria. This was partly expected as the more traditionally creative companies like theatre and other live productions could not have been able to switch to digital RDI work due to lack of infrastructure and skilled workforce and own funding required to implement the project. This in any case leaves a question: did the funding renew the target industry, or what was the target industry? If the target was the most vulnerable sector from the pandemia in the creative industry, who is the least digitalised, shouldn't then the focus have been more in the physical, client-facing companies that had to shut down operations? The companies that applied for and received funding were also mostly already digital companies creating digital products that then either created and piloted new products or invested in their pre-existing products. In the follow-up of the impacts of these projects one should pay attention that the results and new products would be b2b products for creative companies, which may renew the digital ways of working in those industries.

GREEN TRANSITION AND DIGITALISATION DID NOT GO HAND-IN-HAND IN ALL OF THE PROJECTS

The calls were designed in a way that either green transition or digitalisation was the main target. One should note that all the projects had to fulfil DNSH criteria and majority of

the calls were targeted to industries where green transition solutions rely on digitalisation. Example of such was the low-carbon built environment call where the projects very much focused on the development of digital solutions. In light of this it is noteworthy that the projects in both the creative and travel industries lacked aspirations concerning green transition. In the interviews, companies might have noted that they believe that their operations as a company are generally green and that they have adopted some more sustainable ways of operating since receiving the RRF funding. One interviewed company even told how they had been inspired to rethink their work after conducting the DNSH assessment of the project.

The lack of green transition aspiration is true also for travel projects in general. Although funding was directed also to resorts and hotels directly, the majority of the RDI funding was directed to software development or management consulting companies. The projects also did not directly deal with green transition or digitalisation but more general business development and creating new products.

THE STF PROGRAM HAS SIGNIFICANTLY BENEFITED THE WHOLE TRAVEL INDUSTRY IN ITS RENEWAL IN GREEN TRANSITION

What increased BF's role in renewal is its internal development work with the Sustainable Travel Finland (STF) program and the different tools and services they provide all travel companies. With RRF funding, Visit Finland was able to develop the STF program and various digital tools. All development projects Visit Finland did in those years were funded by RRF, and they were able to provide several services that have contributed to the whole travel industry's possibilities of transforming its business in more sustainable forms. They provide a STF mark that a company can reach by following specific steps, a carbon calculator, trainings and a sustainable travel manual that covers a wide variety of topics. The STF program and the materials and tools created with RRF funding are available for all travel companies regardless of whether or not they have received any funding. In 2023, more than 1180 companies were involved in the STF program and over 300 of them had reached the STF mark.

This development work and significant investment in the travel sector have been instrumental in its renewal in green transition. Before the RRF funding, Visit Finland had aspects of sustainability in its core operations, but they were nowhere near the level in which they now support the whole industry in its green transition.

The funding for the STF program will be cut significantly from the start of 2025. The cuts will lead to personnel cuts as well as stopping all development of the program and its tools. This creates risks for the program and hinders its ability to serve the whole industry as tit has been able to do in the recent years. The program will transfer into a

more technical upkeeping stage, but since the industry is ever evolving, it is unrealistic to expect that the services, be it the digital tools, the manuals or training materials, would be useful in a few years' time if they are not continuously developed even after the RRF funding ends. There is a significant risk that BF's investment in the STF program and the development of the whole industry will not reach its full potential and that the results will be short-lived. The STF program has benefited the whole travel industry in its renewal in green transition significantly and there are still opportunities to keep the reached results on a good level if Visit Finland is able to transition from a development phase to a maintenance phase with some emphasis on continuous development of the services.

TABLE 13. AVERAGE GROWTH IN TURNOVER, EXPORT AND JOBS FOR COMPANIES ON DIFFERENT SIZE (DATA SOURCE: STATISTICS PROVIDED BY BUSINESS FINLAND)

	AVERAGE CHANGE FROM 2019 TO 2023		
COMPANY TURNOVER IN 2019	TURNOVER	EXPORT	JOBS
1–50 M€	353 %	565 %	82 %
50–300 M€	28 %	67 %	19 %

5.4 OBSERVATIONS OF RRF'S ROLE IN GROWTH AND EXPORT

The companies receiving RRF support span different size categories, industry sectors, and growth phases. At the mid-term evaluation phase, when most of the projects are on-going, it is too early to analyze the role of RRF funding for the growth of the companies. Also, the fragmentation of the RRF funding and the use of different instruments mean that the attribution of the growth to this funding will be challenging even over the longer time frame. For example, the small de minimis support to creative industries is not comparable with million euros investment support.

