



REE4EU: Integrated High Temperature Electrolysis (HTE) and Ion Liquid Extraction (ILE) for a Strong and Independent European Rare Earth Elements Supply Chain

Project type: Innovation action

Start date of project: 01/10/2015 Duration: 48 months

PROJECT

D10.4 Regular Project Meetings (4 times per year) mini-review

WP n° and title	WP10. Project Management
Responsible Author(s)	SINTEF
Contributor(s)	
Version	Final



TABLE OF CONTENTS

E>	ecutiv	e Summary	5
1	Intr	oduction	6
2	Fac	e-to-Face Meetings	6
	2.1	Kick-off Meeting, 4-5 October 2015, Brussels	6
	2.2	6M Progress Meeting, 19-20 April 2016, Halmstad (Sweden)	6
	2.3	12M Progress Meeting, 19-20 October 2016, Trondheim (Norway)	7
	2.4	18M Progress Meeting/First Review Meeting, 19-20 April 2017, Liverpool (UK)	7
	2.5	24M Progress Meeting/Midterm Evaluation, 18 September 2017, Brussels	8
	2.6	30M Progress Meeting, 17 April 2018, Hanau (Germany)	9
	2.7	Second Review Meeting, 20-21 June 2018, Kristiansand (Norway)	9
	2.8	36M Progress Meeting, 10 October 2018, Viviez (France)	10
	2.9	42M Progress Meeting/Third Review Meeting, 23 April 2019, Brussels	11
	2.10	Final Meeting, 11 September 2019, Brussels	11
3	Con	sortium Telephone Conferences	12
4	Tec	hnical Meetings	12
5	Sun	nmary of Project Meetings	13
Αd	knowl	edgements	18

TABLE OF FIGURES

Figure 1. REE4EU consortium at the KoM.	6
Figure 2. REE4EU consortium at the 6M Progress Meeting, hosted by partner Stena	
Figure 3. REE4EU consortium at the 12M Progress Meeting, hosted by the coordinator, SINTEF	7
Figure 4. REE4EU consortium and Project Monitor from the EU-Commission at the 18M/RV1 Meeting, hosted by partner LCM	8
Figure 5. REE4EU consortium and PO at the 24M/Midterm Meeting, hosted by partner CEFIC	8
Figure 6. REE4EU consortium at the 30M Progress Meeting, hosted by partner VAC	9
Figure 7. REE4EU consortium and PO at the RV2 Meeting, hosted by partner Elkem	10
Figure 8. REE4EU consortium at the 36M Progress Meeting, hosted by partner SNAM	10
Figure 9. REE4EU consortium and PO at the RV3 Meeting, hosted by partner CEFIC	11
Figure 10. REE4EU consortium and Project Monitor from the EU-Commission at the Final Meeting	12

D10.4 Regular Project Meetings (4 times per year) mini-review Dissemination level: PUBLIC



LIST of TABLES

Table 1. Summary of all project meetings throughout the project lifetime. Lilla shaded	
represent the face-to-face progress and review meetings with the consortium, while	
green-shaded are the consortium's TFLCO meetings. Other WP meetings are also given	13



List of abbreviations and definitions

Abbreviation	Definition				
CEFIC	The European Chemical Industry Council				
HTE	High Temperature Electrolysis				
ILE	Ionic Liquid Extraction				
КоМ	Kick-off meeting				
LCM	Less Common Metals				
PO	Project Officer from the EU-Commission				
PM	Project monitor from the EU-Commission				
RE	Rare Earth/s				
SPIRE	Sustainable Process Industry through Resource and Energy Efficiency				
VAC	Vacuumschmelze GmbH & Co. KG				
WP	Work package				

D10.4 Regular Project Meetings (4 times per year) mini-review Dissemination level: PUBLIC



Executive Summary

Regular discussions with all partners was key in order to build a consistent work team for project execution.

Apart from the physical project meetings every six months with the whole consortium, reviews of the project progress took place almost every month by telecommunications and videoconferencing.

Moreover, numerous technical meetings, both face-to-face as well as TELCOs, took place during the project lifetime, but specially during the first months of the project.



1 Introduction

In order to assure a smooth and fluent consortium collaboration, multiple meetings took place through the lifetime of the project (4 years).

Apart from the face-to-face meetings with the whole consortium every 6 months, multiple telephone conferences (almost every month, 35 in total) with the presence of all partners were organised by the project coordinator. Moreover, multiple technical meetings took place, especially during the first year of the project, with the main focus of planning the engineering and build-up of the REE4EU pilot.

2 Face-to-Face Meetings

A total of 10 face-to-face meeting took place during the 4 years' project period.

2.1 Kick-off Meeting, 4-5 October 2015, Brussels

The project, funded in the frame of Horizon 2020 TOPIC SPIRE-07-2015, kicked-off on $4^{th} - 5^{th}$ October 2015. The meeting took place at the Mid-Norway European office in Brussels, hosted by the coordinator SINTEF, and in the presence of the Project Officer from the EU-Commission, Dr. Istvan Ritz.

The partners were very excited over the project's 4 years ahead and had big expectations in realizing a breakthrough innovation in the field of recovery rare earth elements from RE-containing waste streams, by developing, for the first time at industrial scale, an efficient and cost effective method of extraction and a direct production route for Rare Earth Alloys.



Figure 1. REE4EU consortium at the KoM.

2.2 6M Progress Meeting, 19-20 April 2016, Halmstad (Sweden)

The first progress meeting of the project took place in Halmstad, Sweden, hosted by partner Stena.

Stena just moved to those facilities at the time of the meeting. The consortium could visit the new plant Stena Nordic Recycling Center, which is one of Europe's most modern recycling facilities and forms the hub of the Group's industrial recycling infrastructure.

