

SEAF

Deliverable D1.2

Report on the interchange with the core stakeholder group

V1.0 Final Version



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Executive Summary

This document describes the progress dedicated to building the SEAF Stakeholder group, which have taken place continuously throughout the duration of the SEAF project since February 2016.

The SEAF project developed an online platform, the aim of which is to connect energy efficiency and distributed generation projects in Europe to private investment. In order to develop the platform and ensure it meets the needs of its respective stakeholders, extensive work with over 450 contractors and investors was carried out over the two years of the project.

The learnings that were integrated into the building of the SEAF platform and services came from multiple channels, including 4 high-level stakeholder workshops, 6 webinars, presentations and networking at external events, desk research and direct outreach, one-to-one demonstrations of the beta and alpha versions of the platform, and over 100 interviews and follow up with the most engaged investor and contractor stakeholders. This document describes these key activities in detail, including the main outcomes and findings, from each stakeholder activity.

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List of acronyms

CEO	Chief Executive Officer
CFO	Chief Financial Officer
CO ₂	Carbon dioxide
DECC	Department of Energy and Climate Change
DR	Demand Response
EC	European Commission
ECM	Energy Conservation Measure
EE	Energy Efficiency
EED	Energy Efficiency Directive
EEFIG	Energy Efficiency Financial Institution Group
EPBD	Energy Performance of Buildings Directive
ESCO	Energy Service Company
EU	European Union
GA	Grant Agreement
HSB	Hartford Steam Boiler
ICP	Investor Confidence Project
IoT	Internet of Things
IREE™	Investor-Ready Energy Efficiency
IT	Information Technology
LED	Light-Emitting Diode
M&V	Measurement and Verification
NDA	Non-Disclosure Agreement
SEA	Sustainable Energy Asset
SEAF	Sustainable Energy Assets Framework
SME	Small and Medium-sized Enterprise
SPV	Special Purpose Vehicle
UK	United Kingdom
WP	Work Package

1. Introduction

1.1 Scope of this deliverable

D1.2 “Report on the interchange with the core stakeholder group and activities” discusses the stakeholder engagement activities throughout the SEAF project and the current state of the SEAF stakeholder group. The objective of this deliverable is to summarize the engagement initiatives and to report the feedback received by the consortium through stakeholder engagement process.

The feedback of the investor and contractor stakeholders has also been fed into the platform design and now informs its business offering. This was done during the commercialization stage. The aim is the last 6 months of the project duration.

1.2 Aims and objectives

The key aim of the SEAF project – the Sustainable Energy Asset Framework – is to bridge the communication and knowledge gap between Energy Service Companies (ESCOs) and investors, related to the finance of small (less than €1 million) energy efficiency projects. SEAF has created an online Platform that provides project valuation and financial analytics, project standardization and certification from the Investor Confidence Project (ICP), and Energy Efficiency (EE) insurance from HSB Engineering Insurance, which can then be presented to and matched with investment from an investor within the SEAF network.

As the project comes to a close, the SEAF consortium is working to refine the SEAF platform (eQuad will be the commercial name). The SEAF platform is now “market ready”, and looks to achieve the project’s aim of up to €15 million of project investment in early 2018. The creation of a strong stakeholder group is therefore essential for achieving this goal. The stakeholder group has enabled the consortium to understand both the requirements of ESCOs and investors, and develop a platform and services adapted to the real needs of the market.

The stakeholder group therefore includes both contractors (ESCOs) and investors, who have tested and provided feedback on the platform and on the overall offering, bringing concrete project pipeline as well as capital to the platform, in order to demonstrate how SEAF can practically scale up the European energy efficiency market.

This deliverable provides an overview of the stakeholder engagement, carried out throughout the project lifetime, from February 2016 to the time of the Deliverables submission, and discusses the main learnings that have come from this engagement.

1.3 Outline of this document

This report outlines the interaction with the core stakeholder group over the project period.

- **An outline of the Stakeholder group today can be found in Chapter 2**, which provides an overview over the different SEAF stakeholders that have signed up to be part of the platform.
- **Key engagement activities that built the stakeholder group are presented in Chapter 3**, describing the actions taken to gather feedback from stakeholders about the functionality of the eQuad platform.

- **Chapter 4 summarizes the learning outcomes of the stakeholder’s activities,** addressing the most frequently reoccurring issues, namely project challenges faced by ESCOs and investment criteria for investors.

2. State of the Art: The SEAF Stakeholder Group today

Chapter 2 of this deliverable describes the status of the membership of the SEAF Stakeholder Group to date, including a description of the main activities used to build a network of stakeholders, and numbers of engaged members according to stakeholder type.

At the outset of the SEAF project, an initial invitation was sent to Joule Assets’ internal mailing list of approximately 8000 contacts from across the European energy sector. This invitation received 150 responses from individuals interested in following the development of SEAF, which have been added to the SEAF mailing list – these contacts receive press releases and invitations to events.

The SEAF stakeholder group includes investors and contractors (ESCOs) that have direct interest in the platform’s functionality and services, as well as other users that may have direct or indirect interaction with the platform such as Project Developers (PDs), Investor Confidence Project (ICP) Quality Assurance Providers (QAPs) and/or risk assessment underwriters.

Since the first stakeholder invitation, networking and presentations at external events, referrals, six webinars and four high-level workshops, desk research and direct outreach, the group has grown to over 450 members, including both actively engaged stakeholders and those who are passively following the results of the project. Of these stakeholders, 90 are directly relevant to the SEAF project: This group consists of 80 contractors, 10 companies working in construction and real estate, and 23 investors or financial institutions. Among these, a core group of 11 contractors have signed a SEAF contractor agreement and 40 more are waitlisted to sign contracts to use the SEAF platform post-commercialization. Indeed at time of writing well over €80 million in projects have been submitted and over €1.5 billion of investment is available from a network of funds. The work of matching projects to investors is ongoing.

3. Stakeholder Engagement Activities: Building a stakeholder group

Chapter 3 of this deliverable discusses the specific activities that have been carried out since February 2016, which have served to provide feedback on the eQuad platform development. These activities have been crucial for gathering key stakeholder insights into platform functionalities, and include 4 high-level stakeholder workshops with contractors, investors, and policy makers, 6 webinars, and many qualitative telephone interviews (over 100 to date) as well as 30 one-to-one demonstrations of the eQuad platform with contractors and investors as well as additional desk research into potential stakeholders, particularly investors, followed by direct outreach via email or phone call.

