Achieving Speed and Scale in Climate Finance: the Platforms as Meta-intermediaries

*Working Paper*

**Esther Choi, Ph.D.**  
Research Fellow  
Sustainable Finance Initiative  
Stanford University
# Table of Contents

Executive Summary ................................................................. 3  
Acknowledgment .................................................................... 3  
I. Introduction ......................................................................... 4  
2. Theoretical and Analytical Framework ................................  6  
3. Platform-based Initiatives .................................................. 9  
   IRENA Sustainable Energy Marketplace .............................. 10  
   CDP Matchmaker ............................................................... 12  
   Convergence ...................................................................... 13  
   CleanTek Market ............................................................... 15  
4. Discussion .......................................................................... 16  
5. Conclusion .......................................................................... 19
**Executive Summary**

In the midst of the persistent climate investment gap, a renewed focus has emerged on blended finance to strategically use public and philanthropic capital to catalyze substantial amounts of additional private sector investment for climate projects. However, in today's complex and fragmented climate finance landscape, investors, intermediaries, and project developers cannot find one another in an efficient and effective manner. This, in turn, incurs significant transaction, search, and opportunity costs, posing a substantial impediment to the progress that is needed to enhance the quantity and quality of climate finance. Without an effective mechanism that can mitigate the mismatch between supply of and demand for climate finance, it is unlikely that blended finance can achieve its potential to effectively mobilize private capital at scale for systemic and transformative climate actions.

In response, an array of online platforms has emerged at various governance levels and sectors to match different stakeholders and accelerate the process. Matchmaking platforms can expedite the discovery of investment opportunities and mobilize untapped resources by facilitating multi-sided interactions and reducing the transaction costs of achieving common goals. These platforms can also serve as an important tool and mechanism for a governance strategy called orchestration. By serving as meta-intermediaries, or an umbrella for public and private intermediaries, matchmaking platforms can help climate finance participants navigate through the highly fragmented landscape and direct their efforts towards accelerating the deployment of climate finance.

Framing the mismatch in climate finance as a governance problem and drawing insights from the literatures on transnational governance, polycentric governance, and collaborative governance, this working paper assesses four platforms that are operating in this space: the International Renewable Energy Agency (IRENA)’s Sustainable Energy Marketplace, CDP’s Matchmaker, Convergence’s Deal Platform, and CleanTek Market. While these platforms represent notable achievements with significant legitimacy, they have yet to play an effective role of meta-intermediary in orchestration. Because of the registration status, the nature of institutionalization, and/or the lack of resources and appropriate technologies, many function more as a data aggregator than an actual matchmaking platform, often relying on time-consuming manual matching and the expertise of the platform managers. This approach deviates from “democratizing” the deal-sourcing process and what is often thought of as the bottom-up, IT-based platform ecosystem. Therefore, rather than launch another platform that serves the same goal, it is recommended to consider the critical functions and features needed for meta-intermediaries to foster a vibrant ecosystem for climate finance transactions.

**Acknowledgment**

This working paper benefitted from the valuable contributions and perspectives of interviewees and colleagues in the climate finance community. All errors are my own.
I. INTRODUCTION

While the current scale of climate finance shows impressive progress over the past decade, it is still significantly below what is required to meet the goals set by the Paris Agreement of the United Nations Framework Convention on Climate Change (UNFCCC) and achieve the transition to low-carbon and sustainable economy. The amount of financing required is in the trillions of dollars, yet the recent flows of climate finance have averaged US$579 billion (Buchner et al. 2019). In the face of the potential carbon lock-in and the urgency of mitigating intensifying climate impact, the rate of closing the financing gap is too slow and the approach too fragmented.