Stena is key-partner providing raw material that was treated at the REE4EU pilot: almost half a tonne of spent permanent magnets, which was used in the ILE-HTE process, extracting pure RE alloy that was used in the manufacture of new permanent magnets.

While being in Halmstad, the coordinator and Stena prepared the first video launched in the project website, explaining the aim of the project and Stena's role in the consortium.



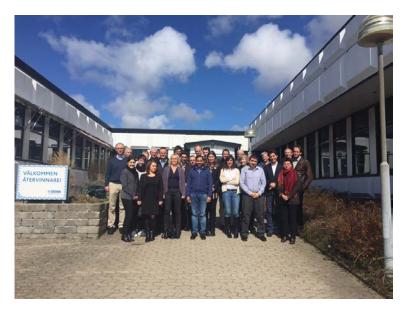


Figure 2. REE4EU consortium at the 6M Progress Meeting, hosted by partner Stena

2.3 12M Progress Meeting, 19-20 October 2016, Trondheim (Norway)

The REE4EU project partners met in Trondheim on $19^{th} - 20^{th}$ October 2016, to discuss the results achieved so far and plan further steps to be taken. The progress meeting, hosted by SINTEF, the project coordinator, focused mainly on the engineering strategies of the High Temperature Electrolysis (HTE) and Ionic Liquid Extraction (ILE) units of the pilots to be build up at Elkem's (Norway) and LCM's (UK) premises.



Figure 3. REE4EU consortium at the 12M Progress Meeting, hosted by the coordinator, SINTEF

2.4 18M Progress Meeting/First Review Meeting, 19-20 April 2017, Liverpool (UK)

On April 19th - 20th 2017 took place the third project meeting of REE4EU, hosted by the partner LCM, in Liverpool (UK).

The meeting aimed at analysing the progresses done so far, evaluating the activities implemented and taking next steps for future actions. In those days it was also performed the first review meeting, with the presence of the Commission's project monitor, who was glad of the results achieved so far.

The partners discussed about the strategies to be implemented in order to build up the REE4EU's pilot, with a specific focus on its detail engineering design. The consortium also visited the premises of hosting partner



LCM, a world leader in the manufacture and supply of complex alloy systems and metals, specialists in those based on rare earth elements.



Figure 4. REE4EU consortium and Project Monitor from the EU-Commission at the 18M/RV1 Meeting, hosted by partner LCM

2.5 24M Progress Meeting/Midterm Evaluation, 18 September 2017, Brussels

On Monday 18th September 2017, the coordinator, Ana Maria Martinez (SINTEF), welcomed all the REE4EU consortium to the M24 Progress Meeting which coincided with midterm. Especially the project officer from the EU Commission, Dr. Istvan Ritz was welcomed.

During the meeting, the work package leaders presented the updates on the activities realized so far. Dr Ritz informed the consortium that he is satisfied with the progress.

The meeting was very well organized and hosted by CEFIC.

CEFIC is supporting dissemination activities through Europe and beyond within the relevant Process and Chemical industries with particular attention to the European Innovation Partnership on Raw Materials and SPIRE frameworks. In fact, the date of the project meeting has been chosen also in conjunction with the SPIRE Process Industry Conference, where the REE4EU project was presented by the project coordinator.



Figure 5. REE4EU consortium and PO at the 24M/Midterm Meeting, hosted by partner CEFIC



2.6 30M Progress Meeting, 17 April 2018, Hanau (Germany)

On April 17th 2018, the REE4EU partners were hosted by VACUUMSCHMELZE GmbH & Co. KG, in Hanau, for their M30 Progress Meeting.

VACUUMSCHMELZE GmbH & Co. KG is one of the key REE4EU partner, as leading global manufacturer of advanced magnetic materials and related products. The partners gathered to analyse the project status and organize the steps to be taken in the future, according to the project plans. SINTEF, Less Common Metals, PNO Consultants, Elkem and Inovertis presented the activities carried out in the last six months and plans for the next period.

Mr. Bernd Schleede, Director Product Management of VACUUMSCHMELZE GmbH & Co. KG gave a very interesting presentation on the company's history, products and manufacturing methods. This worked also as a very good introduction for the plant tour that the partners had later on during the meeting.



Figure 6. REE4EU consortium at the 30M Progress Meeting, hosted by partner VAC

2.7 Second Review Meeting, 20-21 June 2018, Kristiansand (Norway)

The second review meeting of the REE4EU project took place 20th – 21st June 2018 in Kristiansand (Norway) and it was hosted by Elkem. During the meeting, the project officer and the whole consortium had also the opportunity to visit the Elkem's premises at Fiskå, Norway, where the REE4EU pilot is installed.

The PO from the EU-Commission, Dr. Istvan Ritz, could examine the different units the pilot consists of, namely ILE and HTE units, which were at that time in operation at Elkem. Moreover, an extensive presentation of the results obtained during the trials done so far was given. Up to date, the ILE unit has treated 1.7 tonnes of permanent magnets swarf, giving a total amount of ca. 250 kg of RE oxides. The HTE unit for direct conversion of the RE-oxides into RE alloys is expected to be up-running in August 2018.

The PO was very enthusiastic about the project achievements, which represents a first-time demonstration of closed-loop recycling for permanent magnets at almost industrial scale.





Figure 7. REE4EU consortium and PO at the RV2 Meeting, hosted by partner Elkem

2.8 36M Progress Meeting, 10 October 2018, Viviez (France)

On 10th October 2018, the REE4EU partners were hosted by SNAM, in Viviez. The consortium had the great opportunity to visit their premises: this French company is one of the leading European key-players in the field of collecting and recycling batteries.