The above described stakeholder engagement within the parameters of the SEAF project are considered fundamental to eventual commercial success and carried out in a strategic manner. This means that the goal always to develop solid business relationships, based on trust, with stakeholders and through this to receive honest and open feedback on what is needed within SEAF. This trust is built through consistent follow up and active engagement in understanding the individual stakeholders' specific interests and needs.

Engagement and follow up with stakeholders made possible largely through the activities described below. The main SEAF-related events – webinars and workshops – have provided opportunities to interact with stakeholders and familiarize them with the SEAF project in a significant manner. Numerous speakers at the Investor Days Barcelona, for example, were first present on the SEAF Introductory webinar. Upon follow up to the participants' questions on the webinar, it was deemed appropriate to have the participants present themselves, which added value to the overall event and also created trust and the beginnings of a working relationship. Preparing for the events involved introductory calls and discussions on the content of presentations, which in turn paved the way for increased follow-up discussion on the individual stakeholders' involvement in SEAF.

The process of stakeholder engagement has been to first have an introductory call, followed by the signature of a Mutual Non Disclosure Agreement (MNDA), with the end goal of having the stakeholder sign a Contractor or Investor Agreement, which defines the parameters of Joule's professional relationship with that stakeholder, at once giving Joule *permission* to follow up in the future and increasing the likelihood of the stakeholders' active use of the SEAF Platform either as an investor or contractor.

3.1 Stakeholder workshops

In partnership with the Investor Confidence Project (ICP), the SEAF consortium organized and hosted four high-level events, which were instrumental in growing the core stakeholder group. These events were named "Investor Days" as follow up to the Investor Days event hosted by BPIE and ICP in Brussels on 22-23 February 2016, which reviewed progress made and challenges for the Energy Efficiency industry since the 2015 EEFIG report.

Investor Days Barcelona

This 1.5-day event took place in Barcelona the 16-17 May 2016. The event provided a forum for over 75 registered contractors and industry experts to discuss challenges and solutions related to project finance in the energy efficiency sector. The event included a full panel of contractors and investors, which are now part of the core SEAF stakeholder group. The second day included a detailed demonstration of SEAF, a series of one-on-one demonstrations of the

SEAF Platform to contractors, and an intensive discussion session on successful ESCO business models and risk management.

Investor Days Lisbon

This 1.5-day event took place the 2-3 November 2016 in Lisbon and followed a similar format to the June event. However, whereas the Barcelona event featured a number of stakeholder types including a few international consultancies, the Lisbon event had a very focused and local audience, with about 110 registered participants, of which at least half were contractors.

8 contractors also tested the beta version of the SEAF Platform on-site during the event and provide direct feedback to the developers. The event also included time for directed discussion groups between the audience members on key topics of concern for the industry. These groups then presented their conclusions in turn to the rest of the audience and the results were recorded. This also provided key insights into the ESCO sector and how the SEAF Platform and overall project may be better adapted to contractor needs over and above any conclusions drawn from speaker presentations.

These first two events were successful not only in disseminating information about the SEAF Platform and building our contact list, but the discussion during the panels and focused discussion sessions provided key learnings that were crucial going forward with the update of the beta version of the platform and the structuring of the commercial offering of SEAF. (See section 4 for a summary of the key learnings).

The SEAF Investor Forum Milan

The SEAF Investor Forum Milan *Making Energy Efficiency Finance Work*, took place on 8 March 2017. Hosted by SEAF and ICP, the event was an interactive event that aimed to develop a community of ESCOs and financiers dedicated to up-scaling the energy efficiency market across Europe but with a particular focus on Italy. The event provided a forum in which investors and contractors learned from each other. In particular the event focused on different aspects of project finance and prerequisites for successful finance. 150 participants registered for this event, and 100 attended in person.

The SEAF Investor Forum Brussels

The fourth and final event, the SEAF Investor Forum, *Project Success and Future Trends in Energy Efficiency Finance*, took place on 29 November 2017. The event again targeted financial institutions, policy makers, regulators, and Energy Service Companies (ESCOs) this time in the Brussels area. The success achieved during the lifetime of the SEAF H2020 project was showcased, and keynote speakers presented on the future of energy efficiency financing in Europe. The day event featured Diana Barglazan, Policy Officer at DG Energy, and an investor panel including Eiffel Investment Group, Demeter Partners, Green Investment Group, SI Capital, SUMA Capital, SUSI Partners, and Adaxia Capital Partners who discussed their key success requirements and the real life impact of policy on energy efficiency finance. 125 participants registered for the event and 62 participated.

3.2 Presentations at external events

The SEAF consortium has presented the project at 29 external events since the project's kick-off in February 2016, as shown in Table 1.

Table 1 - List of events where SEAF Project was presented

Event name	Location	Date	Partner
Investor Days	Brussels, Belgium	21-22 February 2016	Jessica Stromback, JA
World Sustainable Energy Days	Wels, Austria	24 February 2016	Antonio Ciccarelli, SEA
Cleantech Forum Europe	Lyon, France	13 April 2016	Michael Pachlatko, JA
L'efficienza energetica nei condomini. Novità, obblighi e opportunità	Verona, Italy	22 April 2016	Antonio Ciccarelli, SEA
E2 Energy Efficiency for Industry	Brussels, Belgium	13 June 2016	Jessica Stromback, JA
EUSEW Policy event	Brussels	15 June 2016	Jessica Stromback, JA
EPFL Conference	Lausanne, Switzerland	27 September 2016	Jessica Stromback, JA
IEEE Smart Grids	Paris, France	16 October 2016	Jessica Stromback, JA
Renovate Europe Parliamentary Lunch	Brussels, Belgium	20 October 2016	Jessica Stromback, JA
EBRD Meeting	London, UK	7 November 2016	Jessica Stromback, JA
European Utility Week 2016	Barcelona, Spain	15-17 November 2016	Jessica Stromback, JA Antonio Ciccarelli, SEA
VIII Conferenza nazionale sull'efficienza energetica	Rome, Italy	22 November 2016	Antonio Ciccarelli, SEA
Mese Dell'efficienza energetica enea	Sulmona, Italy	24 November 2016	Antonio Ciccarelli, SEA
Mese Dell'efficienza energetica enea	Padova, Italy	29 November 2016	Antonio Ciccarelli, SEA
Birmingham EISA Autumn Seminar	London, UK	6 December 2016	Jessica Stromback, JA
EASME conference: Energy Efficiency Finance Market Place	Brussels, Belgium	18-19 January 2017	Jessica Stromback, JA
EnergyLive Conference	Lisbon, Portugal	17 February 2017	Jessica Stromback, JA
Convegno sull'EPC	Marghera, Italy	16 March 2017	Antonio Ciccarelli, SEA
3rd Annual European Ancillary Services & Demand Response Management Forum	Frankfurt, Germany	11-12 May 2017	Jessica Stromback, JA
ETIP SNET	Brussels, EU Parliament, Belgium	30 May 2017	Jessica Stromback, JA
Workshop "Efficienza energetica 4.0"	Pescara, Italy	28 June 2017	Antonio Ciccarelli, SEA
Investor Days Madrid	Madrid, Spain	10 July 2017	Caroline Milne, JA
EASME – Promoting and Financing Energy Efficiency in Ireland and the United Kingdom	Dublin, Ireland	28 September 2017	Jessica Stromback, JA

