

Community Paper

Proposal for the First Global Sustainable Energy Innovation Fund to Tackle Climate Change Using Blended Public and Private Finance

Partnering to Accelerate Sustainable Energy Innovation project
In collaboration with KPMG

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Executive summary

As a contribution to global efforts on the transition to low-carbon economies, the World Economic Forum and KPMG propose the establishment of a Sustainable Energy Innovation Fund (SEIF) to support and accelerate breakthrough energy innovations with the potential to significantly reduce CO₂ emissions.

The proposal builds on multiple consultations and is part of the World Economic Forum's "Partnering to Accelerate Sustainable Energy Innovation" project, which is supported by KPMG.

Energy consumption and production represent around two-thirds of global greenhouse gas (GHG) emissions and there is urgency to act, as recent recommendations of the Intergovernmental Panel on Climate Change (IPCC) confirm. Maturing and bringing to market a broader set of energy technologies and solutions much faster than today is an often overlooked yet critical element in tackling climate change.¹ To achieve this, more capital must flow to sustainable energy innovation, and available funding from public and private sources must be aligned and used as effectively as possible.

The development of sustainable energy innovations faces systemic financial and regulatory hurdles, making the road to market long and challenging. While many sustainable energy innovation challenges and potential markets for deployment are global, energy innovation funding is often taking place nationally.

The SEIF is a unique proposition and can be differentiated from other funding models for the following reasons:

- It will be the first global sustainable energy innovation fund of scale designed to address the innovation deficit identified in the 2015 Paris climate agreement. Critically, mechanisms will be built into the fund structure to enable cross-border sharing of ideas and knowledge to help avoid duplication of effort and to facilitate knowledge and risk sharing on a global basis.
- The fund will support leading-edge energy innovation throughout the world provided the innovation in question has specific application to middle- and low-income countries. This does not exclude innovations supported by the fund to be deployed also in high-income countries.
- Unlike other funds, the SEIF will support energy innovators in the early, mid and late stages where the impact on the climate change agenda can be substantial. Besides funding technologies, the fund also intends to support adaptive and innovative business models and integrated solutions.
- The use of a fund is innovative in itself in this area and is specifically designed to reduce risk through investment diversification. Four initial innovation areas are suggested for investments: hydrogen; energy storage; biomass, bioenergy and advanced biofuels; and Energy Efficiency.

- A blended finance funding structure will be used to meet the different objectives of public and private investors to create synergies between public and private capital. Public investments will help reduce risks to private investors and thereby help catalyse investments from the private sector. While this type of funding model has been used extensively to finance infrastructure projects (particularly renewables) in the middle- and low-income world, it has not for the most part been used to fund energy innovation initiatives.
- The fund will use the services of a "best in class" investment manager with the requisite financial, commercial and technical skills to evaluate, guide and commercialize the underlying innovation projects. This is to professionalize the entire approach to supporting innovation projects and to remove this burden from public and private investors who might otherwise have taken on this role under more traditional models. This removes many of the risks that exist if investors use a "do-it-alone" approach.
- Many of the features of the fund are designed to address specific areas of concerns for innovators, including overdilution of equity, protection of intellectual property and providing support other than just financial support. It is intended that this unique focus on innovators will help attract superior innovation projects, which in turn will benefit the investors in the fund.

To assist the innovators beyond funding, it is envisaged that the fund will include two forms of collaboration:

1. Collaboration with governments and scientific and academic institutions to ensure maximum leverage of existing knowledge and expertise
2. Collaboration with large industrial players to provide a platform for innovators to test bed and prototype their individual innovations and ensure focus is on solutions with a credible market potential

The fund will invest in a portfolio of investee entities with an initial fund size growing to €1 billion over the first 12 months after proof of concept, with an ambition for further growth.

The World Economic Forum and KPMG suggest establishing a "SEIF Alliance", gathering organizations or individuals to become part of the SEIF, either supporting the establishment or later to be part of the SEIF community. We are specifically looking for an investment manager, public and private investors as well as financial, commercial and technical advisers. The envisioned timeline is to create support through outreach and at the World Economic Forum Annual Meeting 2019 in Davos, and be in a position to officially announce the SEIF at the Mission Innovation Ministerial meeting in Vancouver, Canada, in May 2019. The establishment of the fund would follow thereafter.

