



CSA-Industry4.E

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Coordination & Support action for Lighthouse Initiative Industry4.E

Deliverable 5.4

Result and analysis of KPIs

Lead parties for Deliverable: IMR

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History of Changes:

Version	Publication date	Change
V1	15.09.2020	Draft document IMR
V2	25.03.2021	Additional info added to all sections from IMR
V3	20.04.2021	Final harmonisation and peer review IMR

Table 1: History of changes to the report

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Project Partners:



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Table of Acronyms:

AI	Artificial Intelligence	IPR	Intellectual Property Rights
AquaTT	AquaTT UETP Ltd	ISO	International Organization for Standardization
BDVA	Big Data Value Association	I4MS	ICT Innovations for Manufacturing SMEs
CF2	ConnectedFactories2	JU	Joint Undertaking
CSA	Coordination and Support Action	KDT	Key Digital Technologies
D	Deliverable	KPI	Key Performance Indicator
DEI	Digitising European Industry	LIASE	Lighthouse Initiative Advisory Service
DEP	Digital Europe Programme	MASP	Multi-Annual Strategic Plan
DIH	Digital Innovation Hub	MGEP	Mondragon Goi Eskola Politeknikoa
DoA	Description of Action	M	Month
DT	Digital Transformation	MCs	Major Challenges
EC	European Commission	MS	Milestone
EDIH	European Digital Innovation Hub	Obj	Objective
EU	European Union	PM	Person Month
FoF	Factories of the Future	PO	Project Officer
FP	Framework Programme	PC	Project Coordinator
GDPR	General Data Protection Rights	PPP	Public Private Partnership
GA	General Assembly	R&I	Research and Innovation
GB	Governing Board	SME	Small- and Medium-Sized Enterprise
HE	Horizon Europe	SoA	State-of-the-Art
H2020	Horizon 2020	S2i	Steinbeis 2i GMBH
IMR	Irish Manufacturing Research Ltd	VTT	Teknologian tutkimuskeskus VTT Oy
I4.E	Industry4.E	WP	Work Packages
ECSEL	Electronic Components and Systems for European Leadership		
ECS-SRIA	Electronic Components and Systems Strategic Research and Innovation Agenda		
EFFRA	European Factories of the Future Research Association		

Table 2: Project acronyms

1.1 Contextual information

This deliverable *D5.4_Result and analysis of KPIs* prepared at M30 by IMR aims to demonstrate the significant results and related analysis of the Industry4.E (I4.E) Lighthouse Initiative Key Performance Indicators (KPIs).

Every effort has been made to keep this deliverable brief avoiding repetition, therefore it is recommended that this deliverable is read in conjunction with *D5.3 Evaluate and decided on proposed KPIs* and further supported by the information containing within the following reports:

- *D2.1 Report presenting the operational platform;*
- *D2.3: Summary reports of the workshop on Lighthouse projects;*
- *D4.3 Report on the public engagement activities carried out in the project;*
- *D4.4 Report on the outreach to related initiatives carried out in the project;* and
- *D5.2 Report about secretariat support provided to the LIASE.*

A summary of exploitable results and an explanation of how they can be further exploited will be presented at the final review meeting where opportunities for more detailed questions and answers will be observed.

The consortium together with the LIASE have established the KPIs for the Lighthouse Initiative to ensure the most appropriate data points are captured ensuring sustainability of the initiative into the next FP. The entire project effort (WP1-WP5) as described in the DoA, and the addition contribution made by the CSA, LIASE and ECSEL-JU have contributed to the results presented.

The analysis of KPIs has been place in *Task 5.3. Secretariat services to LIASE in their engagement with the ECSEL JU governing board (M1-30)* Lead: IMR Contributors: AquaTT (M10-M13) heavily related to pillar one of the project (as illustrated in Figure 1).