For future considerations some observations can be made based on the financial background statistics of the 291 companies receiving RRF funding. Focus here is on the smaller companies, since for large Finnish multinationals the growth and renewal impacts from their RRF funding takes place through RDI work and in innovation ecosystems involving also smaller companies.

Table 13 presents the average growth figures from 2019 to 2023 for companies that are micro (here taken the ones which had turnover in 2019 between 1 and 50 M€) and mid-cap size (turnover on 2019 between 50 and 300 M€). The ones with no turnover in 2019 were left out.

There is naturally large variation among the companies but especially for the smaller companies the development

has been very positive. One explanation is the relatively large number of fast-growing start-ups in the sample. There were 18 small companies that had had a yearly turnover growth of more than 40 % (and some of those had increased their turnover more than 20-fold by 2023 compared to 2019) and 13 with a yearly export growth of more than 40 %. All these were start-ups that had received also venture capital (VC) funding. Of RRF companies, 41 (14%) in total had received VC investments. The total volume of VC investments for the RRF companies has been 670 M€ over the time frame (few very big VC investments in this total). Another explanation for the good growth figures is that the implementation of RRF was done with a very tight timeline and priority was clearly given to the best projects from companies on a clear growth path.

The financial statistics of the companies that received RRF funding do not include all the companies using RRF funded BF services. Based on the interviews, there were clear linkages between RDI projects and export services. A separate report of the RRF export programs[17] highlights the services provided and the large number of companies which have participated in the programs.

17 Business Finland. (2024)

6 HOW TO CONTINUE?

6.1 ANTICIPATED RESULTS AND REACHING THE GOALS SET FOR RRF

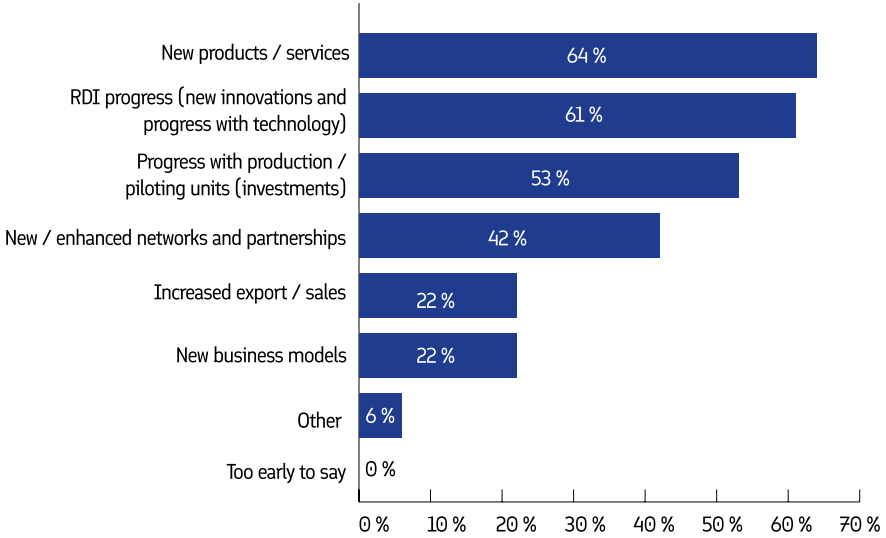
TIGHT TIMELINE HAS PUSHED RDI WORK TO PROCEED EFFECTIVELY BUT THE INVESTMENT PROJECTS WILL FACE DELAYS

Most of the projects continue until 2025 and final results and overall success of the funding will be seen over the following years. By the time of the mid-term evaluation in autumn 2024, however, the anticipated results and progress were already quite clear in the interviews. The tight timeline has pushed the RDI work to proceed in ways which give already some indication of the results. Delays with investment projects caused by external factors such as slower permitting processes or withdrawals of investors are a risk.