Energy Efficiency Conference 2017 National Event	Athens, Greece	29 September 2017	Benedetta Friso Bellemo, JA
European Utility Week 2017	Amsterdam, the Netherlands	3-4 October 2017	Jessica Stromback, JA Antonio Ciccarelli, SEA
EASME – Financing Energy Efficiency in Italy, Croatia and Slovenia	Milan, Italy	16 October 2017	Jessica Stromback, JA
EEFIG Workshop	Brussels, Belgium	19 October 2017	Dan Maskell, HSB
Key Energy	Rimini, Italy	7 November 2017	Benedetta Friso Bellemo, JA Antonio Ciccarelli, SEA
Sustainable Energy Investments (SEI) Forums	Milan, Italy	16 November 2017	Antonio Ciccarelli, SEA, Jessica Stromback, JA

3.3 Webinars

The SEAF consortium organized six webinars throughout the project, which had three key aims: to disseminate information about the project, to attract further stakeholder engagement, and to gather relevant information about how to both refine and market the SEAF offering.

SEAF Introductory Webinar

The SEAF Introductory Webinar took place on 26 March 2016. It provided a general overview of the SEAF project, including its purpose, aims, and objectives, targeting ESCOs, investors as well as sustainable finance and energy efficiency experts who would be able to follow the project and provide feedback. This webinar was the first main bi-directional engagement activity with stakeholders, which had as its core objective to build and strengthen relations with the first signups to the stakeholder mailing list.

The webinar included 86 participants who provided insightful questions. The interaction with numerous of these participants provided a foundation for later follow-up, and a small number of these first participants continue to be active as core stakeholders today. 30 relevant questions asked by participants demonstrated a high overall level of interest. The most pertinent questions focused on:

- Minimum project size
- The legitimacy of the Investor Confidence Project (ICP) as a relevant benchmark for EU projects.
- The interaction between investors and contractors
- The kinds of investors who would be active on the Platform
- When the platform would be ready for use.

Empowering Residential and SME Consumers with Demand Response

This webinar took place on 1 September 2016. The program of this webinar was organized by Joule Assets, with hosting and promotion provided by Engerati – the Smart Energy Network, which was invaluable towards reaching a wide audience. The content of the webinar focused on the smart energy landscape, in particular how residential consumers and SMEs can take control of their energy production and consumption through both onsite generation

and IoT. Therefore, while this webinar did not focus on energy efficiency finance, its main audience consisted of technology providers and energy regulators. Within the framework of onsite microgeneration and recent contextual and technology trends in demand, Jessica Stromback, Chair of Joule Assets, discussed the need for demand response solutions in combination with energy efficiency, taking the opportunity to present the main aims and objectives of the SEAF project, namely matching small projects in energy efficiency, renewables and demand response to appropriate finance.

Main questions from the audience here included:

- How will SEAF support Demand Response in combination with energy efficiency?
- How will the SEAF Platform support projects including micro-generation or combined heat and power (CHP)?
- Who is the typical end client for SEAF projects? Is there a wide variation?
- Does the platform cover residential and/or public projects? Do investors in the network invest in these?
- How can member states facilitate increased energy efficiency in combination with demand response in large buildings/industry?

The SEAF ESCO Webinar I

This webinar took place on 25 October 2016. More than an introduction, this webinar provided an in-depth demonstration of the platform to 15 contractors who had already engaged with the SEAF consortium through the previous webinar or events, and in this way was more focused than the first. The webinar also resulted in more specific feedback and questions.

Contractors were required to sign MNDAs at this stage, in order to agree on the confidential nature of the information shared. This webinar walked the audience through the platform itself, and provided ample time for the question-answer session. The questions asked were extremely useful for the SEAF team in understanding how to clarify the sales message, and provided the basis for an FAQ page on the website of the Platform. The questions included:

- What are the main benefits of SEAF?
- How does SEAF differ from an EPC contract?
- What is the benefit of getting ICP Certification through SEAF?
- Does SEAF include cash flows on a month-by-month basis?
- Does the SEAF financial model incorporate how money is returned to investors through dividends, loans, receivables, and debt coverage?
- How does SEAF support contractors in negotiating with investors?
- How will SEAF achieve the best possible funding cost for the project?
- How is confidentiality of information guaranteed?
- Will each investor who is looking to invest accept non-disclosure?
- When is the SEAF Platform expected to go live?

SEAF Web Seminar: Connecting projects to finance, speeding deal closure

This webinar took place on 19 May 2017. It provided an introduction to eQuad for new users, and explained its purpose, aims, and objectives. It also provide a demonstration of the platform itself, specifically focusing on the most recent updates made, including new ECMs, new features on the contractor dashboard, and the new investor dashboard. This webinar included 27 participants and left plenty of time for questions and answers with the audience. The interaction with numerous of these participants provided additional insights into 1) the usefulness of the platform for ESCOs – where the real value is, and 2) ESCOs' main areas of concern/insecurity vis-à-vis investment and dealing with financial funds.

30 relevant questions asked by participants demonstrated a high overall level of interest. The most relevant questions focused on:

- Minimum project size
- The legitimacy of the Investor Confidence Project (ICP) as a relevant benchmark for EU projects.
- The interaction between investors and contractors
- The kinds of investors active on the Platform
- When the project would be ready for use.
- What are the main benefits of eQuad?
- How does eQuad differ from an EPC contract?
- What is the benefit of getting ICP Certification through eQuad?
- Does SEAF include cash flows on a month-by-month basis?
- Does the eQuad financial model incorporate how money is returned to investors through dividends, loans, receivables, and debt coverage?
- How does eQuad support contractors in negotiating with investors?
- How will eQuad achieve the best possible funding cost for the project?
- How is confidentiality of information guaranteed?
- Will each investor who is looking to invest accept non-disclosure?
- What are the costs of using eQuad?