To compliment the effort to communicate, disseminate and exploit the results of the initiative a visionary PowerPoint has been prepared to further enhance the impact of the initiative and bring this insight to a larger audience outside the lighthouse, to encourage further cooperation and widening. The presentation has been expertly delivered by the LIASE at key Digital Industry events complemented by a social media conversation calendar (D4.3 and D5.2) from M24-M30. The images are used in this report to illustrate the results of the KPIs.



Figure 1: Pillar 1 - project activities of the CSA-Industry4.E

1. Results and analysis of the KPIs

1.2 The eight KPIs of the Industry4.E Lighthouse Initiative:

Upon completion of the evaluation and decision-making process for the KPIs, included the organisation of meetings and facilitated dialogue, the following KPIs have been agreed:

1. N° of contributions to the ECS-SRIA roadmap;
2. N° of projects participating in I4.E / CSA & LIASE;
3. N° of entities involved in I4.E / CSA & LIASE);
4. N° of events with presence of I4.E / CSA & LIASE;
5. N° of events organised by I4.E / CSA & LIASE;
6. N° of concepts mapped in the ECSEL portal;
7. N° of access to social media of I4.E / CSA & LIASE; and
8. N° of projects active in the ECSEL portal

1.3 Generated results, demonstrating sustainability:

The compact set of KPIs encompass the main aspects of the initiative, its added-value contributions, ability to galvanise the community, and facilitate outreach as well as knowledge management.



Figure 2: Objectives of the Industry4.E Lighthouse Initiative

The KPIs have been mapped to the initiatives objectives and results and analysis are summarised in Table 3.

#	I4.E Objective	I4.E KPI	M1-M30
O1	Support impact through promoting cooperation and collaboration of I4.E twin transition initiatives	2. N° of projects participating in I4.E / CSA & LIASE.	15 (see Figure 2)
		3. N° of entities involved in I4.E / CSA & LIASE.	520 (see Annex 2)
O2	Foster continuous dialogue	5. N° of events organised by I4.E.	16 (see D4.3 and D4.4)
O3	Provide domain-specific guidance towards twin transition	1 N° of contributions to the ECS-SRIA roadmap.	3 (2019, 2020, & 2021)
		6 N° of concepts mapped in the new ECSEL portal.	8 (see Annex 4)
O4	Serve as communication & innovation platform	6: N° of access to social media of I4.E / LIASE & CSA.	1046 (see D4.3 and Annex 1)
O5	Advisory services to guide the way.	4. N° of events with presence of I4.E / LIASE & CSA.	12 (see D4.3)
O6	Share best practice - share results for accelerated impact	8. N° of projects active in the ECSEL portal.	16 (see Annex 3)