If your organization is interested in participating in the alliance to create the SEIF, please contact Espen Mehlum, Project Lead at the World Economic Forum, by email at espen.mehlum@weforum.org.

Introduction

Accelerating the pace of innovation in sustainable energy is a critical but often overlooked part of achieving the goals set in the 2015 Paris climate agreement. The urgency for action to reach a lasting and global transition to a low-carbon economy has been emphasized by the latest report of the Intergovernmental Panel on Climate Change (IPCC).² The International Energy Agency's Tracking Clean Energy Progress Report 2018 highlights 38 energy technology areas that are important to meet climate commitments at the COP21 in Paris, underscoring that only four are advancing fast enough.³

This document is a proposal for the establishment of a Sustainable Energy Innovation Fund (SEIF) to support and finance sustainable energy innovations. This is one of the six bold ideas arising from the World Economic Forum project white paper on [Partnering to Accelerate Sustainable Energy Innovation](#), launched at the Mission Innovation Ministerial meeting in Malmö, Sweden, in May 2018.

KPMG is supporting the World Economic Forum on this initiative, and the Forum and Mission Innovation are collaborating on the bold ideas with the hope that some of the Mission Innovation member countries will take an active part in implementing the SEIF.

In 2018, the project developed a straw man proposal with various stakeholders in the energy innovation ecosystem. The envisaged proposal will be open source so that it can support other organizations, national governments or stakeholders to replicate the fund idea with their own focus or stake at the national or international levels. In fact, the World Economic Forum and KPMG are pleased about the recently announced action taken in response to the white paper launch and the call for public-private co-investment for energy innovation. In October 2018, "Breakthrough Energy Europe" was announced, a public-private co-investment fund launched by the Breakthrough Energy Coalition and the European Commission to invest in clean energy technologies in the European Union.⁴ In the same month, the UK Department for Business, Energy & Industrial Strategy (BEIS) has announced a Clean Growth Fund to target clean technology innovations in the UK as part of the government's Clean Growth Strategy.⁵

The challenge

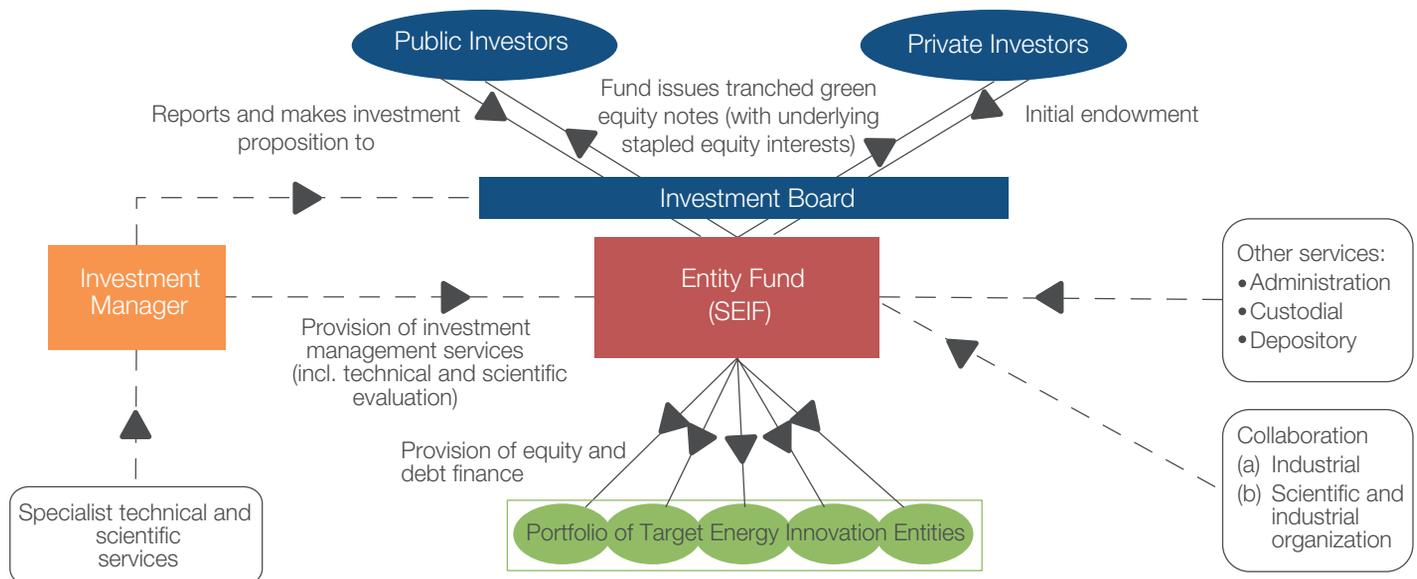
There is a financing gap at critical stages of energy technology development, and public and private funding sources are often not well aligned. The allocation of direct public grants is often inefficient in targeting innovations and innovators with high potential. Industrial corporations and other private sector investors face significant risks in funding, especially early- to mid-stage energy innovations; venture capital largely covers very late stages of innovation only. Government innovation funding mostly focuses on basic research. Early stages of innovation largely takes place in a national context, while the sustainable energy innovation challenges and markets for deployment are international and the innovators are spread across the world. Figure 1 summarizes the challenges of investing in sustainable energy innovation from the perspective of the different stakeholder types.