For their M36 Progress Meeting, the partners proudly announced that the REE4EU's high temperature electrolysis (HTE) pilot unit is successfully in continuous operation and this is indeed an effective case of how the project transferred knowledge from lab to run a real pilot plant. Elkem and SINTEF teams were very satisfied with these major technical achievements after three years of hard work, and the whole consortium hopes this represents the first milestone towards the future industrial production of rare earth alloys in Europe: being able to really close the loop in permanent magnets' recycling.



Figure 8. REE4EU consortium at the 36M Progress Meeting, hosted by partner SNAM



2.9 42M Progress Meeting/Third Review Meeting, 23 April 2019, Brussels

The third review project meeting took place on the 23rd April 2019 in CEFIC premises, up on the 13th floor of the B40 in Brussels. Wonderful view, great day and interesting talk for the REE4EU consortium that was playing the last year of the project.

The Project Officer Dr. Istvan Ritz and Professor Toru Okabe from the University of Tokyo were the guests of honours.

In this final stage the presented main activities focused on the manufacture and validation of the endproduct, which is the permanent magnet produced out of recycled material obtained in the REE4EU pilot. Moreover, the validation of REE4EU technology to other types of RE-containing wastes (nickel metal hydride battery waste) were ready to start after the preparation and commissioning of the pilot equipment at Elkem and SNAM.

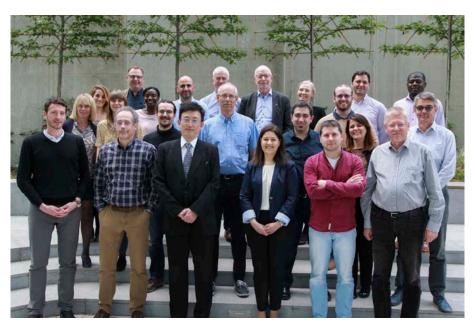


Figure 9. REE4EU consortium and PO at the RV3 Meeting, hosted by partner CEFIC

2.10 Final Meeting, 11 September 2019, Brussels

On September 11th 2019, the REE4EU consortium gathered to present to the EU-Commission's project monitor the latest results and overall achievements after 4 intense years of hard work. Since 1st October 2015, when the project started, all partners have worked hand-in-hand in order to demonstrate the REE4EU technology at pilot scale. For the first time, a closed-loop permanent recycling process has been demonstrated at this level, being able to treat almost 2 tonnes of RE-containing waste from the permanent magnet value chain, producing new rare earth master alloy from the recycled material, and manufacturing new magnets. The project has demonstrated that the magnets manufactured with the recycled material in the industrial line at Vacuumschmelze, possess the same magnetic properties as those obtained using virgin materials. The high quality in the magnetic properties made them suitable for highly efficient electric motors.





Figure 10. REE4EU consortium and Project Monitor from the EU-Commission at the Final Meeting

3 Consortium Telephone Conferences

A total of 35 telephone conferences with the whole consortium were organized by the project coordinator throughout the lifetime of the project, 3 in 2015, 10 in 2016, 8 in 2017, 8 in 2018 and 6 in the last year 2019. This means an average of 9 meetings pre year.

During the TELCOs, a status of the activities was provided by all partners, encountered hurdles discussed, and further plans debated.

Minutes of all meetings were prepared by the project coordinator and distributed to the consortium via the project platform.

A detailed summary of all TELCOs is given in Table 1.

4 Technical Meetings

Several technical meetings, both face-to-face as well as TELCOs, took place during the project lifetime. Face-to-face meetings were carried out especially during the first 18 months of the project.

The main goal of the REE4EU project was to engineer, upscale, pilot and prove a more efficient novel direct rare earth alloys (REA) production route for permanent magnets from industrial residues and side streams. Then, team-work and good planning from the very beginning of the project was crucial. In this way, it is important to mention the following technical meetings:

- Kick-off meeting for planning the engineering work of the pilot REE4EU ILE+HTE solution within dedicated facilities for REA production from PM-waste, which was installed at Elkem. On January 2016 all partners involved in technical activities gathered at partner Elkem's premises at Fiskå, Norway. Apart from common discussions, discussions in groups for the ILE and HTE process, separately were carried out. Elkem, together with the partners responsible for engineering the REE4EU solution stablished a road map for the work in the following months, until the basic engineering blueprint documentation was accomplished (planned for M18).
- Kick-off meeting for planning the engineering work of the pilot REE4EU ILE unit. On December 2015, partners responsible for the development of the ILE process at pilot scale gathered at partner Tecnalia's premises in San Sebastian, Spain. Tecnalia, as technology provider for the ILE process welcomed Elkem, and Idener teams, to understand the challenges of the process.



Kick-off meeting for planning the engineering work of the pilot REE4EU HTE unit. On June 2016, partners responsible for the development of the HTE process at pilot scale gathered at partner SINTEF's premises in Trondheim, Norway. SINTEF, as technology provider for the HTE process welcomed Elkem, LCM, Idener and UPS teams, to understand the challenges, and develop a road map until complete basic engineering blueprint documentation.

A summary of all technical meetings during the whole project's lifetime is gathered in Table 1.

5 Summary of Project Meetings

The summary of all project meetings carried out throughout the project lifetime is given in the following Table:

Table 1. Summary of all project meetings throughout the project lifetime. Lilla shaded represent the face-to-face progress and review meetings with the consortium, while green-shaded are the consortium's TELCO meetings. Other WP meetings are also given.