Table 3: Industry4.E objectives and indicators

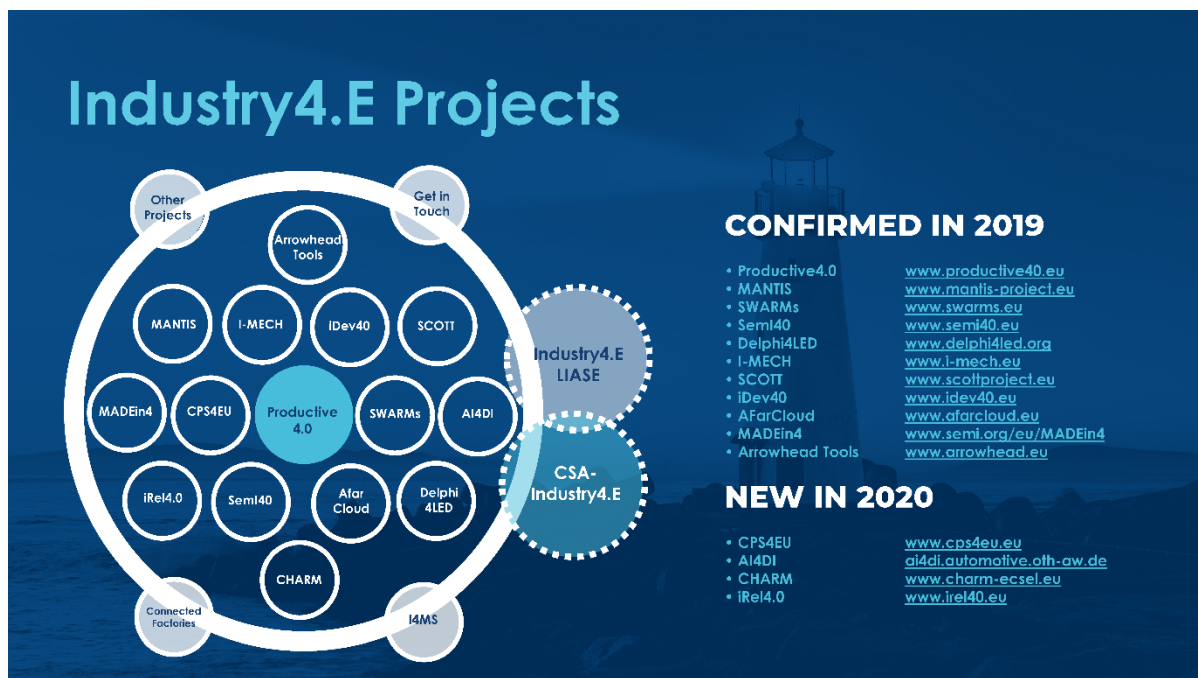


Figure 3: 15 projects participating in I4.E

1.4 Coordinating and supporting research impact:

The project has fully addressed the recommendations and commentary through project learnings, delivering beyond the expected impacts presented in the DoA. From our analysis additionality has been achieved from the initial investment in the CSA as follows:

- Generated European industrial leadership in industry digitalisation** (some examples: contributions to the [ECS SRIA](#) process throughout the life of the project, LIASE engagements [#LighthouseKeepers](#) conversation calendar...);
- Secured involvement and commitment from key stakeholders** (some examples: the LIASE [membership extended](#) in RP2, meeting bi-monthly privately and with the CSA, a new series of digital workshops heavily oversubscribed, increased [virtual event](#) and presentation opportunities were embraced...);



Figure 4: Extension of the LIASE in 2020

- Increased transnational collaboration between the relevant European initiatives** (some examples: the [ECSEL portal](#) for intel, results and demos supporting longer term collaborations, research impact and the exploitation of innovation and results; the success facilitating online (particularly social media) interactions amongst pertinent initiatives and projects including [EFFRA innovation portal](#)...);
- Widened attainment of excellence related to the digitalisation of industry** (one example: the Industry4.E [Bringing Projects Together](#) Workshop facilitated the necessary dialogue and cooperation among stakeholders within the Digital Industry domain ensuring interactions and sharing of research impact while engaging the different research communities, in cross-border, trans-discipline, inclusive collaboration with a focus on new opportunities for exploitation...); and

- e. **Increased awareness of European activities in this field** (some examples: [Industry4.E careers toolkit](#) complimented by a (well attended) workshop series implement across the EU; and an [Industry4.E e-book](#) has been published complimented by a series of virtual (well attended) workshops focusing on “success stories” to stimulate discussion and awareness in relation to SoA and key results related to piloting activities of the Industry4.E lighthouse projects...).

