

September 2022

REFINE



REFINE has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 894603

### **DOCUMENT SUMMARY INFORMATION**

Grant Agreement No	894603	Acronym	REFINE			
Full Title	Mainstreaming of refinancing schemes as enhancer for the implementation of energy efficiency service projects					
Start Date	01/06/2020 <b>Duration</b> 36 months					
Project URL	https://refinepro	ject.eu/				
Authors	Rachel Leutgöb					
Co-authors	Klemens Leutgöb	, Mirjana Wissinger	ſ			

### **DISCLAIMER**

The REFINE Project receives funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 894603. The sole responsibility for the content of this document lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither the EASME nor the European Commission is responsible for any use that may be made of the information contained herein.



### INTRODUCTION AND OVERVIEW

The aim of this document is to present the results of the EES market survey which was conducted between January and May 2022. The survey was developed by e7 and distributed by all partners of the REFINE project.

In the course of identifying and developing pilot applications for refinancing of EES, financial institutions expressed their interest to learn more about the market potential related to the acquisition of receivables from ongoing and/or future EES projects across Europe. Actually, it is clear that refinancing may support EES providers in overcoming financial bottlenecks and to gain leeway for the expansion of their business more easily. However, there a no market data available that provide information of the current and expected future size of this business approach across Europe.

Therefore - although not directly requested in the project work plan - the REFINE-team decided to implement a small **market survey which addressed exclusively to EES providers (ESCOs)** and asked for more information about their (potential) interest in selling receivables from ongoing or future EES projects.

We tried to keep the survey as short as possible so that filling in the questionnaire took no longer than 5-10 minutes. The full questionnaire is attached in Appendix 2. The following figures contain a **first evaluation of the survey results**. In the following chapter a more detailed evaluation can be found.

The sample contains 48 observations from 10 countries (see Figure 1).

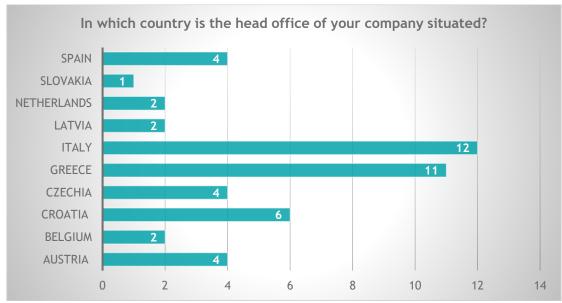


Figure 1 Observed countries



As figure 2 shows, the main financing instruments applied by the surveyed EES providers are credit financing and grants/subsidies. However, also sale of receivables and equity is used quite commonly as financing instruments.

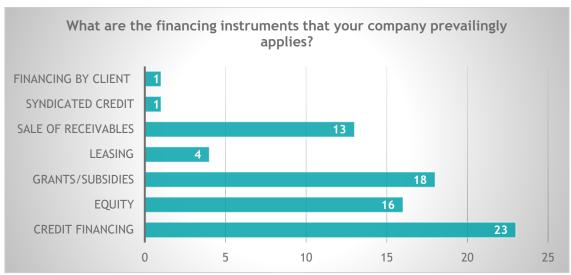


Figure 2 Financing instruments used by responding EES providers

The survey also indicates that among the EES providers the interest in sales of receivables is high: 79% of the respondents have general interest in this financing instrument (see figure 3).

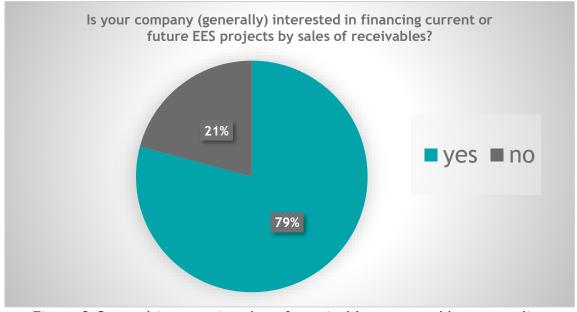


Figure 3 General interest in sales of receivables reported by responding EES providers



Figure 4 and 5 show the approximate amount of receivables that possibly could be sold from ongoing or future EES projects.