Figure 3 presents an overview of the interviewees' assessment of the direct anticipated results from the projects. One should note that these views represent all types of RRF funded projects covered in the interviews. The summary of anticipated results is also validated with public project summaries. The main direct results are linked to product and process improvements, further directions and follow-up to RDI work and to progress with investments in production. Clear networking benefits have resulted especially from co-innovation and Leading Company initiative funded ecosystems. More fundamental new business model development or transforming the value chains were not the priorities in the projects. It is also clear that when the RRF funding became available and the short time period for organising the calls and getting projects completed was acknowledged, priority in funding was given to projects that had clear plans for completion. This has enhanced the likelihood of success but has not excluded the necessary level of risk-taking involved in RDI work.

A summary of the anticipated results leading towards the goals set for BF's RRF funding is presented here. Figure 4 presents the interviewees' assessment of the contribution of their RRF funding towards the goals.

FIGURE 3. CATEGORIES OF DIRECT RESULTS FROM THE PROJECTS MENTIONED IN THE INTERVIEWS
(interviewers did multiple choices based on the discussions, N = 36 interviews)



BF'S RRF HAS BEEN SUCCESSFUL IN INCREASING R&D INVESTMENTS

The main target of BF's RRF funding was to stimulate innovations and increase the ambition level of the companies. The overall assessment of reaching the goal of increasing private sector RDI investments is very positive. Based on the interviews, the RDI projects also had clear linkages and future potential growth with export and green transition investments. Results from the projects focus on RDI and are especially linked to the various business and research ecosystems.

BF'S RRF RENEWAL IMPACTS FOR THE COMPANIES IN GREEN TRANSITION AND DIGITALISATION VARY IN DIFFERENT SECTORS

Renewal targets were integrated into all RRF calls. Renewal occurs through targeted investment and RDI support aimed at green transition and digitalization. Targeted calls for the creative and travel industries, which are typically low in RDI intensity, also contributed to renewal.

RDI and investment support strengthened existing viable innovation ecosystems. Their continued development will serve as a foundation for sector-specific renewal through more versatile ecosystems. The fragmentation of the RRF portfolio necessitates sector and ecosystem-specific long-term impact assessments by different sectors and thematic areas.

In the travel and creative industries, funding was primarily used by IT companies or consultancies that were already digital, with projects lacking a clear link to the green transition. The anticipated impact could have been greater if the calls or instruments used had been targeted differently. However, the short execution timeframe and the limited capabilities of companies in the travel and creative industries to apply for funding were hindering factors. The most significant renewal results in these sec-

tors were achieved through the internal investment in the Sustainable Travel Finland (STF) program, which reached a large number of travel companies to promote sustainable travel practices.

For the evaluation there was no information available of the amount of BF's new customers receiving RRF funding. The new customers, especially in RDI projects from low-RDI-intensive sectors like the travel industry, would be an indication of the renewal impacts. Generally, one should note that there was a large amount of SME beneficiaries from various sectors and a relatively large number of fast-growth start-ups. For the future renewal SMEs have potential for growth and it would be beneficial to support these smaller companies in getting linked to different innovation ecosystems.