Meeting	Date	Venue	Attendants
Kick-off meeting	5-6 October 5-6 2015	Brussels (Belgium)	The whole consortium and PO
Status meeting #1	13 October 2015	Skype for business	The whole consortium except LCM,
			VAC, CEA, SNAM, Avere, CEFIC, UPS
WP1 meeting ILE step	15 October 2015	San Sebastian	Tecnalia, IDENER
		(Spain)	
WP2 meeting HTE step	2 November 2015	Trondheim	SINTEF, Elkem
		(Norway)	
Status meeting #2	10 November 2015	Skype for business	The whole consortium except LCM,
			Elkem, CEA, STENA, Avere, PNO, CEFIC,
			UPS
WP2 meeting HTE step	7-8 December 2015	Trondheim	SINTEF, UPS, Elkem
14/D4 14/D2 11.5 1	0.0 1 2045	(Norway)	T !: 5!! !DENIED
WP1-WP3 ILE step	9 December 2015	San Sebastian	Tecnalia-Elkem-IDENER
technical meeting Status meeting #3	10 December 2015	(Spain) Skype for business	The whole consortium except LCM,
Status meeting #3	10 December 2015	skype for business	VAC, Elkem, IDENER, Avere, UPS, CEFIC
WP1 meeting HM		Skype	CEA, SNAM
process	11 January 2016	Зкуре	CLA, SIVAIVI
Status meeting #4	12 January 2016	Skype for business	The whole consortium except LCM,
Status Meeting # 1	12 3411441 7 2010	Skype for Susmess	Avere
WP4-WP5 meeting HTE	14 January, 2016	Liverpool (UK)	LCM, Elkem
step	γ,	, ,	
WP3 ILE step	13 January 2016	WEBEx	Inovertis-SINTEF-IDENER
WP3 ILE-HTE	28-29 January 2016	Kristiansand	SINTEF, Tecnalia, Elkem, Inovertis-
engineering		(Norway)	IDENER, LCM, STENA
Status meeting #5	9 February 2016	Skype for business	The whole consortium except LCM,
			VAC, CEA, Avere, UPS
WP1 meeting HM	12 February 2016	Skype	CEA, SNAM
process			
WP1-WP3 ILE step	16 February 2016	Madrid (Spain)	Tecnalia, IDENER
WP3 ILE engineering	22 February 2016	Skype for Business	Elkem, Inovertis, IDENER, SINTEF
strategy (draft)			
presentation		<u></u>	
WP1-WP3 ILE step	24-25 February 2016	Tecnalia premises	Tecnalia, IDENER
technical Meeting		in Madrid (Spain)	
Status meeting #6	7 March 2016	Skype for business	The whole consortium except LCM,
			VAC, Avere, PNO, UPS