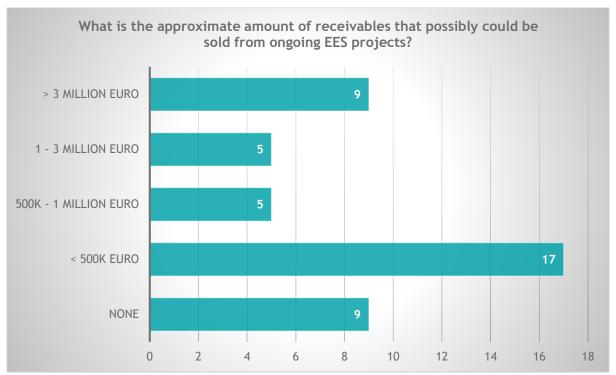


Figure 4 Possible amount of receivables that could be sold from ongoing projects

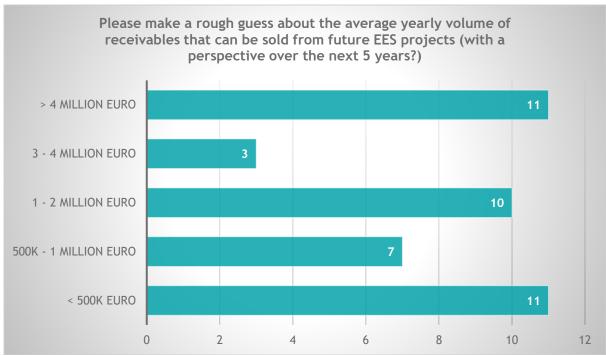


Figure 5 Possible amount of receivables that could be sold from future EES projects



# **FURTHER ANALYSIS**

The following chapter presents a more in-depth analysis of the potential of the refinancing market. Thereby, the most important results will be discussed. Additional results are attached in the Appendix 1.

By analyzing the questions discussed in chapter 1 more detailed, it becomes clear that especially in Italy the majority of participants expect that sales of receivables would help them to implement more projects (see Table A1 in Appendix 1).

Furthermore, as Table 1 indicates, more than half of the Italian participants expect an average yearly volume of receivables from future EES projects (with a perspective over the next 5 years) higher than 1 million  $\in$  - up to higher than 4 million  $\in$ . Similarly, also the Spanish respondents estimate an average yearly volume of receivables that could be sold above 1 million  $\in$  and higher.

**Table 1** Estimated average yearly volume of receivables that can be sold from future EES

projects

projects	Croatia	Greece	Austria	Belgium	Spain	Italy	Czechia
< 500k€	2	4	1	1	0	3	0
500k-1 million €	2	2	0	1	0	2	0
1-2 million €	1	2	1	0	1	4	2
3-4 million €	0	0	0	0	1	0	1
> 4 million Euro	1	1	1	0	2	3	1
none	0	2	1	0	0	0	0
Observations	6	11	4	2	4	12	4

Table 2 shows the number of SMEs and non-SMEs participating in the survey and their interest in refinancing models. The analysis of each country is just based on descriptive statistics as the number of observations for each country is too small. Therefore, no statistical significance can be assumed.

However, for some countries the results point in a specific direction. Generally, we can observe within both groups (SMEs and non-SMEs) a majority interested in applying refinancing schemes. Though, the interest among SMEs is much higher. In Italy, Croatia and Greece a significant number of the participating SMEs shows interest in refinancing. While in other countries no conclusive inferences can be drawn.

**Table 2** The interest of SMEs and non-SMEs in refinancing schemes

Country	SME and interested	SME and <i>not</i> interested	Non-SME and interested	Non-SME and not interested	Number of participants
Austria	1	1	1	1	4
Belgium	2	0	0	0	2
Croatia	5	0	0	1	6
Czechia	1	0	1	0	2
Greece	6	2	2	0	10
Latvia	1	1	0	0	2



Netherlands	0	0	1	1	2
Slovakia	1	0	0	0	1
Spain	1	0	3	1	5
Italy	8	3	1	0	12
Sum	26	7	9	4	46

Table 3 depicts the main reasons for the participating EES providers for not being interested in financing project by implementing sale of receivables till this point.1 It can be observed that a variety of reasons is relevant for the participants. <sup>2</sup> Two reasons in particular seem to concern the EES providers, especially in Italy and Austria:

- Sale of receivables is too expensive compared to other financing (i) instruments.
- Requirements on creditworthiness of clients are too strict. (ii)

Table 4 shows the aspects which could positively influence the perception of sale of receivables according to EES providers indicating not being interested in applying this financing instrument. Also, here no clear tendency can be identified. However, better information on refinancing schemes and easier access to refinancing institutions could influence the perception positively according to our respondents. Nevertheless, it can be assumed that all of the listed aspects are important for mainstreaming refinancing schemes.