FUTURE ATTENTION TO THE REALIZATION OF EXPORT GROWTH AND GREEN TRANSITION INVESTMENTS

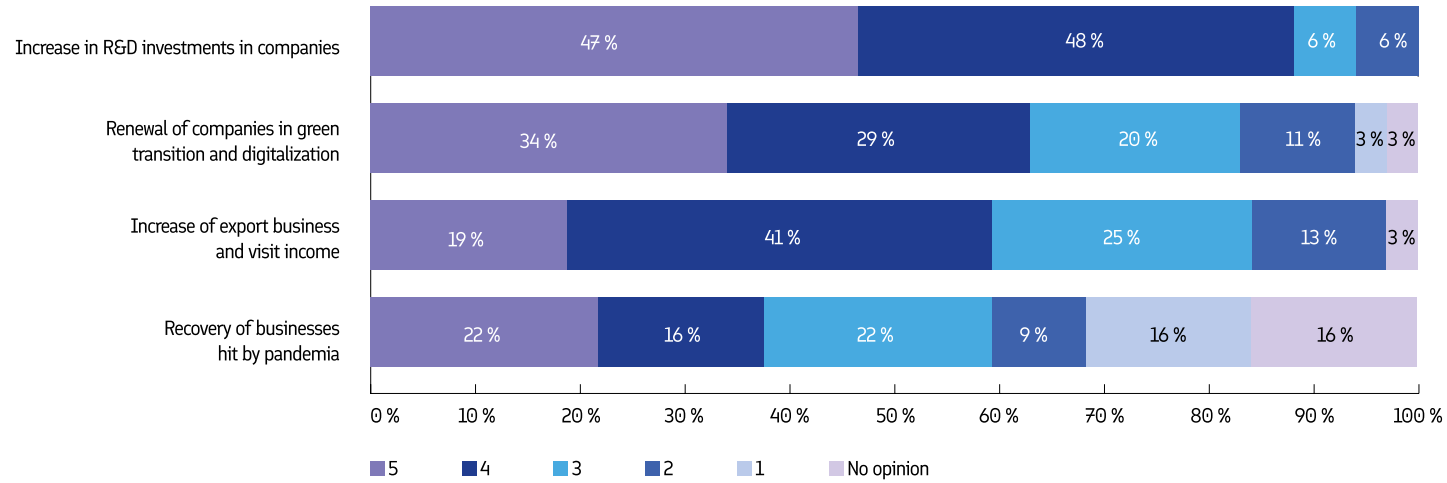
Programmatic actions implemented with RRF focused on export and based on the results these got very good feedback and reached a number of companies. Precise indications of actual growth in export due to these programs is not available, but overall companies receiving RRF has had positive export growth over years 2019 – 2023. The RDI project interviews indicated positive indirect links to future expectations for export growth. Global markets and export are a "must" in green transition. In the same way green transition is an opportunity for inbound investments to Finland.

For the visit income growth the evaluation did not have clear indicators, but the success of STF program among the participating companies indicates some positive future results although the stop put on the further development of the program may be a drawback. In any case, the travel industry needs to focus on providing sustainable travel opportunities in order to attract future visitors.

FUNDS FOR RECOVERY ENDED UP TO DIFFERENT INDUSTRY THAN INITIALLY TARGETED

Recovery after the pandemic was a target set for the BF RRF funding by the Finnish RRP and was at the time relevant. After 2021, however, the recovery in the societies after the pandemic has taken place and other crises such as the war in Ukraine have appeared. With respect to this target the RRF funding has not been that successful. Even some companies from the creative and travel sectors that were targeted due to the recovery aspects responded that this funding was not that important for their recovery. Positive assessments mainly came from technology companies that were able to re-direct the work to RDI during pandemia.

FIGURE 4. INTERVIEWEES' RATING OF THE ROLE OF RRF FUNDING TOWARDS THE MAIN OBJECTIVES FROM THEIR OWN OPERATIONS POINT OF VIEW. N = 36
What is your overall own opinion of contiution of the project for the following impacts?
(1 = no contribution at all, 5 = very big contribution, 0 = no opinion)