Energy Efficiency Europe: How can ESCOs best finance energy efficiency projects?

The webinar took place on 19 October 2017. The content and agenda was organized by Joule Assets Europe, with hosting and promotion provided by Engerati – the Smart Energy Network. Of the 96 registrants, 38 ESCOs and technology providers joined the webinar. This webinar addressed the basics of securing finance – discussing available financing structures and best practices, particularly with regard to off balance sheet finance.

Presenters included Jessica Stromback from Joule Assets, Stefano Fissolo, VP Energy Efficiency at SUSI Partners, and Antonio Ciccarelli, CEO of Servizi Energia Ambiente. Jessica Stromback presented the SEAF project and eQuad platform, and discussed off-balance sheet financing models, and particularly explained the benefits to both the investor and contractor of establishing an SPV; Stefano Fissolo explained how to best structure a finance deal for public project; and Antonio Ciccarelli explained best practices for ESCOs in selling their projects to both end clients and investors.

The main questions from the audience included:

- What are the benefits of off-balance sheet financing as opposed to bank loans, and how are these deals structured?
- What are the basic requirements of most investors for these types of deals, for both public and private projects?
- What are the most common pitfalls ESCOs experience when first engaging with investors, and how can they be avoided?

SEAF ESCO Webinar II: The latest eQuad updates for increased usability

The final eQuad webinar took place on 9 November 2017. It was organized exclusively for registered early contractor users of the eQuad platform. This webinar was intended to demonstrate the latest updates on the platform, which included increased portfolio management capabilities, project report enhancements, multiple language support (Italian) and a new help desk. The webinar aimed to educate contractor users about these updates as well as receive feedback on the current usability and future developments. One key point that

was raised was that not all project types could be input into the platform – one contractor requested if it would be possible to add additional fields what would support projects involving retrofitting of solar and wind plants. eQuad team took this into consideration and is looking to make these changes in the coming months. For this webinar, 15 contactors registered, with 10 total participating in the live broadcast.

3.4 Desk Research and Direct Investor Outreach

From early 2017, desk research was carried out to show the potential of the SEAF platform to new investors and expand the network. Specific investors were selected and contacted via an introductory email. This is especially effective for investors as they are more likely to engage with personalized, targeted outreach.

A database of investors was developed for different countries including Italy, France, the UK, Ireland and Spain and an introductory email clarifying the purpose of the SEAF platform and proposing a meeting with Joule Assets Europe Chair was sent. The same approach for the UK was put in motion.

The main criteria according to which the investors were selected are the following:

- Investment type: preferably equity, also debt if necessary.
- Investment size: minimum preferred to be included in the € 250k-1million range
- Geographical scope: targeting regions of interest

A face-to-face meeting was set up with the new investors and a questionnaire was sent to all of them identifying the characteristic of the funds, the preferred technologies, their willingness to set up an SPV and their interest in a potential insurance cover.

Examples are:

- A € 500k minimum - €30 million maximum fund targeting Italy, France and Spain and investing in energy efficiency without innovative technologies.
- A €3-10 million equity fund investing in industrial energy efficiency and district heating.

To date, the investor network includes 25 actively engaged investors of which:

- 2 public-private energy efficiency funds
- 1 crowd-funding platform
- 5 commercial banks
- 17 private equity firms with specialized energy efficiency, renewables or infrastructural funds

The majority of the above investors concentrate on investments in Spain, Italy, Portugal, the UK, Ireland, and France. However some banks in particular are able to invest in a wider range of countries including the Netherlands, Belgium, Denmark, Germany, Austria, Sweden, Slovenia, Estonia, and Greece.

3.5 Stakeholder interviews

In order to ensure that the SEAF platform has been built according to stakeholder needs the consortium has performed extensive introductory and follow up interviews to over 100 stakeholders. The interviews focus on the stakeholder's needs and main concerns.

Interviews have been organised throughout the project duration and for each stage of development, as stakeholders continued to join the group through registration to an event or informal meeting at an external event. The meetings and interviews are followed up by signing of MNDAs and a provisional service agreement (there are currently no fees for using the SEAF platform, however given the sensitivity of the data, NDA and service agreements are considered important).

It is important to note that the below numbers describing the interviews do not fully capture the work that was put into each relationship. Face to face meetings generally only take place after one or several initial conference calls, and represent a strong professional relationship. These meetings are always a “next step” from the interview, where the SEAF team has the opportunity to get to know the given stakeholder – including their projects/investment criteria in much more detail. The face-to-face meeting therefore represents a formal business relationship as opposed to a one-way interview for purely academic purposes.

Moreover, in most cases, especially with contractors, interviews do not take the form of one call – they often include several additional follow up calls; often the use of the SEAF platform by stakeholders requires additional follow up on project inputs they have entered into the platform and questions they may have.

However, in order to provide a picture of the quantity of qualitative interviews and open discussions that took place from the project’s kick-off in February 2016 to the writing of this deliverable in October 2017, of the 100+ interviews conducted, the following may be noted:

Investor interviews:

- 25+ interviews via conference call
- 10 face-to-face meetings

The main questions put to investors included:

- What is your minimum size of investment?
- Do you take performance risk
- What structures of investment do you provide (equity through an SPV, debt, EPC, leasing...)
- What regions will you invest in?
- Do you take exchange rate risk?
- What program types do you cover?
- Other questions concerning criteria for project investment, including technology types, desired ROI, IRR, and payback time, can projects be bundled...?

Contractor interviews:

- 65+¹ contractor interviews have been carried out
- 10 face-to-face meetings

The main questions put to contractors included:

- What are the main difficulties you face in growing your business?
- What are the main difficulties you face in securing finance and investor relations?
- What are the types of projects you have in your pipeline currently? What is the typical project size, technology, location? Who is the client?
- Do you have projects you are looking to get financed for now?
- What is the technology?

¹ This is the number of contractors who have had introductory calls with the SEAF team. Of these calls, not all have been responsive or appropriate for follow up, while others have had continued follow up through email, calls, and meetings.

- What is the typical IRR and payback time?
- What is the typical ROI?
- Who is the client?
- Where are you in negotiations with the client - have you signed a contract?
- Do you have a checklist of documents you require of your client to verify their financial health/ability to pay their bills?
- Do you cover M&O (maintenance and operation)? What is your preferred financing structure (leasing/debt/EPC)?