WP1-WP3 ILE step technical meeting WP1-WP3 ILE step final concept WP1 meeting HM process WP1-WP3 ILE step final concept WP1-WP3 ILE step final concept WP1-WP3 ILE step final concept WP1-WP3 ILE step final process WP1-WP3 ILE step final process WP1-WP3 ILE step strategy consolidation Status meeting #7 12 April 2016 Skype for business WP3 ILE process concept review WP3 Material needs discussion WP4 ILE step technical meeting #8 19 Mayo 2016 Skype for business Inovertis, Tecnalia, IDENER skype for Business Inovertis, Elkem, SINTEF, IDENE skype for business Inovertis, Elkem, SINTEF, IDENER skype for business Inovertis, Elkem, CEA, SNAM	pt LCM,
WP1-WP3 ILE step final concept WP1 meeting HM process WP1-WP3 ILE engineering strategy consolidation Status meeting #7 WP3 ILE process concept review WP3 Material needs discussion WP3 Material needs discussion WP1 ILE step technical meeting #8 WP1 ILE step technical meeting #8 WP1 ILE step technical meeting #8 WP1 March 2016 Skype for Business Skype CEA, SNAM Skype for business Inovertis, Elkem, SINTEF, IDENE Inovertis, Elkem, SINTEF, IDENE Skype for business Inovertis, Elkem, SINTEF, IDENE Inovertis, Elkem, CEA, Avere, UPS The whole consortium except Inoverties (joined by phone) WP3 Material needs Skype for business WP4 ILE step technical Skype for business WP5 ILE step technical Skype for business WP6 ILE step technical Skype for business WP7 ILE step technical Skype Skype for business WP8 ILE step technical Skype Skype for business WP9 ILE step technical Skype Skype Skype Skype CEA, SNAM	pt LCM,
WP1 meeting HM process WP1-WP3 ILE engineering strategy consolidation Status meeting #7 12 April 2016 Skype for business Skype for business The whole consortium except likem, CEA, Avere, UPS The whole consortium WP3 ILE process concept review WP3 Material needs discussion WP4 ILE step technical meeting Skype for business Skype for business The whole consortium (Sweden) Kristiansand (Sweden) (Norway) Skype for business Elkem, Inovertis, IDENER, (joined by phone) Elkem, Inovertis, SINTEF, To VAC, SNAM, STENA WP1 ILE step technical meeting Status meeting #8 19 Mayo 2016 Skype for business The whole consortium except of the consortium except o	pt LCM,
wP1-wP3 ILE engineering strategy consolidation Status meeting #7 12 April 2016 Skype for business The whole consortium except Elkem, CEA, Avere, UPS The whole consortium except (Sweden) WP3 ILE process concept review WP3 Material needs discussion WP1 ILE step technical meeting Skype for business The whole consortium Kristiansand (Sweden) Kristiansand (Norway) Skype for business Elkem, Inovertis, IDENER, (joined by phone) Elkem, Inovertis, SINTEF, Toyac, SNAM, STENA WP1 ILE step technical meeting Status meeting Status meeting #8 19 Mayo 2016 Skype for business The whole consortium except of the	pt LCM,
WP1-WP3 ILE engineering strategy consolidation Status meeting #7 12 April 2016 Skype for business The whole consortium except Elkem, CEA, Avere, UPS The whole consortium except (Sweden) WP3 ILE process concept review WP3 Material needs discussion WP4 ILE step technical meeting Skype for business The whole consortium Kristiansand (Sweden) Kristiansand (Norway) Skype for business Elkem, Inovertis, IDENER, (joined by phone) Elkem, Inovertis, SINTEF, To VAC, SNAM, STENA WP1 ILE step technical 12 May 2016 Skype for business Skype for business Tecnalia, IDENER The whole consortium except of the conso	pt LCM,
engineering strategy consolidation Status meeting #7 12 April 2016 Skype for business The whole consortium except Elkem, CEA, Avere, UPS 6M progress meeting 19-20 April 2016 Halmstad (Sweden) WP3 ILE process concept review WP3 Material needs discussion WP4 ILE step technical meeting Status meeting #8 19 Mayo 2016 Skype for business Skype for business Tecnalia, IDENER The whole consortium except of the state of the	pt LCM,
Status meeting #7 12 April 2016 Skype for business The whole consortium exception of the status meeting #7 19-20 April 2016 WP3 ILE process concept review WP3 Material needs discussion WP4 ILE step technical meeting Status meeting #8 19 Mayo 2016 Skype for business Skype for business Skype for business The whole consortium exception of the status meeting for business The whole consortium exception of the status meeting for business Skype for business The whole consortium exception of the status meeting for business The whole consortium exception of the status meeting for business The whole consortium exception of the status meeting for business The whole consortium exception of the status meeting for business The whole consortium exception of the status meeting for business The whole consortium exception of the status meeting for business The whole consortium exception of the status meeting for business The whole consortium exception of the status meeting for business The whole consortium exception of the status meeting for business The whole consortium exception of the status meeting for business The whole consortium exception of the status meeting for business The whole consortium exception of the status meeting for business and the status meeting for business for busi	Tecnalia
Status meeting #7 12 April 2016 Skype for business The whole consortium exception of the progress meeting 19-20 April 2016 WP3 ILE process concept review WP3 Material needs discussion WP4 ILE step technical meeting Status meeting #8 19 Mayo 2016 Skype for business Skype for business Skype for business The whole consortium exception of the process concept (Norway) Elkem, Inovertis, IDENER, (joined by phone) Skype for business Elkem, Inovertis, SINTEF, Total VAC, SNAM, STENA Tecnalia, IDENER The whole consortium exception of the process of	Tecnalia
6M progress meeting 19-20 April 2016 Halmstad (Sweden) WP3 ILE process concept review 21-22 April 2016 Kristiansand (Norway) Elkem, Inovertis, IDENER, (joined by phone) WP3 Material needs discussion Skype for business Elkem, Inovertis, SINTEF, Total VAC, SNAM, STENA WP1 ILE step technical meeting 12 May 2016 Skype for business Tecnalia, IDENER Status meeting #8 19 Mayo 2016 Skype for business The whole consortium except of LCM, CEA, PNO, CEFIC, UPS WP1 meeting HM 9 June 2016 Skype CEA, SNAM	Tecnalia
6M progress meeting 19-20 April 2016 Halmstad (Sweden) WP3 ILE process concept review 21-22 April 2016 Kristiansand (Norway) Elkem, Inovertis, IDENER, (joined by phone) WP3 Material needs discussion Skype for business Elkem, Inovertis, SINTEF, Total VAC, SNAM, STENA WP1 ILE step technical meeting 12 May 2016 Skype for business meeting Status meeting 48 19 Mayo 2016 Skype for business The whole consortium except of LCM, CEA, PNO, CEFIC, UPS WP1 meeting HM 9 June 2016 Skype CEA, SNAM	
WP3 ILE process concept review WP3 Material needs discussion WP1 ILE step technical meeting Status meeting (Sweden) Kristiansand (Norway) Skype for business Skype for business Skype for business Skype for business Tecnalia, IDENER Tecnalia, IDENER Skype for business The whole consortium except of LCM, CEA, PNO, CEFIC, UPS Skype Skype Skype CEA, SNAM	
review (Norway) (joined by phone) WP3 Material needs discussion Skype for business Elkem, Inovertis, SINTEF, T VAC, SNAM, STENA WP1 ILE step technical needing Status meeting 12 May 2016 Skype for business Tecnalia, IDENER Status meeting #8 19 Mayo 2016 Skype for business The whole consortium except T LCM, CEA, PNO, CEFIC, UPS WP1 meeting HM 9 June 2016 Skype CEA, SNAM	
WP3Material needs discussion12 May 2016Skype for businessElkem, Inovertis, SINTEF, T VAC, SNAM, STENAWP1ILE step technical meeting12 May 2016Skype for businessTecnalia, IDENERStatus meeting #819 Mayo 2016Skype for businessThe whole consortium except T LCM, CEA, PNO, CEFIC, UPSWP1meetingHM9 June 2016SkypeCEA, SNAM	ecnalia,
WP3Material needs discussion12 May 2016Skype for businessElkem, Inovertis, SINTEF, T VAC, SNAM, STENAWP1ILE step technical meeting12 May 2016Skype for businessTecnalia, IDENERStatus meeting #819 Mayo 2016Skype for businessThe whole consortium except T LCM, CEA, PNO, CEFIC, UPSWP1meetingHM9 June 2016SkypeCEA, SNAM	ecnalia,
discussion WP1 ILE step technical meeting Status meeting #8 19 Mayo 2016 WP1 meeting HM 9 June 2016 Skype for business LCM, CEA, PNO, CEFIC, UPS CEA, SNAM	
WP1 ILE step technical meeting Status meeting #8 19 Mayo 2016 Skype for business Tecnalia, IDENER Tecnalia, IDENER The whole consortium except of LCM, CEA, PNO, CEFIC, UPS WP1 meeting HM 9 June 2016 Skype CEA, SNAM	
meeting Status meeting #8 19 Mayo 2016 Skype for business LCM, CEA, PNO, CEFIC, UPS WP1 meeting HM 9 June 2016 Skype CEA, SNAM	
Status meeting #8 19 Mayo 2016 Skype for business The whole consortium except TLCM, CEA, PNO, CEFIC, UPS WP1 meeting HM 9 June 2016 Skype CEA, SNAM	
WP1 meeting HM 9 June 2016 Skype CEA, SNAM	Tecnalia
WP1 meeting HM 9 June 2016 Skype CEA, SNAM	rechana,
process	
WP3 – WP2 HTE process 13 June 2016 Trondheim SINTEF, Elkem	
·	
review (Norway)	
WP3 – WP2 kick-off HTE 21-22 June 2016 Trondheim SINTEF, UPS, LCM, IDENER	
process engineering (Norway)	
Status meeting #9 28 June 2016 Skype for business The whole consortium exception Elkem, CEA, UPS	pt LCM,
WP3 HTE step discussion 30 June 2016 Skype for business SINTEF, Elkem, IDENER	
WP1-WP3 ILE step 12 July 2016 San Sebastian Tecnalia, Elkem, Inovertis, IDEN	JFR
consolidation (Spain)	
Status meeting #10 13 September 2016 Skype for business The whole consortium exce	pt VAC,
WP1-WP3 ILE step 13 September 2016 Skype for business Tecnalia, Elkem, Inovertis,	IDENER
technical meeting SINTEF	ibliveit,
WP1 meeting 13 September 2016 Skype CEA, SNAM	
WP2 HTE step technical 20-21 September 2016 Toulouse (France) SINTEF, UPS	
meeting Sittle Step teelimear 25 21 September 2515 Todiouse (Trainee) Sittle 1, 51 5	
WP1 ILE step technical 26 September 2016 Skype for business Technical, IDENER	
meeting	
Status meeting #11 4 October 2016 Skype for business The whole consortium except TVAC	Гесnalia,
12M progress meeting 19-20 October 2016 Trondheim The whole consortium, except	partners
(Norway) STENA and CEFIC	,
WP1-WP3 ILE step 24 October 2016 Skype for business Tecnalia, Elkem, Inovertis,	IDFNFR
technical meeting SINTEF	
	IDENIED
	IDENER,
technical meeting SINTEF WR1 WR2 U.S. stop & November 2016 Slyro for business Togralia, Elkom Inquestic	IDENED
	IDENER,
technical meeting SINTEF	
STATUS MEDITING #17 1 17 NOVEMBER 711h SPUND for NUCIDAGE The whole concertium except (>F A
Status meeting #12 12 November 2016 Skype for business The whole consortium except 0	
WP1-WP3 Technical 12 November 2016 Skype for business Tile Whole Consortium except C	