<sup>&</sup>lt;sup>2</sup> The complete table can be found in Appendix 1.



<sup>&</sup>lt;sup>1</sup> For Table 2 and Table 3 the survey allowed multiple answers to this question.

Table 3 Main reasons why EES providers were not interested in sale of receivables till this point

0		instruments			refinancing
J	0	1	1	0	2
0	0	0	0	1	1
1	1	1	0	0	3
0	0	0	0	1	2
1	1	2	3	0	3
2	2	4	4	2	-
	0 1	0 0 1 1 2 2	0 0 0 0 1 1 2 2	0 0 0 0 0 1 1 2 3 2 2 4 4	0     0     0     0     1       1     1     2     3     0       2     2     4     4     2

\*For Table 4 the survey allowed multiple answers to this question.

Table 4 Aspects which could positively influence the perception of sale of receivables for EES projects

Country	Better information on refinancing approaches	Easier access to possibly interested financial institutions	Standard contractual stipulations which can be directly used for EES projects	Better risk rating of EES projects	Lower costs	Number of participants not interested in refinancing
Austria	0	2	0	0	0	2
Croatia	1	0	0	1	1	1
Greece	1	1	1	1	0	3
Italy	2	2	2	1	2	3
Sum	4	5	3	3	3	-
*F T-bl- 4 tl		to this supplies				

\*For Table 4 the survey allowed multiple answers to this question.



Furthermore, it is also important to evaluate the client base of the EES providers seeing an advantage in using sales of receivables (see table 5) and to indicate the areas mostly represented in their company's EES business (see table 6)3.

Generally, it can be observed that the client pool of the EES providers is quite broad. However, as table 4 shows, many EES providers with interest in refinancing schemes have to a large extend public clients. Similarly, the areas in which the interested EES providers are represented is broadly different between countries and no clear tendency can be observed.

**Table 5** Clients of EES providers, who are interested in sale of receivables

Country	Public buildings	Residential buildings	Commercial buildings <sup>4</sup>	SMEs from different branches	Larger industrial companies	n.a
Austria	0	1	1	1	0	1
Belgium	1	0	2	2	0	0
Croatia	4	1	3	1	1	0
Czechia	3	0	0	1	1	0
Greece	4	1	3	2	2	3
Latvia	1	1	1	1	0	0
Netherlands	0	0	0	0	1	0
Slovakia	0	0	0	0	0	1
Spain	3	1	2	1	2	0
Italy	6	6	3	4	5	0
Sum	22	11	15	13	12	5

\*For Table 5 the survey allowed multiple answers to this question.

Table 6 Represented areas of the EES businesses that are interested in refinancing

	Public lighting	Building technologie s	Building reconstructi on	Renewable energy projects	EE measures in industry	n. a.
Austria	0	1	0	1	0	0
Belgium	0	2	1	0	0	0
Croatia	1	0	3	2	0	0
Czechia	2	3	3	2	1	0
Greece	3	2	1	5	0	0
Latvia	1	1	1	0	1	0
Netherlands	1	0	0	0	1	1
Slovakia	0	0	0	0	0	1
Spain	1	1	3	3	0	0
Italy	n.a	n.a	n.a	n.a	n.a	n.a
Sum	9	10	12	13	3	2

\*For Table 6 the survey allowed multiple answers to this question.

<sup>&</sup>lt;sup>4</sup> Commercial buildings include for example office buildings, shopping centers, logistic centers etc.



<sup>&</sup>lt;sup>3</sup> For Table 4 and Table 5 the survey allowed multiple answers to this question

As main conclusions from our EES market survey on refinancing schemes, we would like to underline the following aspects:

- For many EES providers, credit financing is the easiest and thus most used financing instrument. However, also refinancing approaches are commonly used among some EES providers participating in the survey (see figure 2).
- A clear majority of all participants is (generally) interested in (re)financing current and future EES projects by sales of receivables (see figure 3).
- Participants that are interested in sales of receivables as a financing instrument are to a large extend SMEs (see table 1).
- Especially the participants from the Italian and Spanish EES markets estimate the average yearly volume of sales of receivables from future EES projects in the range of 1 million € up to over 4 million €.
- EES providers not interested in refinancing so for, have the perception that sales of receivables are too expensive and the requirements too strict. Consequently, better information and an easier access to refinancing institutions is required - among other additional activities - to increase the attractiveness of refinancing.