Figure 1: Funding sustainable energy innovation: The challenges

Sustainable energy innovation		<ul style="list-style-type: none"> - Lack of precedent for transformative innovation in the sustainable energy area to date. - The significant capital expenditure required to commercialize ideas. - Lack of private funding leading to overdependence on public funding.
The innovators		<ul style="list-style-type: none"> - Very little financial support for early-stage research even if it is groundbreaking. - Public support schemes tend to be bureaucratic and administratively burdensome and lack the necessary transparency required. - Placing an obligation on innovators to secure matching funding. - Fear of equity dilution forces many energy innovators to do it alone and not seek funding support. - Concerns over the protection of intellectual property can also cause innovators to avoid public funding opportunities.
Public sector investors		<ul style="list-style-type: none"> - Challenge of identifying the innovators. - Challenge of determining the most appropriate projects to invest in (finding an appropriate investment focus). - Ongoing monitoring and safeguarding of investments made. - Requirements for strict adherence to internal rules, thereby preventing the flexibility required to nurture innovation. - Lack of commercial, financial and entrepreneurial skills in the public sector. - Lack of accountability.
Private investors		<ul style="list-style-type: none"> - Too much risk associated with sustainable energy innovation for the type of returns that can be generated. - Access to investment projects and investable innovators is an issue. - No suitable structures to make investments into – unlike, say, software innovation where there is an active VC and angel market.

Source: World Economic Forum, KPMG, 2018, Project “Partnering to Accelerate Sustainable Energy Innovation”

Figure 2: The SEIF structure



Fund proposal

The SEIF proposal is designed to overcome the various challenges identified above.

Fund structure

Blended finance

Blended finance has proved a successful tool in mitigating the high risks – e.g. macroeconomic, political, tax or currency – in the context of development finance and infrastructure investments. Even though the risks in innovation processes – mainly technological and commercial – are different, the mechanisms used in development finance can be replicated in this new context.

A simplified overview of the envisaged SEIF structure is depicted in Figure 2.

The fund is seeking to attract public and private investors, taking into consideration their individual risk profiles. The mitigation of risk is central to the fund proposition in order to attract funding. The key principle is that the investors will be appropriately remunerated for the underlying risks, including sharing of any above-average profits between the investors and the innovators. The structure is envisioned to adhere to the OECD DAC Blended Finance Principles for Unlocking Commercial Finance for the Sustainable Development Goals.⁶

Investment mechanisms

The fund will invest into a portfolio of target energy innovation legal entities (“investee entities”). The investment will typically take the forms of equity (most likely given the level or risk) or debt (convertible or otherwise). No support would be provided in the form of grant aid. Each investment will be negotiated separately between the SEIF and the innovator on an “arm’s length” basis. Investments will be made on a fully commercial basis with the intention of ultimately delivering returns to the fund and its investors. However, the investments will be made on the basis that each of the underlying projects will carry real innovation risk and have a longer time horizon than typical venture capital. Public sector investments can be in the form of an initial investment where returns are re-invested in the SEIF or returned to the public investor as desired.

Green equity notes

The investor instrument issued by the SEIF will be in the form of a green equity note (GEN), adhering to the principles of the Climate Bonds Initiative.⁷ Because of the inability to pay annual coupons, the GEN funding instrument has been structured as a hybrid between a debt and an equity instrument.

The GENs would be split into two tranches – a senior note and a mezzanine note. The public investors, at least initially, would take the mezzanine note.