WP3 HTE process design	25 November 2016	Skype for business	IDENER, SINTEF, UPS, LCM, Elkem
WP3 ILE step review	14 December 2016	Skype for business	SINTEF, Tecnalia, Inovertis, Elkem,
·			IDENER
Status meeting #13	15 December 2016	Skype for business	The whole consortium except STENA, CEA, PNO, CEFIC
WP3 HTE budget	21 December 2016	Skype for business	IDENER, ELKEM
estimation			,
Status meeting #14	17 January 2017	Skype for business	The whole consortium except STENA,
		,	CEA, CEFIC
WP3 ILE step technical	24-25 January 2017	Kristiansand	Inovertis, Elkem
meeting	_ · _ · _ · · · · · · · · · · · · · · ·	(Norway)	moverus, america
WP9, Socio-economic	13 February 2017	Skype	PNO-I, PNO-Italy, Inovertis
analysis	10 1 001 001 7	J. J	The if the italy, moverus
WP3 HTE process	15-16 February 2017	Sevilla (Spain)	IDENER, SINTEF, UPS, Elkem, LCM (by
engineering	15 16 (65) (61) (15)	Jevina (opani)	phone parts of the meeting)
Status meeting #15	21 February 2017	Skype for business	The whole consortium except LCM,
Status meeting #15	ZITCDIddiy ZOI7	Skype for business	CEA, Avere, UPS
WP3-WP5 Hazid HTE	16-17 March	Kristiansand	IDENER, Elkem, SINTEF (2 hours by
step	10-17 Waren	(Norway)	phone)
Status meeting #16	17 March 2017	Skype for business	The whole consortium except VAC,
Status meeting #10	17 Watch 2017	Skype for busiliess	Elkem, IDENER
WP2-WP4 HTE step	22 March 2017	Liverpool (UK)	LCM, SINTEF
knowledge transfer	22 March 2017	Liverpoor (OK)	LCIVI, SIIVTEF
Status meeting #17	4 April 2017	Skype for business	The whole consortium except AVERE
Discussions about the	•	• •	1
	6 April 2017	Skype for business	Coordinator team and Elkem
budget to build-up the			
pilot at Elkem	10 20 Amril 2017	LCN4 Liverness	The color agreement and musicat
18M progress meeting	19-20 April 2017	LCM, Liverpool (UK)	The whole consortium and project monitor (Emilio Nieto)
and review meeting RV1	2F 26 April 2017		,
WP5/WP7-HAZID HTE unit	25-26 April 2017	Elkem, Kristiansand	Elkem, Idener, SINTEF participated by
unit			Skype
WP5/WP7 HTE unit	27 April 2017	(Norway) Skype for business	Elkom SINTEE Idonor
cover designed by Idener	27 April 2017	skype for busiliess	Elkem, SINTEF, Idener
HTE-MDO	8 May 2017	Skype for business	Idener and SINTEF
Status meeting #18	16 May 2017	Skype for business	The whole consortium except AVERE
WP5 Pilot, technical	30 May 2017	Skype for business	Elkem, Tecnalia, SINTEF
meeting	27 June 2017	Clause for business	The subale assessmine assessmine AV/FDF
Status meeting #19	27 June 2017	Skype for business	The whole consortium except AVERE,
WD4 LITE on line FTID	15 August 2017	Clause for business	UPS, CEA, PNO-Italy (Ciaotech)
WP4-HTE on-line FTIR	15 August 2017	Skype for business	LCM, SINTEF
gas analysis, planning of			
the pilot trial	20 August 2017	Clause for husings	The whole consertium execut LCM
Status meeting #20	29 August 2017	Skype for business	The whole consortium except LCM,
W/DO Discomination	1 Contombor 2017	Clause for hereines	AVERE, CEFIC
WP9-Dissemination	1 September 2017	Skype for business	Coordinator, AVERE
activities	C Contomber 2017	Clause for business	Coordinator DNO Ciastash
IPR workshop	6 September 2017	Skype for business	Coordinator, PNO, Ciaotech
WP9, Task 9.3. Socio-	7 September 2017	Skype for business	Inovertis, SINTEF, Tecnalia, PNO,
economic analysis			SNAM, Elkem, STENA, Idener,
2484	10 Combourle 2017	CEEIC B	Dualant assessment was and DO /L L DO /L
24M progress meeting,	18 September 2017	CEFIC, Brussels	Project consortium and PO (Istvan Ritz)
24M progress meeting, midterm meeting WP9, D9.4	18 September 2017	CEFIC, Brussels Skype for business	Project consortium and PO (Istvan Ritz) Coordinator, PNO