# **APPENDIX 1**

**Table A1** Do you expect that financing resources from the sale of receivables would help

you to imp	lement more	projects?
------------	-------------	-----------

	Croatia	Greece	Austria	Belgium	Spain	Italy	Czechia
n.a	0	1	1	0	0	3	0
No	0	0	0	1	0	0	0
Yes	4	6	1	1	3	8	3
I do not know	2	4	2	1	1	1	1
Observations	6	11	4	3	4	12	4

\*For Table A1 the survey allowed multiple answers to this question.

**Table A2** Please make a rough guess about the average yearly volume of receivables that can be sold from future EES projects (with a perspective over the next 5 years).

	Croatia	Greece	Austria	Belgium	Spain	Italy	Czechia
< 500k€	2	4	1	1	0	3	0
500k-1 million €	2	2	0	1	0	2	0
1-2 million €	1	2	1	0	1	4	2
3-4 million €	0	0	0	0	1	0	1
> 4 million Euro	1	1	1	0	2	3	1
none	0	2	1	0		0	0
Observations	6	11	4	2	4	12	4

\*For Table A2 the survey allowed multiple answers to this question.



Table A3 Main reasons why EES providers were not interested in sale of receivables till this point

	Sufficient other financial resources available	Clients do not accept sales of receivables	Sale of receivables is too expensive compared to other financing instruments	Requirements on creditworthiness of clients are too strict		Number of participants not being interested in refinancing
Austria	0	0	1	1	0	2
Belgium	0	0	0	0	0	0
Croatia	0	0	0	0	1	1
Czechia	0	0	0	0	0	0
Greece	1	1	1	0	0	3
Latvia	0	0	0	0	0	0
Netherlands	0	0	0	0	1	1
Slovakia	0	0	0	0	0	0
Spain	0	0	0	0	0	0
Italy	1	1	2	3	0	3
Sum	2	2	4	4	2	-
*For Table A3 the sur	rvey allowed multiple answer	s to this question.				

Table A4 Aspects which could positively influence the perception of sale of receivables for EES projects

	Better information on refinancing approaches	Easier access to possibly interested financial institutions	Standard contractual stipulations which can be directly used for EES projects	Better risk rating of EES projects	Lower costs	Number of participants not interested in refinancing
Austria	0	2	0	0	0	2
Belgium	0	0	0	0	0	0
Croatia	1	0	0	1	1	1
Czechia	0	0	0	0	0	0
Greece	1	1	1	1	0	3
Latvia	0	0	0	0	0	0
Netherlands	0	0	0	0	0	0



Slovakia	0	0	0	0	0	0		
Spain	0	0	0	0	0	0		
Italy	2	2	2	1	2	3		
Sum         4         5         3         3         3								
*For Table A4 the survey allowed multiple answers to this question.								

Table A5 Clients of EES providers (which are *not* interested in sale of receivables)

	Public buildings/facilities	Residential buildings	Commercial buildings	SMEs from different branches	Larger industrial companies	n.a
Austria	1	0	0	0	0	0
Belgium	0	0	0	0	0	0
Croatia	0	0	0	1	1	0
Czechia	1	0	0	0	0	0
Greece	1	0	1	1	1	0
Latvia	0	0	0	0	0	0
Netherlands	0	0	0	0	0	1
Slovakia	0	0	0	0	0	0
Spain	0	0	0	0	0	0
Italy	2	1	2	2	2	3
Sum	5	1	3	4	4	4

<sup>\*</sup>For Table A5 the survey allowed multiple answers to this question.

Table A6 Represented areas of the EES businesses that are not interested in refinancing

	Public lighting	Building technologies	Building reconstruction	Renewable energy projects	EE measures in industry	Other	n.a.
Austria	0	0	1	0	0	0	0
Belgium	0	0	0	0	0	0	0
Croatia	1	0	0	1	0	0	0
Czechia	1	1	1	1	0	0	0
Greece	1	1	0	2	0	0	0
Latvia	0	0	0	0	0	0	0
Netherlands	0	0	0	0	0	0	1
Slovakia	0	0	0	0	0	0	0



Spain	0	0	0	0	0	0	0
Italy	n.a						
Sum	3	2	2	4	0	0	1

<sup>\*</sup>For Table A6 the survey allowed multiple answers to this question.