This would be the tranche which is most at risk in that any cash available for distribution to the investors is in the first instance paid in respect of the senior note. In other words, the mezzanine noteholder takes the “first loss” position. This is consistent with the fact that the mezzanine funding is replacing funds that otherwise might have been provided by way of grant aid. The mezzanine note would carry the highest coupon – this would mean that some private investors may wish to also participate in the mezzanine note to take on more risk and thereby potentially receive a higher return.

Both the senior note and the mezzanine note would have a stapled equity interest to allow all of the investors to participate in any remaining residual surplus in the SEIF on a proportionate basis. In the event that there is a surplus available in the SEIF once all of the GENs (principal and accrued interest) have been discharged, the equity surplus is distributed to investors in the same proportions as the original notes subscribed. The returns to the investors will reflect the average performance of the entire portfolio of investments, i.e. the diversification of investments should help to provide downside protection to investors. This will mitigate the dependency of investors on the performance of individual projects or companies.

Protection of the innovator

Innovators will be protected against too much dilution of their economic interest. This is a key area of concern for innovators. Different techniques to protect innovators have been considered:

- The investment could comprise part equity and part debt with the result that the full amount of equity dilution is less than what it might have been. However, the interests of investors will always be a key criteria.
- The fund structure will make sure that innovators will get rewarded for above average performance.
- The innovator has the right to acquire the equity interest held by the SEIF within two years of full commercialization on an “arm’s length” basis.

Exit of investments

The key principles in respect of exiting the underlying investments would be as follows:

- The SEIF is free to sell its equity interest at any time if it believes it would generate optimal value for its investors. The SEIF is free to hold onto its interests post-commercialization; this is the more likely scenario.

- Where possible, an independent “arm’s length” market value is established for the interest being disposed of.
- The underlying investee entity (and its other shareholders) would have first right to acquire the interest held by the SEIF. Where the SEIF interest is not acquired by the underlying investee entity, investors will have the right to acquire the interest before it is put on the open market.

Investment guideline

Strict investment guidelines for the fund will need to be established and agreed upon. The purpose of these guidelines is to determine exactly what type of assets the SEIF can invest in, the stage of development sufficient to entail investment, and possibly, some overall cap on the amount that can be invested in respect of any one innovation.

Investment focus

The key principle is that the fund will not only focus on exponential or transformative innovations, but also look at applied innovations. Many potential solutions exist in other sectors (for example, in the digital world), but their application to sustainable energy has not been properly considered or examined. Impactful and profitable sustainable energy innovations will be systemic solutions rather than one hardware technology only. Clean and sustainable energy technologies and solutions are defined as being directly or indirectly capable of reducing GHG emissions, either by substantially decreasing GHG production, emissions or by decreasing consumption. As such, a strong focus of the SEIF will be placed on solutions that improve energy efficiency and a few high potential areas for clean energy production. An indicative measure of the CO₂ abatement potential will be sought to assess SEIF innovation investment targets in addition to their realistic commercial market potential. The SEIF will only invest in solutions that have application in middle- and low- income countries.

The fund’s investment focus will be informed by the IEA’s Clean Technology Tracker. The IEA has identified 100 innovation gaps in the 38 clean energy technologies.⁸ These highlight where hurdles for development are particularly high and more innovation is needed.

As an outcome of structured discussion with various players from the sustainable energy ecosystem, areas that could benefit from the unique SEIF set-up have been identified. These include energy efficiency as well as three technology areas in energy production: Hydrogen, energy storage, biomass/bioenergy and advanced fuels. These areas necessitate further funding and would profit from enhanced international collaboration in R&D and deployment. Also, there is substantial potential in the development of systemic solutions in these areas, making use of and adapting existing infrastructure, and combining hardware components with IoT solutions to facilitate utilization and market access. The focus areas are an initial proposition, which will be discussed and assessed in detail and potentially adapted with the seed investors and investment manager.

Energy efficiency

There are various systemic solutions that are being developed in the area of energy efficiency. These include combinations of hardware with IoT solutions, to improve energy consumption visualization, evaluation, optimization and adaptation. One area where more innovation in terms of efficiency is required is “cooling”, especially in middle- and low-income economies. Middle- and low-income countries will see a fivefold increase in RAC demand until 2050. Some estimates indicate that more efficient cooling technology could prevent up to 100 gigatonnes (GT) of CO₂-equivalent emissions by 2050.⁹

The energy production areas are:

Hydrogen

Hydrogen has the potential to integrate different segments of the energy value chain, and with that, support the transition to a low-carbon energy system. If produced from clean energy sources, it can play a key role in reducing global GHG emissions and improving the operational flexibility of the energy system, given its fuel and storage potential.¹⁰

Mission Innovation and the Hydrogen Council are collaborating on a Hydrogen Innovation Challenge, which identifies and seeks to address key innovation gaps in hydrogen.