W/D2 T 2.4	60 1 1 2017	C	CINITES LIDE
WP2-Task 2.4	6 October 2017	Skype for business	SINTEF, UPS
preparations HTE pre- pilot runs (REO mix)			
WP6-LCA preparations	6 October 2017	Skype for business	Inovertis, Tecnalia
WP5/WP7 ILE unit costs	9 November 2017	Skype for business	Coordinator team, Elkem
WP4-Task 4.3. REMA	20 November 2017	Skype for business	Coordinator team, LCM, VAC
achievement	20 NOVEITIBET 2017	Skype for business	coordinator team, Lewi, VAC
Status meeting #21	21 November 2017	Skype for business	The whole consortium except STENA,
Status Meeting 1121	ZI NOVEITIBEI ZOI7	Skype for business	Ciaotech, CEA, CEFIC, UPS
WP9-Dissemination	23 November 2017	Skype for business	Coordinator, AVERE
activities		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Discussions on pilot	13 December 2017	At SINTEF	Coordinator, Elkem
budget			·
WP9-Newsletter	4 January 2018	Skype for business	Coordinator, Ciaotech
Status meeting #22	10 January 2018	Skype for business	The whole consortium except CEFIC
WP5/WP7 Pilot	19 January 2018	Skype for business	Tecnalia, Elkem
WP5/WP7 Pilot	7 February 2018	Skype for business	Tecnalia, Elkem
WP5 pilot runs, initial	26 Feb-1 March 2018	Physical meeting in	Tecnalia, Elkem
trials of PMS leaching at		Kristiansand	
Elkem		(Norway)	
Status meeting #23	6 March 2018	Skype for business	The whole consortium except UPS
30M progress meeting	26 March 2018	Skype for business	Coordinator, VAC
preparations			
Status meeting #24	9 April 2018	Skype for business	The whole consortium except VAC,
			CEA, UPS, CEFIC, Idener
WP9-Exploitation	26 April 2018	Skype for business	Coordinator, PNO, CEFIC, AVERE
strategy			
30M progress meeting	17 April 2018	VAC, Hanau	The whole consortium
		(Germany)	
WP9-Dissemination	4 May 2018	Skype for business	Coordinator, Ciaotech
Status meeting #25	22 May 2018	Skype for business	The whole consortium except VAC, UPS
RV2 preparations	11 June 2018	Skype for business	Coordinator, Elkem
RV2 preparations	18 June 2018	Skype for business	The whole consortium
RV2 preparations	19 June 2018	Elkem,	SINTEF. Elkem, Idener
		Kristiansand	
Deview and the DV2	20.24 Jun - 2040	(Norway)	The sub-le server time and the BO
Review meeting RV2	20-21 June 2018	Elkem,	The whole consortium and the PO
		Kristiansand	(Istvan Ritz)
WP9-Dissemination	25 June 2018	(Norway) Skype for business	Coordinator, PNO
WP5/WP7 HTE	29 June 2018	Skype for business	SINTEF, Elkem
preparations for pilot			
	29 Julie 2018	Skype for business	Sivili, Likelii
	29 Julie 2016	Skype for business	SINTEL, LIKEIII
runs			
runs HTE	9 August 2018	Skype for business	SINTEF, Elkem
runs			
runs WP5/WP7 HTE preparations for pilot	9 August 2018	Skype for business	SINTEF, Elkem
runs WP5/WP7 HTE preparations for pilot runs WP9-Dissemination			
runs WP5/WP7 HTE preparations for pilot runs WP9-Dissemination Video pilot runs	9 August 2018 17 August 2018	Skype for business Skype for business	SINTEF, Elkem Coordinator, Ciaotech
runs WP5/WP7 HTE preparations for pilot runs WP9-Dissemination Video pilot runs WP5/WP7 HTE	9 August 2018	Skype for business	SINTEF, Elkem
runs WP5/WP7 HTE preparations for pilot runs WP9-Dissemination Video pilot runs WP5/WP7 HTE	9 August 2018 17 August 2018	Skype for business Skype for business	SINTEF, Elkem Coordinator, Ciaotech
runs WP5/WP7 HTE preparations for pilot runs WP9-Dissemination Video pilot runs WP5/WP7 HTE preparations for pilot	9 August 2018 17 August 2018	Skype for business Skype for business	SINTEF, Elkem Coordinator, Ciaotech
runs WP5/WP7 HTE preparations for pilot runs WP9-Dissemination Video pilot runs WP5/WP7 HTE preparations for pilot runs	9 August 2018 17 August 2018 28 August 2018	Skype for business Skype for business Skype for business	SINTEF, Elkem Coordinator, Ciaotech SINTEF, Elkem