3.6 Closed testing of SEAF Platform for Contractors

During the writing of this deliverable, there were 43 registered contractors on the SEAF platform, however this number is expected to grow quickly as the team continues outreach post-project.

One-to-one, live demonstrations took place with 8 contractors at Investor Days Barcelona, 17th May 2016, and again with 8 contractors at Investor Days Lisbon, 3rd November 2016. These sessions showed selected contractors the early developments of the SEAF platform and collected stakeholder feedback, which was then fed into the beta version, released in January 2017.

10 contractors initially joined the platform for the first closed beta testing session in January 2017, after first signing an MNDAs (Mutual Non Disclosure Agreement). These first contractors also signed a Contractor Agreement that outlined the nature of their relationship with the SEAF team and the services offered. The closed beta testing sessions took place as part of the “Alpha” version release verification activities and involved test users from the SEAF core stakeholder group. Each contractor was initially presented with the platform’s core services and user interfaces through peer-to-peer online demos with the platform developers. Moreover, the group of contractors were given a 3-week period of hands-on experience, by inputting real projects in the platform and testing its usability. The inputs and feedback obtained through these early test sessions were taken into consideration for the SEAF platform early release. From March 2017 the platform was made available through the website <http://www.equadcapital.com>, through which the 33 additional contractors joined over time, first filling a request form (MNDAs have been mandatory for all subsequent users prior to using the platform, although while contractor agreements are not). The commercial process by which contractors as well as investors have been on-boarded has been streamlined and will be closely followed by the SEAF team post commercialization. This process is discussed in greater detail in the post-project deployment strategy in D1.9.

3.7 Closed testing of the SEAF Investor Dashboard

Closed testing with investors took place in two phases. The first phase took place in 20 minute, private face-to-face meetings with **four investors** at the SEAF Investor Forum Milan. These meetings provided a demonstration of the basic functionalities that had been developed for investors as well as the contractor dashboard, and gathered detailed feedback pertaining to the real needs of investors to get the maximum benefit from using the SEAF platform.

The second set of demonstrations for investors took place in October 2017. The fully functioning investor dashboard with the capability to receive and download project reports was released in October 2017. This release was accompanied by **three two-hour feedback sessions with investors**, whereby the SEAF platform managers demonstrated the dashboard to investors through screen sharing and took their feedback and discussed additional needs.

3.8 Beta testing – matching project pipeline to investors

The end goal of the SEAF project – to match project pipeline to capital sources – began April 2017 to December 2017. Approximately €68.3 million worth of project investments have been shown to investors to date, and negotiations with several investors are currently ongoing, with the first deal closures expected before the close of the SEAF project. In order to do this, the SEAF team asks the contractors to input their projects onto the SEAF platform and to create a portfolio of projects. The portfolio, in addition with a presentation highlighting the basic numbers (size of pipeline, project size, internal rate of return and payback time), as well as a presentation of the company itself, are then sent to appropriate investor stakeholders.

Greek Pipeline - Development Bank

One of the first stakeholders to actively engage with the SEAF platform was an SME contractor located in Marathon, Greece.

The contractor has ten years of experience in plant auditing, energy and heat transfer data analysis and redesigning solutions, with a specialization in MVR – mechanical vapour repression, and HVAC for large facilities. The company’s pipeline of projects included food factories of reputable companies located in Greece, Italy, Bulgaria and Romania, totaling €8 million. Due to the location of the contractor and their projects, it was necessary to bring the projects to a development bank whose geographical scope of investment was wider than most investors in the SEAF network. Over the course of several months, numerous conference calls took place to discuss the details of the projects, the contractor and the end clients, with the aim of defining contract terms and arriving at a favourable deal for all parties. This process was slow and has not yet achieved a positive result. The learnings of this experience are discussed in chapter 4.

Italian Pipeline – private equity investors

An Italian contractor on the SEAF platform, and one of the first, developed a strong pipeline worth €60.3 million. This pipeline consisted of a mix of public projects, (mainly CHP and public lighting), retrofits to private, residential apartment blocks, as well as the purchase of several PV plants in Italy,. This pipeline was sent to 4 investors, 3 of which responded immediately showing interest. Face-to-face meetings were set at the time this deliverable was written.

3.9 Summary of all stakeholder engagement activities

Table 2 provides a summary in list form of all the main stakeholder activities carried out throughout the duration of the project, including the type of activity and final outcome.

Table 2 - Summary of all SEAF stakeholder engagement activities

Stakeholder Activity	Date	Activity Type	Audience	Outcome
SEAF Introductory Webinar	26 April 2016	Webinar	- 105 registrants - 86 participants - Majority policy and consultancy	- Follow up with 6 contractors - 1 MNDAs signed. - Ongoing engagement with 1 investor
Investor Days Barcelona	16-17 June 2016	Face to face stakeholder workshop	Contractors, investors, some non-profits and consultancies	70 registrants 60 participants 2 new investors to join network

				Follow up with 1 new investor - 5 new contractors to join network: all signed MNDAs
Empowering Residential and SME Consumers with Demand Response	1 September 2016	Webinar	- Technology providers - Regulators	- 45 participants, mostly tech providers, some contractors and regulators - Follow up with 1 contractor about SEAF project
The SEAF Investor Forum Lisbon	2-3 November 2016	Face to face stakeholder workshop	85 participants, mainly Portuguese Contractors and investors	-Ongoing follow up with 20 new contractors - Follow-up with 4 new investors: 1 bank, 2 private funds, 1 investment association -MNDAs + contracts signed with 2 new contractors
Closed testing of SEAF Platform for contractors	January - November 2017	One-to-one demonstrations via conference call/screen sharing	10 Contractors	- 10 MNDAs and Contractor Agreements signed. SEAF platform open to all contractor use after demo period
The SEAF Investor Forum Milan	8 March 2017	Face to face stakeholder workshop	Contractors, investors	- 151 registered - 100 actual participants - Follow up with 10 new contractors
eQuad Web Seminar: Connecting projects to finance, speeding deal closure	9 May 2017	Webinar	Contractors – both registered and new users	- 27 participants - 4 new contractors onboarded onto SEAF platform
Energy Efficiency Europe: How can ESCOs best finance energy efficiency projects?	19 October 2017	Webinar	Contractors, investors and consultancies	- 36 participants - Follow up with two new contractors – MNDAs signed and onboarded to using SEAF platform
eQuad ESCO Web Seminar II: The latest eQuad updates for increased useability	9 November 2017	Webinar	10 participants; all registered users of eQuad	Strengthened relations with registered users - Follow up with each participant to discuss their potential pipeline
SEAF Investor Forum Brussels	29 November 2017	Face to face stakeholder workshop	Contractors, investors, policy makers (European Commission, lobby groups)	- 100 participants - Follow up with 4 new ESCO stakeholders
Presentations at external events	February 2016- December 2017	Public presentations	Contractors, investors, policy makers and industry experts	Building stakeholder mailing list to
Desk research and investor outreach	February 2017- December 2017	Research, direct outreach	Investors from Spain, France, Italy	7 new investors onboarded to SEAF investor network
Closed testing of SEAF investor dashboard	March 2017; October 2017	Face-to-face meeting and two hour online demonstrations	7 investors	Detailed feedback for investor dashboard which was built into the platform, and strengthened investor relations