Energy storage

Energy storage plays a key role in the integration and balancing of decentralized renewable energy sources and is a critical factor in the future deployment of large-scale renewable technologies, electric mobility, demand response and other applications. Low-cost, high-performance energy storage technologies have a long way to go to reach full maturity and more fundamental breakthroughs are needed.

Biomass, bioenergy and advanced biofuels

The utilization of sustainable biomass and biofuels has huge potential for the electrification and energy provision of remote areas in the creation of decentralized energy systems, especially for middle- and low- income countries.

Key metrics

- *Innovation stage focus*: It will be the responsibility of the investment manager to ensure that the fund invests in a balanced mix of early- to mid- and late-stage innovators to manage the overall level of technology risk appropriately.
- *Regional focus*: The fund’s investments will not have a regional focus. On the contrary, the SEIF would look to fund technologies stemming from where the leading-edge innovation happens with a broad regional applicability. In particular, the fund would look for applicability and adjustability of technologies to the middle- and low-income world.
- *Investment horizon*: 10+ years with interim liquidity events depending on successful exit at the investee level.

- *Fund size*: A minimum of €100 million initially, but growing to €1 billion over the first 12 months once proof of concept has been demonstrated with a goal to grow further in following years.
- *Number of investments*: 40-50 over the entire lifespan of the fund, but not more than 20 at the same time. There will be continuous exits and divestments.
- *Size of Investments*: €1-50 million to be re-evaluated regularly.

Other criteria include:

- The innovator will have to demonstrate that there is a basis for believing that the innovation is capable of reaching commercialization and scale.
- The innovator must meet all of the normal due diligence hurdles for an investee company.
- The investment manager must be satisfied that the investee management team has the scientific and technical resources at its disposal to research and fully develop the underlying idea.
- As the detailed investment criteria are defined further, one key area will be to agree on some form of measurement process for the purposes of evaluation both initially and subsequently. For example, one idea is that this could be in the form of measurement of overall carbon impact.

Roles and governance of the fund

The selection process will be defined in detail by the investment manager in accordance with seed investors.

Evaluations shall primarily be made by the investment manager and team. External assistance may be used as required, for example, from scientific and academic institutions as well as from governments and private sector investors. There are also various other channels available to secure a pipeline such as via the entities collaborating with the fund and through connections with innovation accelerators, various multilateral bodies and others.

In a fund structure like this, where there will be a mix of public and private investors, proper corporate governance is essential. In addition to defining the right investment criteria and KPIs, the establishment of a knowledgeable and experienced investment management team working full-time on the fund – complemented by a strong group of advisers and support organizations (such as research centres, accelerators as well as energy policy or industry organizations, multilaterals, NGOs) – will be key to ensure access to the “right” innovators and making sure the fund invests in “winning” projects.

Investment manager

The investment manager will act on behalf of the investors in providing investment advisory services to the fund’s board. This will include not only deal origination, but also deal execution and ongoing management of the investments. In respect to the latter part, the role will involve overseeing the ongoing performance of the investee entities. Whether further follow-on investments will be required and when it is appropriate to exit from the investment, the investment manager will be expected to provide not only financial advice, but also provide business and commercial advice to the innovators to guide them to ultimate commercialization of their idea much faster than without the support of the SEIF.

At all times, the performance of the investment manager will be subject to a vote of the investors.

A formal process will be undertaken to identify an asset manager capable of meeting key criteria. The investment manager will be selected at an early stage of designing the fund as the manager will need to provide input into the overall structure, sourcing of investors and structuring of the funding instruments to be issued to investors.