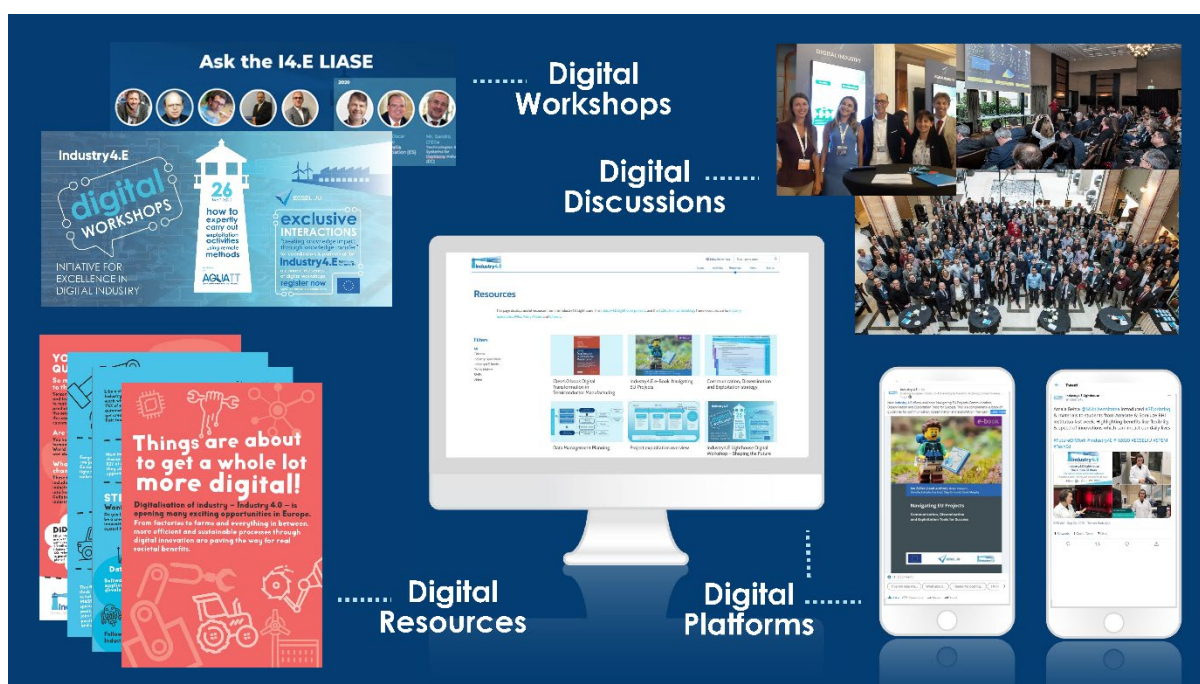


Figure 5: the CSA and LIASE have embraced digital opportunities

END OF SECTION 1

2. Supporting Annexes

The following supporting annexes are detailed on the pages that follow:

- 2.1. KPI 6: N° of access to social media of I4.E | LIASE & CSA;
- 2.2. KPI 3: N° of entities involved in I4.E / CSA & LIASE;
- 2.3. KPI 8: No of projects active in the ECSEL portal; and
- 2.4. KPI 6: N° of concepts mapped in the new ECSEL portal.

2.1. KPI 6: N° of access to social media of I4.E / LIASE & CSA

The final numbers for Industry4.E Lighthouse social media channels and associated statistics are illustrated in Table. 4, with the overall figure to support KPI number 6 estimates to be over 1046 connections.

Channel:	Numbers:	Connections
Facebook [sourced on 09/10/2020] https://www.facebook.com/industry4e/	# posts 64 # followers 305 Page likes 304 Total impressions 5,154,288 Page reach 4,819,233 Video views 308,299 Cities reached 111	305
Instagram [sourced on 09/10/2020] https://www.instagram.com/industry4e/	# posts 50 # followers 65 Impressions 3,836,580 Reach 3,426,707 Likes 1025	65
Twitter [sourced on 31/03/2021] https://twitter.com/Industry4E	Tweets 242 Followers 472 Tweet impressions 657,583 Profile Visits 6319 Mentions 146 Likes 2229 Retweets 1064	472
LinkedIn [sourced on 31/03/2021] www.linkedin.com/in/industry4e	Posts 44 Connections 204 Views of posts 5594	204
Eventbrite [sourced on 09/10/2020] www.industry4e.eventbrite.com	Events 6 Tickets sold 183	N/A
Website [sourced on 31/03/2021] www.Industry4E.eu	Users 4,441 Sessions 6,327 Page Views 13,828	N/A
Newsletter: Issues	Total estimated views 155	N/A
Total:		1046

Table 4: Social media statistics of the Industry4.E Lighthouse Initiative

Full details are provided in [D4.3 Report on the public engagement activities carried out in the project](#).