Stakeholder interviews	February 2016-December 2017	Conference call/face-to-face meetings	Contractors and investors	28 interviews and follow up with investors; Approximately 75 interviews and follow up with contractors
Project-investor matchmaking	April 2017-December 2017	Conference call/face-to-face meetings	Selected contractors and investors	- Best practices for demonstrating projects to investors learned; - Sales process for commercialization of SEAF platform defined

4. Key Learnings from stakeholder activities

Chapter 4 of this deliverable provides an overview of the key learnings that have resulted from the activities listed in chapter 3. Both ESCO and investor stakeholders have consistently named project origination - the sale and closure of projects - their greatest challenge, rather than finance alone. The following sections list the main reasons for this issue, from both stakeholder groups. Section 4.1 outlines the main challenges ESCO and investor stakeholders have expressed during interviews and at events. Section 4.2 outlines the key requirements that investors have repeatedly cited as most important for them to engage in a project. Section 4.3, finally, discusses the specific feedback and needs investor and contractor stakeholders have cited for their successful use of the SEAF platform.

4.1 ESCO and investor challenges

The two main challenges that have been identified throughout the process have been: Selling energy efficiency, particularly through Energy Performance Contracting (EPC), gaining trust from the end client, and securing upfront capital to realize the project. The two problems are interlinked, as lack of upfront finance makes it impossible to sell an EPC model.

Selling Energy Efficiency

For the vast majority of ESCOs, energy efficiency remains difficult to sell and the sales cycle is typically 12 to 18 months per project. This can in part be attributed to the fact that most ESCOs lack strong sales teams to work on effectively reaching their customers and developing strong sales messages.

Firstly, motivating building owners to undertake energy efficiency upgrades is difficult. For most building owners, energy efficiency is a commitment that does not increase their sales or immediate income and extra expenses are best spent elsewhere – for example on hiring new staff. The concept of investing in a project that provides future, as opposed to instant, benefits, is therefore a challenging sales message. ESCOs also face difficulties accessing high-level management (CEO and CFO), who make the final decision. Also an energy manager may react defensively to a proposed EE upgrade.

Similarly, for building owners in many European member states, the EPC model and the concept of energy-as-a-service is not well understood and is met with mistrust. There is also considerable mistrust surrounding the concept of *guaranteed savings*. Many companies prefer to be the owner of the energy efficient assets from day one, as opposed to 3 to 7 years later, however they are also reluctant to pay upfront costs. Building owners and investors may also be wary of entering into a long-term commitment with one provider as they do not have the security that the ESCO will still be a functioning company years later. Additionally, EPC contracts themselves can have a complex legal structure and technical information, including baseline payment and future savings calculations, which may be challenging to communicate.

Clients may not understand where the calculations come from, which instantly puts them in a defensive position and erodes trust, for example.

In the same way, mistrust in the project itself due to perception of risk surrounding technology, and the technology's ability to deliver the promised savings, is an important factor for most building owners. To appease a client, technology must have a strong track record and deliver immediate, next-day savings. Efficacious design of projects also falls into the category of technical risk; whether the technology will deliver the promised savings, and whether the proposed technology is the best solution for the given building, also slow progress in sales and investor negotiations.

Finally, lack of finance remains a key barrier to selling EPC, but is a key barrier in its own right. The EPC model does not work without the upfront capital to deliver the project. Therefore, if the ESCO did not succeed in securing capital from a financial institution, tackling the other aspects of the sales message is of little use. This is largely due in part to difficulty communicating with investors and lack of ESCO in-house expertise in finance itself. A common scenario is that an ESCO will go to a local bank for a straight loan for one project (not knowing or understanding other available options), The loan enables the ESCO to implement one project, however also adds debt to its balance sheet, rendering the hope of financing and rolling out multiple projects simultaneously impossible.

Securing upfront capital and identifying investible projects

The second key barrier to project uptake has to do with the investment transaction itself. For ESCOs, this is related to *securing capital from a financial institution*. On the other side of the coin, the issue for investors is a question of *accessing credible experts with viable pipeline*.

For ESCOs, the difficulty of securing capital is due to several reasons. Firstly, most ESCOs lack the in-house expertise and resources necessary to adequately prepare for investment. The overwhelming majority of ESCO stakeholders interviewed for SEAF expressed a sense of insecurity when approaching finance, and explained that they had limited resources to make available. While well-established ESCOs with experienced financial experts do exist, this is the exception, not the rule. The workload is concentrated on finding and designing projects, as opposed to finding and negotiating financial contracts with investors.

While ESCOs lack the resources and expertise to engage with investors and secure capital, investors on the other hand struggle to identify appropriate, investible projects.

The investor's dilemma can be attributed in part to the high transaction costs of engagement. Close to 100% of all investor stakeholders expressed that the success rate in actual investment, compared to projects received, is very low – around 5%. Projects are often poorly communicated from the start – multiple excel sheets that are difficult to read and overwrought with technical rather than financial data, and a lack of transparency regarding the client and the client contract from the first meeting, discourages investors from engaging early on. Badly presented projects are immediately rejected, even if in reality they are well designed technically. The high transaction costs of engaging with a project with an unknown ESCO or client, which has not presented the project in a clear and understandable way from the very outset, is therefore a key factor that discourages a financial institution from engaging with a project.