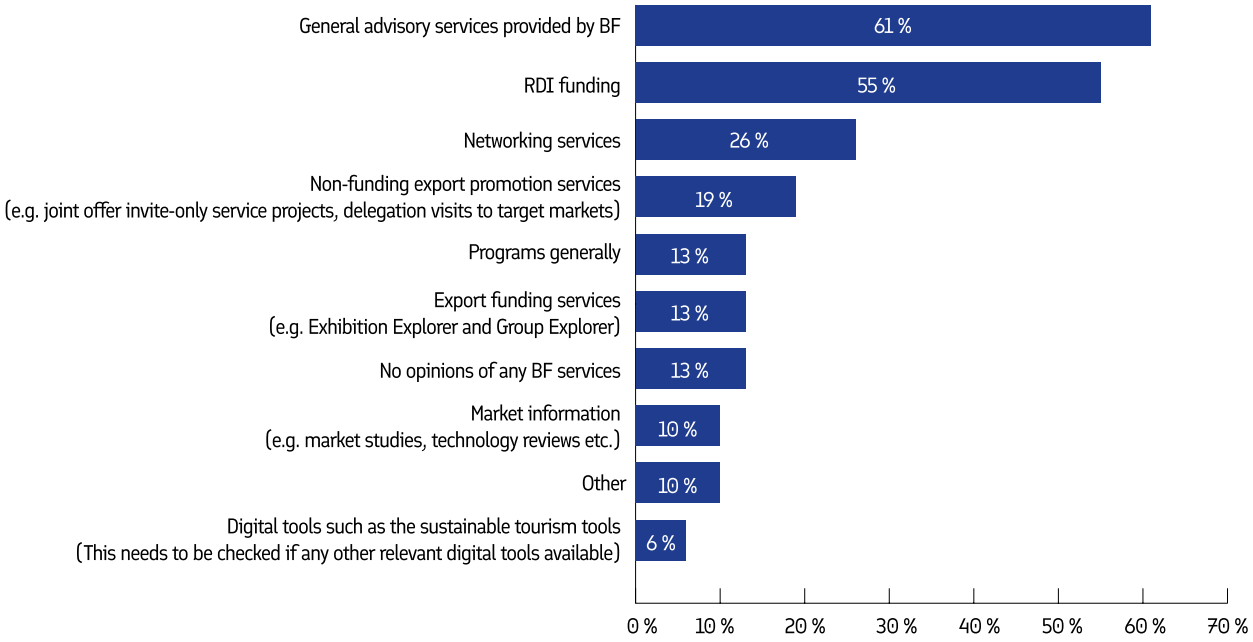
6.2 CONNECTIONS AND SYNERGY WITH BF'S SERVICES

The overall conclusion is that the Sisu project has succeeded well in implementing RRF funding. The mid-term evaluation interviews did not highlight any application and project execution phase RRF specific comments. Naturally the worry of the tight timeline remains, but this is well understood.

The decision to use existing BF's funding instruments and services has been good for reaching the goals. This has enabled building on existing strengths and taking into account that RRF was only a temporary funding package. One should note that also additional funding instruments had to be developed and overall the instrumentation of RRF implementation ended up quite fragmented. RRF does not have its own program identity.

Interviewees were asked how their projects were connected to different BF services and their opinions of them. Figure 5 presents an overview of the BF services used. Most of the companies and research organisations that received RRF funding have a long history and co-operation with BF/Tekes/Finpro. Previous or parallel other RDI projects were most often mentioned as the main service. This is linked to BF's direct contact persons and general advisory services which are frequently mentioned and receive very good feedback. It was very often highlighted that the idea to apply for the RRF funding came from BF's contact person who further helped in the application phase. Different funding instruments targeted to ecosystem building (co-innovation funding, Leading Company funding) also got very good feedback.

FIGURE 5. INTERVIEWEES' RESPONSES TO A QUESTION THAT WHICH OTHER BF SERVICES WERE IMPORTANT AND CONNECTED TO THE WORK.
Number of respondents: 31, selected answers: 70



The interviews covered some start-ups that have used a large number of BF services of which RRF funded project was only one. In some cases, Young Innovative Company funding had been critical and the commercialisation phase had used Tempo instruments. These companies had also used export services and global network experts to find investors, customers, and partners more than others.

Different export services - participations in business delegations, use of different market studies and direct contacts with global network of BF experts - were mentioned in the interviews, often with varying roles and after further discussions. The export programs organised with RRF funding received good feedback.

The links to other BF programs that the projects were tagged with remain weak. While the linkage was recognized in several projects, this had little or no effect on the project execution itself. It may be that the project had benefited from, e,g., different networking events or export activities, but did not identify those to be part of a program.

6.3 FUTURE RISKS AND LESSONS LEARNED

WHAT KIND OF CRITICAL OBSTACLES AND POSSIBILITIES HAVE BEEN FOUND?