Key investment manager criteria:

- A globally recognized individual or brand in the sustainable asset sector
- Ability to attract and manage a diverse group of investor classes
- Ability to select viable innovation projects and has the expertise to manage a project through the innovation lifecycle until commercialization
- Ability to provide or build a knowledgeable team to manage the portfolio and provide guidance to the innovators
- Ability to source technical and scientific resources to help the project evaluation phase, not just at the time of investment but throughout the innovation cycle
- Key relationships with industrials and others who might act as partners for product innovation purposes or for longer-term commercialization of the idea
- Experience in sourcing, structuring and managing investments in high- as well as middle- and low-income countries
- Ability to identify new areas of focus for innovation within the sustainable energy sector

It is recognized that (as it happened in other instances in the sustainable energy sector), the investment manager might not be an existing player, but instead a newly formed grouping around some key individuals. Another alternative is that an existing manager could add resources to deal with the technical aspects.

The board

In essence, the fund’s board will have overall responsibility for corporate governance and will be obliged to oversee the work of the investment manager and the other services which may need to be provided to the SEIF, including fund administration, custodial and depository services. An investment committee would be established to approve investment and divestment decisions recommended by the investment manager. This committee would report to the board of the SEIF. Board members will comprise a diverse group of individuals representing the fields of innovation, and public and private investors. The board will not only represent the investors, but also include independent advisers. This will enable a second, objective opinion on investment propositions made and will take the role of “checks and balances” for investment decisions.

Technical, commercial and financial advisers

In practice, the investment manager will need to buy in or have pro bono access to some specialist scientific and technical expertise (“advisers”) on a standing or case-by-case basis. The SEIF also envisages advisers to support and accompany investee entities in their development journey. Ongoing support will be needed

from a technical and entrepreneurial perspective. As stated above, advisers or advisory organizations will be represented on the board to ensure independent and objective investment decisions.

Investors

A critical aspect for any investment fund is the process to identify and source investors. The SEIF is looking to attract both public and private investors. The Partnering to Accelerate Sustainable Energy Innovation project team has identified a wide range of potential public and private investor groups and tested the risk appetite and strategic interest of selected parties within each group. The diagram shows an overview of the potential investor landscape.

In particular, there is a growing community of investors who would be interested in participating in the clean energy transition, but that lack the technical and commercial energy know-how. The SEIF offers the opportunity to contribute and learn, since the deal flow and management is taken care of by the fund organization. The first investors committing to the SEIF will have a strong influence on the structure and focus of the fund. Ultimately, the seed investor and the investment manager will need to develop all of the detailed aspects of the fund.

Figure 3: Overview of investor landscape

		Strategic interest	Risk appetite for innovations	Overall participation interest in fund	Comment
Corporates	Oil and Gas Companies				➤ Corporates with a strategic interest in accelerating sustainable energy innovation, but with limited in-house capabilities to drive the agenda and assess new technologies, have the biggest interest in participating in the SEIF.
	Utilities (incl. DSOs/TSOs)				
	Plant/Equipment Manufacturers				
	Car Manufacturers				
	Technology Companies				
Others	Philanthropists/Foundation/HNIs				➤ While foundation could have interest in the SEIF to support the climate agenda, financial investors could be attracted by the portfolio returns of disruptive energy innovations.
	Asset Managers/Investment Management Corporations				
	VCs/Angel Investors/Family Offices				
Public	National Governments				➤ Public sector entities are committed to the climate goals and support mechanisms that help achieve this goal. ➤ Prerequisite for these support in SEIF is access to own budget. ➤ Challenge: Public sector is increasingly looking for financial returns.
	MDBs/GIBs				
	Multilateral Organizations				
Institutional Investors (Pension Funds/insurances)					➤ No interest yet, but potentially in the future.

Benefits of the SEIF

Benefits of the SEIF

The additional benefits of the SEIF beyond the mere funding aspect are key to the SEIF proposal. The proposed fund has been structured to consider the motivations and concerns of all parties, including innovators, private investors and the public sector. The SEIF offers opportunities for strategic partnerships and collaboration among different stakeholder groups, while ensuring knowledge sharing and fostering pursuit of a common agenda on climate change mitigation.

Innovators

The SEIF ensures that there will be no inequitable dilutions of the equity stakes, and the innovators will benefit from higher than expected performance. The SEIF governance structure and the entrepreneurial guidance will help innovators stay focused and operate best practice. Beyond the access to finance and protection of equity stakes, innovators profit from the knowledge network and assistance provided by the SEIF advisers and collaborators. The investors provide potential for strategic partnerships and access to first buyers and other commercial partners through the networks created by the SEIF; opportunities to bring innovative projects to market may also arise. The SEIF also offers the possibilities to the innovators to share their knowledge with like-minded and active innovators and advisers while at the same time still protecting their intellectual property. This also offers the potential for synergies in the development process and bundling common activities.