Finally, the investor's dilemma can also be attributed in part to a fundamental mismatch between projects and investor criteria. The majority of potential projects do not match investor requirements if they were designed without outside investment in mind from the start. Many private investors have a minimum investment threshold above €1 million and often above €2

million. While individual EE projects may only require €100-€300 thousand. In the case where investors bundle projects, the ESCO may not have enough pipeline to bundle projects in one investment. This minimum investment threshold can act as an important barrier to investment, as the composition of most markets is not conducive to large project sizes. Portuguese SMEs, for example, account for more than two thirds of the country's economic output (compared with an average 57% in the EU). Of these, 95.2% are micro-enterprises². The numbers indicate that large scale energy efficiency retrofits are highly unlikely in this situation, and 100% of Portuguese ESCO stakeholders have confirmed the same – projects above €1 million are exceptional. Similarly, there is less private finance available for energy efficiency projects in countries that were most affected by the financial crisis, such as Greece or the Baltic countries.

Repeated informal requirements across funds

Interviews and negotiations with investor stakeholders pinpointed key *informal* repeated requirements. *Informal* in this context relates to the value attributed to a fund's formal, public investment criteria. Therefore while all funds have formal criteria, specific value is commonly attributed to a certain criterion, which often closely relates to the private expectations and goals of the funds' shareholders.

Understanding and mapping these criteria common to most investors is essential to 1) ensure projects submitted to the SEAF platform will be investible and supporting ESCOs from the early stages to develop projects that meet these criteria and 2) successfully matching projects submitted to the SEAF platform to the best investor for the project. Key repeated criteria are described below.

Investment Risk vs Expected Return

For the potential investor, investment risk and return are closely linked. In order to be attractive to an investor, riskier projects must offer higher expected returns than low-risk alternatives. Investors may be willing to tolerate more risk in order to achieve higher returns, but many will not have this option as their risk appetite is decided within their fund parameters. From the first audit of a site, an ESCO must take into consideration how it will deal with risks including the credit worthiness of the end client, performance risk and technical risk.

For all SEAF investor stakeholders, strong internal rate of return (IRR), of at least 10-12%, is necessary. IRR is a metric used to measure the profitability of potential investments. The IRR is the interest rate percentage that produces a net present value of zero when calculated for the expected stream of future costs and revenues. For a financial institution, an expected project IRR that is greater than its minimum required return on investment (this minimum return is (also known as a firm's "hurdle rate"), suggests that the project should be undertaken.

Credit worthiness of the client vs credibility of the project

The credit worthiness of the client is the financial health of the end client, or building owner. This is the first area of due diligence for an investor.

Although an investor usually does not engage directly with the ESCO's client, an investor will approve (or disapprove) an investment upon certain adjustments in the ESCO's contract with its end-client. Within this items such as step-in rights in case of a failure to pay and other risk mitigation strategies will be decisive.

² European Commission | 2016 SBA Fact Sheet, Portugal.

Therefore, while it is necessary to demonstrate that the project is well designed and has attractive returns, of equal importance to securing finance is to prove the debtor's ability to pay throughout the duration of the payback period. In this regard, it makes sense to be in contact with potential investors early in the sales cycle, to ascertain if the credit worthiness of the client meets for the fund's risk appetite. High levels of debt on a building owner's balance sheet, should be considered an immediate red flag by the ESCO, some financiers will not be able to engage a project in this case. The ESCO should therefore give careful consideration the end client's financial health, and demonstrate to the investor that this has been duly considered.

4.2 Matchmaking – lessons learned

The experience of preparing portfolios of projects and sending to investors has been positive. Matchmaking has not only revealed the extent to which the SEAF platform will be able to scale up the energy efficiency market and to “bridge the gap”, but has also provided insights on how to best engage with investors and manage the process.

Yet, the experience with the Greek contractor is demonstrative of the limits of private, “market driven” initiatives such as the SEAF platform. While the concept of a “market driven” solution is at the heart of the SEAF ethos, the reality is that the platform cannot successfully drive the market forward in certain Member States without additional incentives and support. Firstly, very few private investors are interested in investing in Greece, especially something new and innovative such as EPC – the risks are seen as too high considering that the economy continues to struggle, and the reputation of the SME sector is poor. The development bank was therefore one of the only choices available.

The contractor that the SEAF project engaged with had previously carried out hundreds of building audits and analyses and demonstrated an excellent business plan and specialized expertise, gained over a period of ten years. However due to lack of upfront capital to support its projects, it had little track record in the actual implementation and measurement and verification of these projects, which is essential for investors and clients for contracts guaranteeing a high level of energy savings. This lack of track record was a huge deterrent for the investor, in addition to the fact that they were located in Greece.

Finally, the third challenge for the bank, was that the contractor was looking to develop the projects under an Energy Performance Contract in order to keep them off of their client's balance sheet. The bank had had poor prior experiences with both the EPC model and with other ESCOs in the past, which complicated their engaging again in a similar model. .

The experience with matching a Greek contractor to a development bank therefore demonstrated the following:

- 1) **Greece, and other countries in economic crisis, may be considered a prohibitive risk, even for development banks.** Despite Greece being one of the ten countries for which SEAF was designed, the SEAF platform's “market driven” approach is therefore insufficient in the face of massive ongoing economic and political challenges. In order to drive a market forward, the market first needs to exist enough to attract private capital. Solving this is out of the scope of the SEAF project.
- 2) **Contractors with a short track record may not be considered investible.** Investors, particularly banks, are unwilling to invest in projects that will be performed by contractors with a short track record. This poses a serious problem, as contractors may have considerable technical expertise, but have not gained a strong track record due to lack of upfront capital needed to develop energy efficiency projects in the first

place. This is a “chicken egg” scenario; without upfront capital, a contractor cannot develop a track record. The capital ideally should be off balance sheet, freeing up the contractor’s and end-client’s cash flows so they are financially in a better position to attract more capital to new projects.

- 3) **Development and commercial banks are slow to understand and adapt their processes to Energy Performance Contracting.** If the EU wishes to see increased energy efficiency retrofits, policy should strongly incentivize more banks – commercial and development - to gain expertise in this sector and start funds dedicated to small projects. For small renewables projects, feed-in tariffs that also benefit the investor could be another incentive to scale up the market.