In response to the persistent climate investment gap, particularly in developing countries, calls for scaling climate finance have been directed at all levels of government and international funding agencies. These calls have recently been accompanied by a renewed focus on the private sector. There is a general consensus that the current amount of public funding is insufficient to achieve meaningful decarbonization and should thus be strategically used – through blended finance – to leverage substantial amounts of private sector investment for climate mitigation and adaptation projects in developing countries (World Bank 2017; Asian Development Bank 2017; IPCC 2019; Buso and Stenger 2018; Attridge and Engen 2019; GEF 2019). By making projects with climate impact commercially viable and investable, blended finance can, in principle, catalyze private investments that would otherwise not be available for climate projects in developing countries (Choi and Seiger 2020). Blended finance is a powerful tool, because more than a third of global invested capital – about US$19 trillion – is controlled by the world’s 100 largest asset owners, yet less than one percent of global capital markets is deployed in developing countries (Henderson 2020; Convergence 2020b). As the necessary capital exists in other sectors of the economy and other parts of the geography, the focus has narrowed down to “having to organize it” so that the capital gets directed to critical projects in critical geographies for effective decarbonization (SFI 2019).

It is, however, the organizing part that remains difficult. Complaints persist on both sides of blended finance transactions, from those who have the capital who say they cannot find investable deals, and those who seek the capital who say they cannot find investors for their projects (The New Climate Economy 2018; Egler and Frazao 2016; Girishankar 2009). Deal sourcing, the process of identifying investment prospects, is already difficult, demanding the vast majority of an investor’s time (commercial investor, correspondence with author, September 12, 2019). Even if there is a pool of investors, intermediaries, and project developers, identifying one another, aligning interests, and forming robust partnerships can be complicated and challenging endeavor, because blended finance inherently brings together public and private stakeholders with different goals, interests, and risk-return profiles (Choi and Seiger 2020). The persistence required to attract investment and forming a partnership is demonstrated by several blended finance vehicles. The front office of the Global Energy Efficiency and Renewable Energy Fund (GEEREF) had to knock on the doors of more than 900 investors to have 24 of them commit (Choi and Seiger, 2020). Climate Investor One, another major blended finance vehicle, approached 300 investors, ultimately securing five (Tonkonogy et al. 2019).

Identifying and partnering with the right type of investors is further complicated by the fact that investors need to be matched with different phases of project finance. Matching public and private investors with various risk appetite and time horizons with different stages of project finance requires deliberate and strategic coordination efforts. Venture capital funds, for example, invest in a basket of entrepreneurs and innovative technologies, expecting the majority to fail but counting on the exceptional success of some investments (Schniering 2019). Commercial banks prefer short-term investments and have moderate liquidity needs, are hence most suited at
the construction and operational phase (Tonkonogy et al. 2018). Life insurance companies, on the other hand, have a long investment horizon driven by long-term obligations with less liquidity needs, are therefore suited at the operational phase (Tonkonogy et al. 2018). Furthermore, state-owned enterprises (SOEs) that are common in emerging economies operate quite differently from private enterprises. Therefore, matching their interests, needs, and objectives requires transparent information sharing, efficient coordination, and innovative approaches to weave the network together. The challenges illustrated above not only prevent climate finance from scaling today, but also have implications on future investment trends and the replicability and scalability of projects beyond one-off transactions. Without an effective mechanism that can mitigate this mismatch problem, it is unlikely that blended finance can achieve its potential to effectively mobilize private capital at scale for systemic and transformative climate actions.

Recognizing these challenges, an array of initiatives and approaches have been proposed and implemented. They include offline events and online “matchmaking” or “marketplace” platforms that connect stakeholders with different risk profiles and interests. Online platforms, in particular, have the potential to connect and mobilize significant amounts of interest and capital. This is because they move away from the transactions that rely on physical networks of developers, investors, and intermediaries, where conducting due diligence depends on who they already know, and “luck” is a key factor for transactions to go through (Salisbury and Khvatsky 2018; Kenny 2019; Carter and Plant 2020; Goel 2020).

Due to the spectacularly successful technology platforms like the iPhone, Uber, and Airbnb, the term “platform” has replaced what might once have been called a meeting, conference partnership, clearinghouse, or network (Ansell and Gash 2018). This paper, however, views platforms as a generic organizational logic, following the insights from Ansell and Gash (2018). Framing the mismatch in climate finance as a governance issue, this paper assesses how this organizational logic might serve as a governance strategy via the promotion of collaborative governance (Ansell and Gash 2018; Nambisan 2019).