End of Annex 1

2.2. KPI 3: N° of entities involved in I4.E / CSA & LIASE

Click on the figure below to be brought to the new [ECSEL portal](#) to further explore the entities currently involved in the Lighthouse. Search either through lists or the map function as illustrated below:

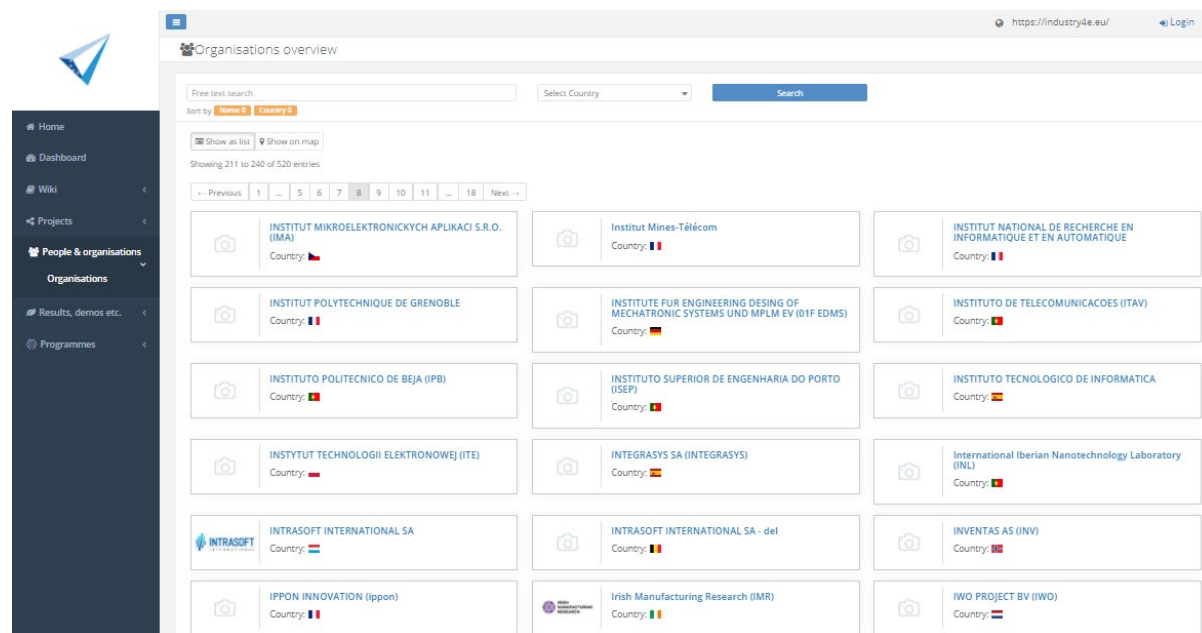


Figure 6: Industry4.E entities listed on the ECSEL portal

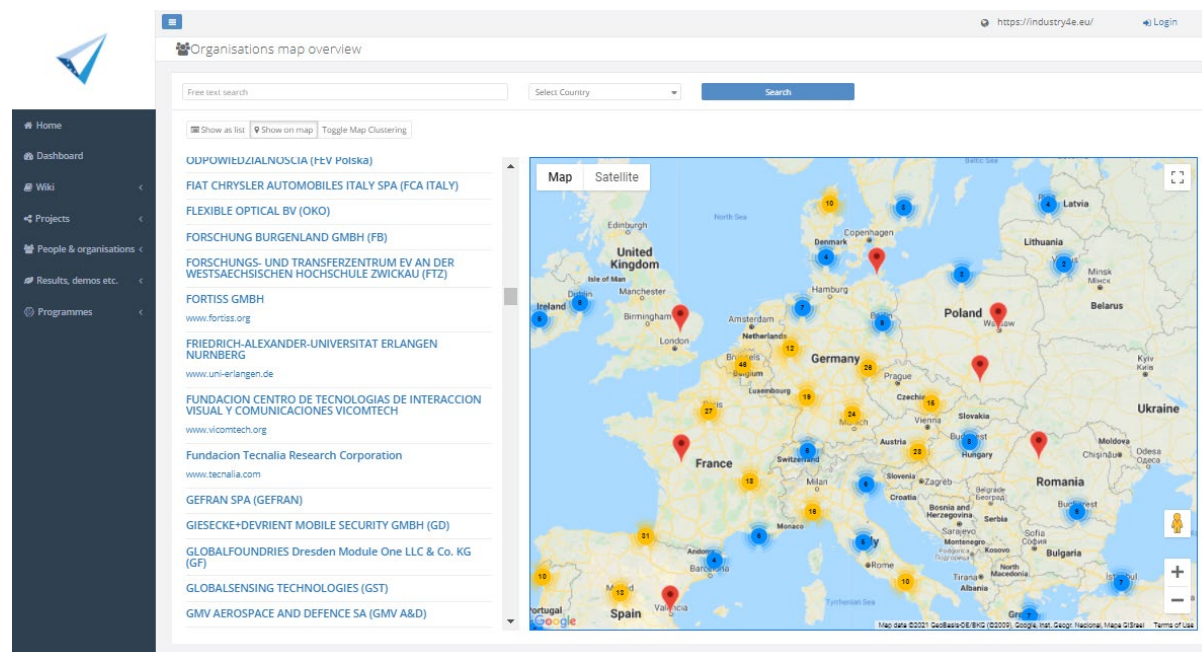


Figure 7: Industry4.E entities mapped on the ECSEL portal

End of Annex 2

2.3. KPI 8: No of projects active in the ECSEL portal

Click on the figure below to be brought to the new [ECSEL portal](https://industry4e.eu/) to further explore the 14 projects currently listed in the Lighthouse.