## **APPENDIX 2**

# EU-WIDE SURVEY ON THE MARKET VOLUME FOR REFINANCING OF THE ENERGY EFFICIENCY SERVICE BUSINESS

### QUESTIONNAIRE; v2.0 – 13 Dec 2021

### **Background and Introduction**

Although by far not the only barrier, limited access to financial resources represents a serious restriction for market growth of energy efficiency service (EES) markets. Against this background, refinancing models get increasingly important, containing all kinds of financing models that enable EES providers to clean up their balance sheet, thus gaining financial leeway for new projects. In many cases, in these models an EES provider sells and a refinancing institution acquires receivables to be paid by an EES client.

The EU-project REFINE is aiming to mainstreaming, standardizing and disseminating refinancing approaches for the EES business. In this context, financial institutions have expressed their interest to learn more about the EU-wide market potential related to the acquisition of receivables from ongoing and/or future EES projects. This questionnaire is addressed to EES providers across EU with the aim to gain information.

1. Which are the main energy efficiency services which the company, which you are representing is offering on the market? [multiple answers possible]							
	Energy Performance Contracting	(EPC)					
	Energy Supply Contracting (ESC)						
	Other Forms of EES:						
2.	Does your company offer other services Yes / No	than EES?					
3.	If yes, which kind of services:						
4.	Is your company an SME? Yes / No						
5.	•	fer energy efficiency services? [multiple answers					
6.	What are the financing instruments that implementation of EES projects? [multip	your company prevailingly applies for the le answers possible]					
	Credit financing	Grants/Subsidies					
	Equity	Sale of Receivables					
	Leasing	Others Financing:					



7. Is your company generally interested in financing current or future EES projects by sales of receivables?

Yes / No

#### IF ANSWER TO QUESTION 7 IS "NO":

8. What are the main reasons for not being interested in financing project implementation by sale of receivables? [multiple answers possible]

Sufficient other financial resources available

Clients do not accept sales of receivables

Sale of receivables is too expensive compared to other financing instruments

Requirements on creditworthiness of clients are too strict

Sale of receivables is too complex (contractual, organisational etc.)

Have no information / Do not know

Other reasons:	

9. Which aspects could positively influence your perception of the financing instrument of sale of receivables? [multiple answers possible]

> Better information on refinancing approaches (best practice, general requirements for forfaiting...)

Easier access to possibly interested financial institutions

Standard contractual stipulations which can be directly used for EES projects

Better risk rating of EES projects

Lower costs

Other: \_\_\_\_\_

### IF ANSWER TO QUESTION 7 IS "YES":

10. Do you expect that financing resources from the sale of receivables would help you to implement more projects?

Yes / No / I don't know

- 11. What is the volume of the yearly turnover generated by your company through EES projects?
  - < 500k€
- 500k-1 million €
- 1-5 million €
- 5-10 million €
- > 10 million €
- 12. What is the approximate amount of receivables that possibly could be sold from ongoing EES projects?
  - none
- < 500k€
- 500k-1 million € 1-3 million €
- > 3 million €
- 13. Please make a rough guess about the average yearly volume of receivables that can be sold from <u>future</u> EES projects (with a perspective over the next 5 years)?



	< 500k€		500k-1 million €	1-2 milli	ion €	3-4 mill	ion €	> 4 million €
14. What is the average duration of your E					ntracts?			
	3-5 year	rs	5-7 years	7-10 years	10-15	years	> 15 ye	ars
15.	Who are	e the n	nain clients in you	ur company's	EES busin	ess? [mui	ltiple ans	wers possible]
		Ownei	rs of public buildi	ngs/facilities				
		Ownei	s of residential b	uildings				
		Ownei etc.)	rs of commercial	buildings (off	ice buildin	gs, shopp	oing cent	res, logistic centres
		SMEs 1	from different br	anches				
		Larger	industrial compa	nies				
16.	6. Which areas are mostly represented in your company's EES business? [multiple answers possible]							
		Public	lighting					
		Buildir	ng technologies					
		Buildir	ng reconstruction					
		Renew	able energy proj	ects				
		EE me	asures in industry	<b>y</b>				
		Other:						
17.			try is the head of f countries	fice of your co	ompany si	tuated?		
18.	In whic	h coun	tries do you gene	erate your tui	nover?			

- ...list of countries... % of turnover
- 19. Concluding questions (Avoidance of double counting): Name of the company, name and position of the respondent