WDO Nowslotton	E Contombor 2019	Slavno for husiness	Coordinator Ciantoch
WP9-Newsletter	5 September 2018	Skype for business	Coordinator, Ciaotech
WP5/WP7 HTE	5 September 2018	Skype for business	SINTEF, Elkem
preparations for pilot			
runs			
Status meeting #26	12 September 2018	Skype for business	The whole consortium except VAC
WP9-Dissemination	12 September 2018	Skype for business	Coordinator, PNO, AVERE
WP5/WP7 HTE pilot	19-20 September 2018	Elkem	SINTEF, Elkem
runs, autopsy of the HTE		(Kristiansand)	
cell and further actions			
WP5/WP7/WP8 pilot	1 October 2018	Skype for business	SINTEF, Elkem
runs at Elkem-budget			
and remaining activities			
Status meeting #27	3 October 2018	Skype for business	The whole consortium except LCM,
Status meeting "L"	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Skype for business	VAC, CEA, AVERE
36M progress meeting	10 October 2018	SNAM, Viviez	The whole consortium, except AVERE
Solvi progress meeting	10 October 2018	(France)	The whole consortium, except AVENE
M/DO Diamina	24 Octobor 2010		DNO SINTEE Cinchesh AVEDE CEEK
WP9-Planning of	24 October 2018	Skype for business	PNO, SINTEF, Ciaotech, AVERE, CEFIC
exploitation workshop	05.0		210 511777 5"
WP9-Exploitation	25 October 2018	Skype for business	PNO, SINTEF, Elkem
possibilities of the HTE			
technology			
Status meeting #28	7 November 2018	Skype for business	The whole consortium except Elkem,
			Idener, SNAM, UPS
WP6-HTE LCA Inventory	22 November 2018	Skype for business	Inovertis, SINTEF
WP9-Exploitation	30 November 2018	Skype for business	SINTEF, Elkem
possibilities of the HTE		/ /	,
technology			
Status meeting #29	18 December 2018	Skype for business	The whole consortium except STENA,
Status meeting #25	10 0000111001 2020	Skype for business	CEA, UPS, Ciaotech
WP6-LCI review	21 December 2018	Skype for business	Inovertis, Tecnalia
Status meeting #30	29 January 2019	Skype for business	The whole consortium except Elkem,
Status meeting #30	29 January 2019	Skype for business	AVERE, UPS
Status manting #21	36 Fahrusan 2010	Clause for business	-
Status meeting #31	26 February 2019	Skype for business	The whole consortium except LCM,
			VAC, Ciaotech
WP6-WP9-LCA and SEA	15 March 2019	Skype for business	Inovertis, PNO, Elkem, CEFIC, LCM
results			
WP8-Adapting REE4EU	15 March	Skype for business	SINTEF, Idener
pilot by MDO tool			
WP6-WP9-LCA and SEA	19 March 2019	Skype for business	Inovertis, SINTEF, Elkem
results			
Status meeting #32	2 April 2019	Skype for business	The whole consortium except LCM,
			Idener, STENA, AVERE, UPS
WP9-Economic	3 April 2019	Skype for business	Inovertis, SINTEF, AVERE
evaluation of REE4EU's		71:	,
technology-Discussion of			
results			
WP9-Economic	11 April 2019	Skype for business	Inovertis, SINTEF, AVERE
evaluation of REE4EU's	11 Whiii 7013	Skype for business	moverus, shvill, AVLIL
technology-Discussion of			
results			
WP8-presentation at the	12 April 2019	Skype for business	SINTEF, Elkem, Tecnalia
RV3 meeting			
WP9-Exploitation	15 April 2019	Skype for business	PNO, SINTEF
workshop preparations			
Morvarioh hreharations	I	l	

D10.4 Regular Project Meetings (4 times per year) mini-review Dissemination level: PUBLIC



WP8-presentation at the RV3 meeting	16 April 2019	Skype for business	SINTEF, Elkem
42M progress meeting and Review meeting RV3	23 April 2019	CEFIC, Brussels	The whole consortium and the PO (Istvan Ritz)
Exploitation WS	24 April 2019	PNO, Brussels	Workshop to show the project results to invited external stakeholders (industry and EC-Comm)-All partners except Tecnalia, UPS, CEA
Status meeting #33	20 May 2019	Skype for business	The whole consortium except LCM, STENA, CEA, AVERE, UPS, CEFIC
Status meeting #34	25 June 2019	Skype for business	The whole consortium except VAC, STENA, AVERE, Ciaotech
WP5/WP7/WP8- presentation at the final meeting	13 August 2019	Skype for business	SINTEF, Elkem
Status meeting #35	27 August 2019	Skype for business	The whole consortium except PNO and Elkem
Final Meeting	11 September 2019	CEFIC, Brussels	The whole consortium and the PM

Acknowledgements

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 680507