Private investors

Professional oversight and management by a qualified investment manager ensures that the supply of high-potential investee entities would not be a concern (the fund will deploy various other mechanisms to source innovators, particularly through collaborations). Investors would also have the possibility to suggest potential promising innovators that could be assessed by the investment manager. Lack of technological know-how, cited as a barrier among investors, is likewise dealt with by having the investment manager with the requisite skills, potentially supported by technical, commercial and financial advisers. These aspects should be key to persuading investors that the risk adjusted returns can be achieved.

The SEIF offers corporate private investors access to innovative ideas at an early, pre-commercial stage. They can incorporate successful ideas into their business models and profit from a first-mover advantage in addition to competitive risk-adjusted returns on their investments and sharing of risks with other private and public investors. The involvement in the SEIF can also help them identify trends and disrupters to their business models at an early stage. Through the involvement and collaboration with other corporates, they can work on a common agenda and support the scaling process of promising solutions. The SEIF will appeal to investors with an interest in responsible and social investments.

Public sector

The proposed fund serves key public policy goals such as economic growth and support for innovation, and pursuing carbon reduction targets consistent with the goals of the Paris climate agreement. The SEIF is a tool to join forces and resources and align incentives to push breakthrough energy solutions faster at a bigger scale than nations can do individually.

- The fund provides the public sector with a new mechanism to deploy funding and know-how and learning from new ways to fund sustainable energy innovation.
- There is an opportunity to highlight high-potential innovators from participating countries, which can be assessed as part of the pipeline management.
- The fund improves effectiveness and leverage of public expenditure through connecting with private funding and through a neutral and specialized investment manager, thereby ensuring higher “innovation dividends” for public funding.
- There is an opportunity to benefit from innovations that come out of the SEIF, for instance, through public procurement.
- There is a possibility to get much higher leverage of government and multilateral funding to bring private capital to deep-tech energy innovation using blended finance techniques.
- There is an opportunity to champion sustainable energy innovation agenda for middle- and low-income countries
- The fund can be an enabler to encourage multinational rather than national approaches to innovation, thereby overcoming systemic barriers and sharing risks.

Since the public sector has easy access to national research centres and to new, unproven solutions, it can provide testing grounds to the SEIF investees and offer collaboration strategies, such as public procurement. The SEIF can also facilitate the collaboration with other public authorities and governments to work on a common agenda.

Public funding in the SEIF is proposed not as a substitute, but rather as a complement to other innovation financing mechanisms such as direct funding of R&D or fiscal measures such as R&D tax incentives. Unlike many other government-sponsored programmes, the fund intends to deliver a commercial return to the public investors.

Call for a SEIF Alliance

As a next step, the World Economic Forum, KPMG and Mission Innovation are cooperating to make the SEIF a reality. The proposal is for interested parties to form a “SEIF Alliance” to engage in the implementation of the fund and/or take an active role in the fund structure. The SEIF Alliance will form a task force to work on the structuring and organizational establishment of the fund, refining and adapting the concept described in this document as needed.

Roles

The SEIF Alliance would ideally consist of at least one representative for the following roles:

- Investment manager
- Public investors
- Private investors
- Financial, commercial and technical adviser (to set up the fund and/or take an active role)

Timeline

The following is a tentative timeline for the establishment of the SEIF:

- January 2019: Informal market approach of investment manager and investors
- January 2019 to end of March 2019: Distribution and collection of letters of interest
- Mid-March to mid-May 2019: Formal request for proposal process for investment managers
- 27-29 May 2019: Announcement of the SEIF at Fourth Mission Innovation Ministerial Meeting in Vancouver, Canada
- Mid-July 2019: Non-binding letter of commitment by public and private investors
- Mid-September 2019: Structuring workshop with investment managers and investors
- November 2019 to December 2019: Due diligence period
- End of December: Binding commitment by investors
- Annual Meeting 2020: Launch of the SEIF

The World Economic Forum and KPMG would like to thank all parties involved in their assistance in developing the concepts of the SEIF and taking the first steps to implementation. We are keen and committed to continuing to offer our expertise and our public-private network to support the energy community on the global climate action agenda.

Contact details

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Endnotes

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