The following risk areas came up in the interviews as the most prominent that may affect the project finalisation or the follow-up use of the anticipated results from the projects:

- **General Financial and Market Trends:** There is a declining trend in investments, particularly in R&D, which raises concerns about the future of funding and innovation. This is potentially particularly true for the attractiveness of Finland for global investors in the green transition area.
- **Technology Risks:** Challenges related to system integration and the rapid turn-around of technologies in the field pose significant risks to project success.
- **External Risks:** Factors such as global pandemics, geopolitical events (e.g., the war in Ukraine), and supply chain disruptions can impact project timelines and outcomes.
- **Regulatory Changes:** Slow progress in EU regulations and changing policies can create uncertainty and affect the competitive position of companies.
- **Human Resource Challenges:** The difficulty in finding and retaining skilled personnel, especially in emerging fields like AI and cyber technologies, can hinder project development and execution.
- **Long-term commitment:** Building well-functioning innovation ecosystems takes time. Companies´ resistance to commit themselves for the long time and frequent shifts in partnerships may pose a risk.

HOW COULD THE INPUT EFFECTS BE IMPROVED IN THE FUTURE?

RRF was a one-time funding package following a national RRP which set the targets for BF. The space for BF to manoeuvre once the RRP was set and approved at the European Commission was very limited. It is apparent that similar EU funding opportunities will come again for BF to implement on top of the normal operations. The political decisions set additional requests to BF and BF needs to be able to react quickly. Based on the RRF mid-term evaluation observations the following lessons learned for the future can be listed.

- **Plan as early as possible.** BF has shown capability to handle chaos, but these additional funding packages have been laborious exercises. Just before RRF, BF implemented an additional large recovery support package after the pandemia, and other additional funding packages are coming. At the same time there is a need to reduce operational costs due to government saving programs. Although challenging to implement, it would be important for BF to be involved as early as possible in the planning of funding and its targets so that the implementation could take place smoothly as a part of normal operations. This means work both towards EU and within Finland based on well functioning dialogue that BF alone is not able to initiate. BF's RRF ended up being very fragmented, and BF was not able to set further priorities after the framework planning was made.
- **Avoid fragmented instrumentation.** RRF was implemented with a relatively large number of different funding services and instruments as well as new ones tailored for RRF purposes. It was a good decision to use existing instruments as much as possible, but fewer perhaps would have been sufficient. The large number of instruments with their own specificities also complicates the application phase of the consortia, potentially affecting their commitment negatively. It should be kept in mind that a large number of small projects create a lot of operational work, and the timeline of a project extends over many years exceeding project execution.
- **Tight timeline is a red flag.** Tight timelines do not fit with projects where the execution of them may depend on uncontrollable external factors and which include risk-taking elements that are inherent in RDI projects. With RRF this refers to investment support, where it is often impossible to speed up the execution. BF has a good reputation of being flexible and it is normal to negotiate extensions or alterations to projects. If this is not possible, this should be taken into account in designing the instruments and calls.
- **Tailored person level service needed.** BF gets very good feedback from customers on their direct per-

son contacts and funding advice. Funding requires personalized support measures and services to the companies in order for especially the SME's to utilize the funding to the fullest. Increasing funding, and especially RRF type of special packages with tailored targets, without providing support from BF personnel, will not result in better and bigger innovation projects.

- **Pay attention to sector specific deep understanding.** BF has strong industry sector expertise in many areas, but not in all. Especially if the funding needs to be targeted to areas of not "usual suspects", BF should ensure that there is good understanding of sector specific needs. There is also big innovation potential in cross-sectoral areas and this work could be more coordinated and focused. Example from RRF is the potential to combine travel and creative industries work for serving film industries. It should also be acknowledged that BF is not always the best one for implementing different industry support mechanisms. Part of the planning should be a careful consideration if BF is the best one for the implementation.
- **Aim to ensure continuity if developing new processes and tools.** RRF funding was used for developing a number of internal processes and external tools like the bot services in application phase and STF program tools for customers. RRF conditions forced to develop these quickly, but there is no funding to maintain and further develop these although some of this would be beneficial for customers.

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