The Italian experience demonstrated the following:

- 1) **Investors are more likely to engage with a contractor if they provide a large pipeline of projects.** Bundling a number of projects in one structured deal (usually a Special Purpose Vehicle), is an advantage to both investors and contractors. Therefore, in order to make small energy efficiency projects investible, they must be part of a larger portfolio. This means in turn that start-up ESCOs require more support and resources in order to grow their pipeline and sell projects.
- 2) **Process to negotiations:** One of the achievements of the SEAF platform is that it allows for an early and quick project assessment. Investors can accept or reject projects from reviewing the SEAF pro-forma immediately allowing for low cost early decision making. (The reasons for a rejection will go beyond the formal criteria of the fund as these are followed within SEAF – but rather with informal factors, such as the stage of fund deployment...) Early rejections are positive as they allow for a low cost early decision on all sides. If a project is rejected the SEAF team to move quickly on to other funds. When the pro-forma is judged as interesting an initial call is set up followed by an initial meeting. Due diligence then follows. The aim is always to not only fund single projects but to create umbrella contracts covering the ESCOs full portfolio. This creates investment security for the ESCO and supports an interesting return for the investor. The contractual negotiation process can require between 3 and 6 months – assuming all goes well.
- 3) **Investors require a company presentation as well as an early review of the contractor-client contract.** In addition to the contractor’s pipeline, the investor immediately needs to see a presentation of the contractor, including their track record and relationship with customers including the contracts used and list of terms. Therefore the SEAF consortium has decided to include a review of the company presentation as well as a review of the end contract with the customer in the early stage of preparing an introduction with investor. This solid presentation was a key factor in generating immediate interest of three investors in the Italian contractor’s pipeline; not only was the pipeline clear and understandable, but the contractor was presented as a trusted expert with a strong track record.
- 4) **New technology is often viewed with suspicion and represents high investment risk** – regarding energy efficiency, investors are still most comfortable with the “low hanging fruits” such as LED lighting.

4.3 Stakeholder Feedback on the SEAF platform

The feedback on the SEAF online platform has been positive³. Contractors highlight that the platform provides an intuitive user interface for inputting data and interacting with the platform services. According to contractors the added value of SEAF lies in that fact that the platform:

³ For more information consult deliverable “D5.3 Report on feedback of the SEAF platform releases – final”

- processes and offers portfolio and individual project management
- can reduce the lead-time for a project access finance
- incorporates, technical and financial data and can potentially provide access to additional revenue streams

As a general comment, contractors indicate it would be useful if a page existed on the portal, with information and guidelines on investor criteria, however this is seen as impractical by the SEAF team. Generally ESCOs do not understand investment criteria the first time. Indeed one of the main observations of the project is that it generally requires between 2-5 actual detailed discussions with an ESCO before they have accepted or understood the implications of an investment structure and how this will apply to their business. (If the time required to explain investment structures sounds longer than expected – remember fund managers themselves have required a university degree in the subject.). Also many fund rules are not written down, but are rather informal, they have to do with a sense of the project and the project team, the stage of the fund itself etc. A single page could therefore do as much harm as good.

Stakeholders made other concrete suggestions, which have been implemented. For example, they have suggested that energy efficiency projects can be further detailed in order to allow all types of projects and technology categories are supported across Europe through SEAF. More specifically:

- The SEAF online platform should be able to capture energy and monetary savings in case of projects with distributed energy sources (on-site generation) such as renewable energy sources (e.g. Photovoltaics).
- The platform should support combined or interactive ECMs (e.g. CHP which results in an increased gas consumption but reduced electricity)
- There should be more carrier/fuel types supported such as diesel and biomass
- Data capture for multiple tariffs must be available
- It would be useful if specific revenue streams generated through different financing models such as leasing and fixed and variable payments are supported.

In relation to the SEAF verification process and the Document Management System (DMS) contractors proposed that DMS underwriting stage be broken down to two stages, with the first stage including all the basic documents (e.g. energy audits, baseline) required for the verification/evaluation phase (up to the point where the project can be introduced to investors) and the second stage including the additional documents needed for the project to receive finance. Likewise, availability of descriptions and document templates for each document element is also strongly desired.

In relation to user management both contractors and investors suggested that it would be useful for the account owners to have the ability to invite other users to register in the account and assign them with specific roles and access rights. The stakeholders have since been informed that the capability of multiple users in the same account is already foreseen and will be implemented in the upcoming platform deliveries.

For investors, it is clear that anything which can lower the cost of due diligence and increase their success rate brings significant value. They confirmed that SEAF is a highly interesting platform for them especially when it comes to the three critical areas of risk assessment, due diligence and success rate.

Investors confirmed that most of the technical and financial data needed for the assessment of a project are already captured through the platform. They have also highlighted the efficiency

of DMS in relation to the due diligence process. Furthermore, they have underscored the following key criteria for investing in a project, which must be visible in the pro forma:

- Credit worthiness and credibility of both the contractor and the end-client
- Availability of the contractor's track record
- Legal structure of the contract between the end-client and the ESCO

In one-to-one demonstrations of the updated investor dashboard in October 2017, investors cited the following as helpful to improve the existing platform:

- Financial performance metrics should be increased to include future value of cash flows compared with the initial investment.
- Long-term development (after the completion of the SEAF project) could include advanced reporting and dashboarding features for investors, for projects financed through the SEAF platform
- Improve clarity of the discount rate - include tooltip that in most cases it should be equal to the end-client's WACC (Weighted Average Cost of Capital)
- Include more stages for the Stage in Sales Process filed (to cover projects which are already running), and potentially rename that field.
- Include a separate inflation rate for energy prices, together with a general inflation rate for other operational expenses
- Feedback on naming conventions
- Rename "portfolio" to "bundle" or "offering" or something similar. In the investors' view, a portfolio is *all* of an investor's projects, not a single investable unit of smaller projects (as was the original design of the investor dashboard)
- Rename 'Contractor cash flows' to 'Project cash flows', and be clear to explain these properly to investors.

5. Conclusions

The SEAF consortium has carried out numerous activities in order to engage with motivated contractors and investors, fulfilling the SEAF Grant Agreement and developing a strong basis to continue to exploit the SEAF platform beyond the lifetime of the project.

The SEAF consortium is therefore on track to fulfilling its goals as set out in the DoW, having developed a group of over 450 stakeholders with a strong core group of contractors and investors who will actively engage on valuating and investing in projects in the Alpha and the final version of the SEAF IT Platform. This group has developed through stakeholder engagement at events organized by the SEAF consortium – six webinars, four high level workshops for investors and contractors, presentations and participation at over 20 external events, 100+ interviews with contractors and investors with appropriate follow up calls and face-to-face meetings, desk research and direct outreach, and one-to-one demonstrations of the platform for both contractors and investors. These activities have reaped invaluable insights that have enabled the consortium to refine the SEAF platform and offering. The resulting project pipeline of over €80 million in projects and 25 engaged investment funds, speak to the need for such a comprehensive solution in the market place today and the potential of the SEAF tool.