The purpose of this paper is to enhance our understanding of current practices and activities that strive to increase the quantity and quality of climate finance by increasing visibility and strengthening linkages among actors, providing support, mobilizing capital and expertise, and increasing coordination and collaboration. The paper examines ongoing efforts, namely the “platforms,” that have been mandated to match different stakeholders. The paper does not assess or determine the effectiveness of matchmaking platforms in this space. Rather, it provides an understanding of these efforts and identifies critical elements and features from a governance perspective, pays proper attention to the achievements so far, and draws implications for the future. The paper contributes to ongoing research on blended finance by providing practical insights on improving deal sourcing processes and forming partnerships in a more strategic and effective manner. Insights from this research are particularly relevant to climate finance practitioners and decision makers in defining their cooperation with partners and identifying alternative models for deploying and scaling climate finance.

IRENA’s Sustainable Energy Marketplace, CDP’s Matchmaker, Convergence’s Deal Platform, and CleanTek Market serve as case studies in this paper. Assessment of the cases is based on desk research, expert interviews, and information that is publicly available on the activities that mobilize the private sector for climate-compatible development. Because detailed case studies can reveal the strengths and weaknesses of collaborative platform as a governance strategy, such research may be the best way of advancing our understanding of collaborative platforms (Ansell and Gash 2018). This paper also draws insights from the literature on regime complex and
polycentric, transnational, and collaborative governance. The cases cited in this paper are not an exhaustive list of matchmaking platforms operating in the nexus of climate finance and project development in developing countries. Rather, they were chosen based on their objective, mechanism, focus area, and legitimacy of the main architect and the host. The primary focus of this paper targets those related to decarbonization in developing countries, although the paper benefits from initiatives that focus on broader sectors, issue areas, and units such as cities, climate adaptation, and U.N. Sustainable Development Goals (SDGs). The cases share the same purpose of connecting stakeholders through an online platform to mobilize and scale climate finance in developing and emerging markets. However, the cases also represent diverse scope, composition, level of institutionalization, sectoral focus, and usage of IT.¹

The remainder of this paper is structured as follows: Section 2 engages with the theoretical literature in establishing an analytical framework to examine the cases. Section 3 is dedicated to the case studies of platform-mediated matchmaking initiatives. Based on the identified features and challenges, Section 4 draws common themes and lessons learned for effective operations of the platforms for climate interventions. The paper concludes in Section 5 with implications for practitioners and scholars.

2. **Theoretical and Analytical Framework**

Global climate governance has shifted from the top-down, state-centric model of the 1990s to a more open, bottom-up pattern that relies on a broader range of governance measures, engaging public and private actors at the international, national, regional, and local levels. Accordingly, governance for climate change is characterized by complexity and the need for coordination vertically, horizontally, and across sectors (Keohane and Victor 2011; Andonova, Betsill, and Bulkeley 2009; K. W. Abbott 2012). As a result, interests have merged into narrowly defined climate-related issues (e.g., adaptation, carbon markets, renewable energy, reporting), necessitating collective actions across borders within specific governance niches (Andonova, Betsill, and Bulkeley 2009). Many of these actions are “transnational” in that they operate across borders and involve non-state and state actors (Abbott 2012). They play diverse governance roles, such as setting standards for measuring and reporting carbon emissions (e.g., Greenhouse Gas Protocol, CDP), financing renewable energy projects (Renewable Energy and Energy Efficiency Partnership, Catalytic Capital Consortium), and disseminating information (Climate Policy Initiative, Extractive Industries Transparency Initiative). The platforms examined in this paper are situated within this space and are considered as transnational initiatives, as they operate across borders connecting public and private actors to finance and operate climate projects.

It is then unsurprising that institutional arrangements for climate finance, which underpin all of these activities, are also highly populated and fragmented. There is a consensus that the commitment to mobilize US$100 billion per year for climate actions would be fulfilled from a range of sources, both public and private, and would be distributed through different channels, both multilateral and bilateral (UNFCCC 2009: Decision 2/CP.15, paragraph 8). With public finance continuing to struggle to meet the climate pledges and target, concerted

¹ There are also innovative incubators such as the Global Innovation Lab for Climate Finance (“the Lab”) and Transformative Actions Program (TAP) by ICLEI that directly address the problem of the lack of quality pipeline of projects with climate impact by identifying, developing, and supporting promising proposals with political, technical, institutional, and financial resources. Although they are indispensable players in the climate finance landscape, incubators are outside the scope of this paper, because their primary focus is on pipeline development and strengthening proposals rather than identifying investors and matching different stakeholders.
Achieving Speed and Scale in Climate Finance