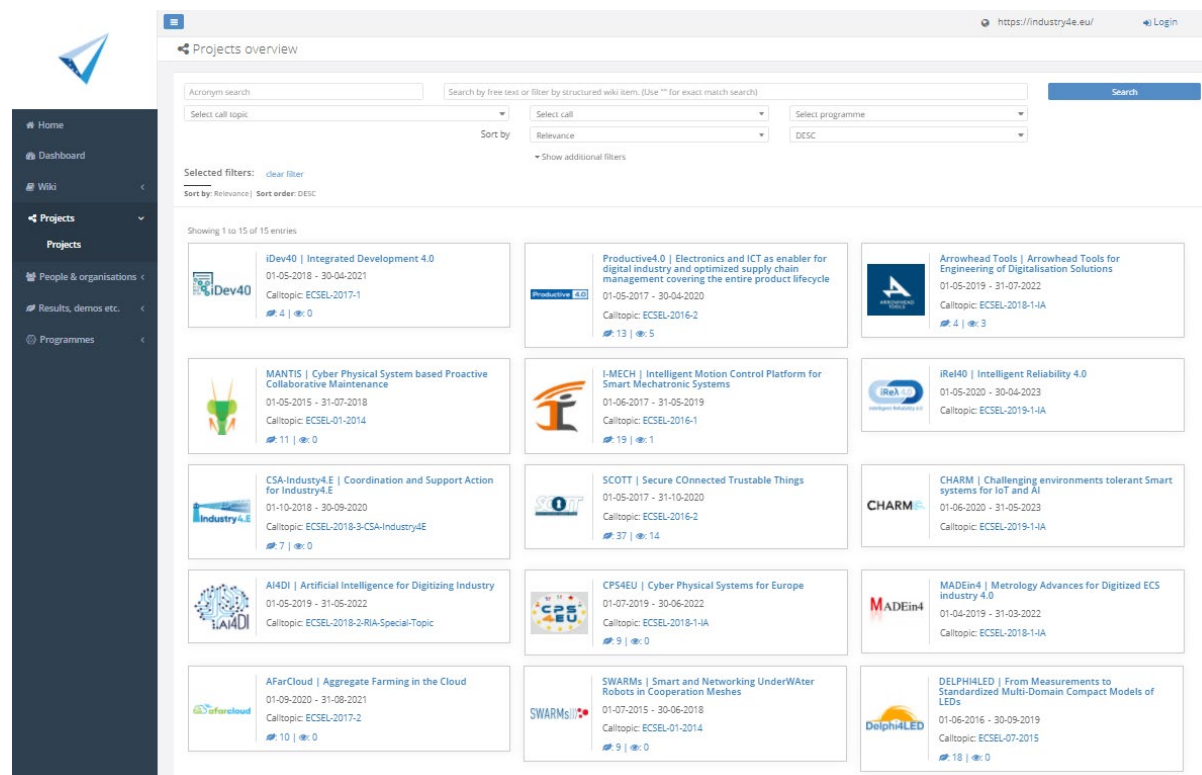


Figure 8: Industry4.E projects officially within the Lighthouse

End of Annex 3

2.4. KPI 6: N° of concepts mapped in the new ECSEL portal

Click on Figure. 9 below to be brought to the new [ECSEL portal](#) to further explore the 8 concepts mapped which can be further broken down and explored.

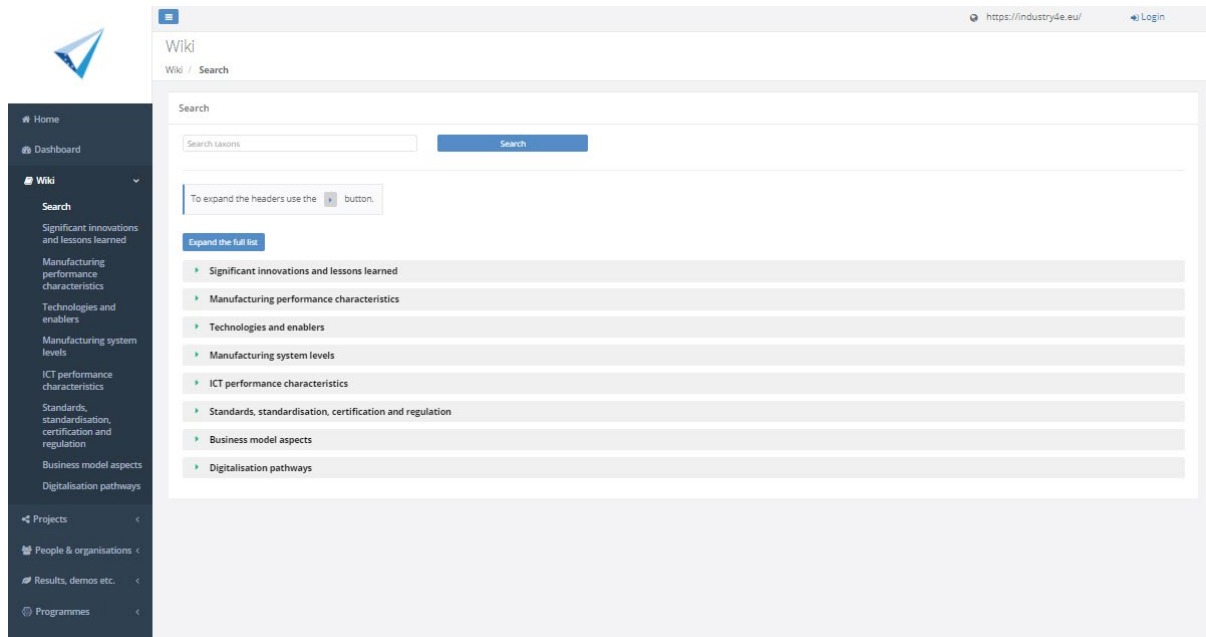


Figure 9: Industry4.E projects officially within the Lighthouse

The I4.E collaboration platform or [ECSEL portal](#) provides a tool for further interaction with other projects [D2.1 Report presenting the operational platform](#) sharing news and providing a means of filtering through technical details of the projects to identify related topics/concepts. The portal has been the subject of extensive promotion to the I4.E community (see [D4.4 Report on the outreach to related initiatives carried out in the project](#)).

The new ECSEL-JU Communication platform is the online resource for stimulating the sharing of information about research and innovation projects and the results and demonstrators that these projects generate.

The ECSEL portal was demonstrated to the participants (see [D2.3 Summary reports of the workshop on Lighthouse projects](#)) to encourage its further use, this included a video made of the demonstration to enable further dissemination and exploitation of the asset. The portal supports community building and enhances the synergy of future activities. Extra video tutorials have also been made to aid this effort:

- ECSEL Portal Basics – Edit Projects and Results. Youtube video: [here](#)
- ECSEL Portal – Imports from the EU Open Data Portal. Youtube video: [here](#)

The collaboration platform supports the projects with their current and future R&I efforts working in complete harmony and providing additionality to the current offering as we transition to the new framework programme. Links as follows:

- <https://ec.europa.eu/info/funding-tenders/horizon-dashboard>
- <https://ecscollaborationtool.eu/>
- <https://portal.effra.eu/projects>
- <https://www.ecsel-portal.eu/projects>

Since its creation at M27 the demonstration video made by the LIASE, with secretariate support from the CSA, has been widely shared via the project's social media accounts, and presented at the I4.E bringing projects together workshop at M30, receiving positive feedback as described in *D2.3: Summary reports of the workshop on Lighthouse projects*. An example post is illustrated in Figure 10, please click on the image to be brought to the demonstration video also available on the project website.

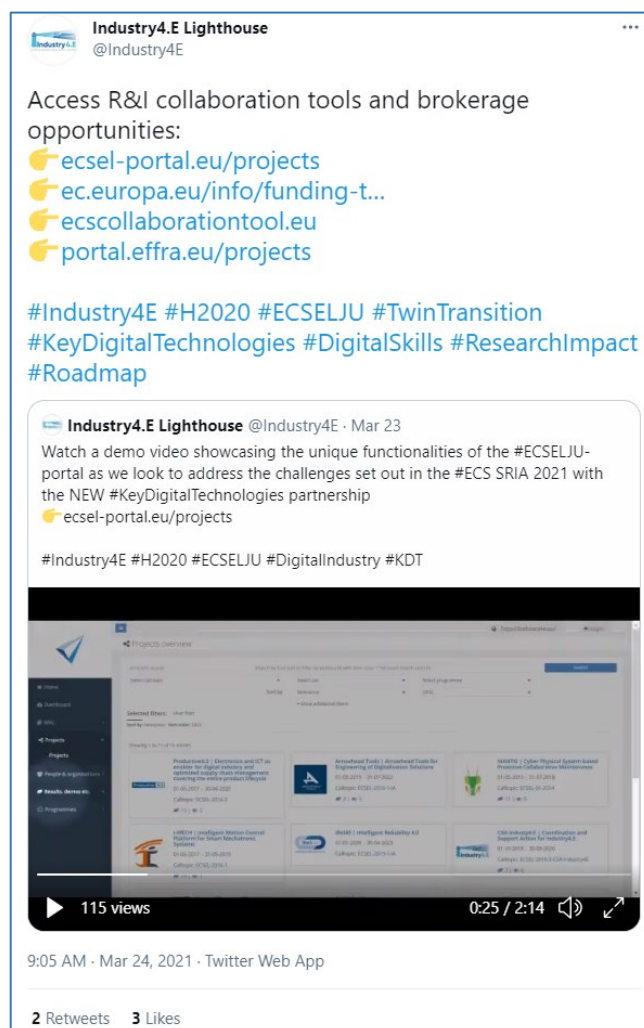


Figure 10: Social media post sharing the collaboration platform

End of Annex 4