Efforts are underway to engage and mobilize the private sector in a more strategic and proactive manner. As a result, the climate finance landscape today is teeming with diverse public and private actors, such as multilateral climate funds and development banks, bilateral aid agencies, development finance institutions, project developers, financial intermediaries, and, increasingly, philanthropic foundations and commercial and institutional investors. These actors, however, often operate in silos without central coordination or hierarchy, resulting in a fragmented approach to climate interventions.

There are many disadvantages associated with the fragmented governance architecture. Actors begin to excessively focus on small victories, reduce their expectations, and lose sight of the main goal of creating an overarching framework to effectively address climate change (Heller 2009). This, in turn, risks having a lot of small projects that yield small benefits and overall are not particularly efficient or transformative. Multiple institutional arrangements can also impede effectiveness and pose administrative burdens on developing countries whose resources are already heavily constrained (Gomez-Echeverri 2013; Pickering 2017). Furthermore, channeling funding through a wide variety of institutions with different standards and decision-making arrangements can impede transparency and accountability (Schalatek 2012). The challenges and costs associated with managing and navigating through this system, therefore, discourage actors to come up with a systemic and coherent approach.

This paper considers this fragmentation as a transnational governance problem. Governance is defined by the public nature of its goals, the notion of “steering” that provides direction towards particular goals, and authority recognized by constituents (Ruggie 2004, 504; Andonova, Betsill, and Bulkeley 2009). Platforms that foster partnerships for climate investment in developing countries can then be characterized by public and private actors seeking each other to achieve the “public” nature of their goals, which in this case is climate impact in developing countries. With the right components and characteristics, these platforms can provide a space for cross-border networks of public and private actors and encourage partnerships to address climate finance governance.

In many productive sectors of economy, platform-mediated ecosystems have already become a preferred method of collaboration and value co-creation (Smedlund, Lindblom, and Mitronen 2018). Platforms can facilitate the interaction of different skills, resources, knowledge, or needs by matching interests or creating standardized technological interfaces and communication forums (Ansell and Gash 2018). Platforms also offer a useful framework for distinguishing one-off or short-term instances of collaboration from more adaptive or sustained efforts (Ansell and Gash 2018). Therefore, platforms are well-positioned and structured to effectively address the barriers identified above.

Platforms typically serve as the organizing nexus for multiple networks rather than for a single network (Ansell and Miura 2020). Platforms in this study bring together both public and private actors and their respective networks. This type of public-private platform brings together autonomous actors in a voluntary alliance from multiple sectors that pledge to align their behavior in ways that support both private and public goals (Andonova, Betsill, and Bulkeley 2009). More specifically, matchmaking platforms can exploit and mobilize untapped resources by enabling and facilitating multi-sided interaction and aligning interests. These platforms often provide multi-level intermediation between local collaborative projects and national or international resources and authority. Platforms can therefore facilitate constituents to identify common goals, reduce the transaction cost of achieving them, and gain recognition for their action.
If chronic underinvestment in climate projects is a governance problem, platforms that have emerged to address this problem need to perform a governance function. Orchestration, a governance strategy that can be found in many areas of global governance, is employed when orchestrators possess limited authority and power for hard and direct action. States and international organizations, in particular, have steadily used orchestration to solve collective action problems, because they often lack authority for direct or mandatory control over their targets and the material resources to provide incentives for desired actions (Abbott et al. 2015a). In orchestration, the orchestrator (O) mobilizes intermediaries (I) to direct targets (T) in the pursuit of key collective goals (Bäckstrand and Kuyper 2017; Hale and Roger 2014; K. W. Abbott et al. 2015). In this O-I-T relationship, orchestrators such as the IRENA and CDP seek to mobilize intermediaries – private investors, donor countries, cities, transnational networks – to impact targets in line with the orchestrator’s governance goals. The target of orchestration can include creating common rules, promoting regulation of private actors, and in this case, providing public good and services while serving commercial interests.

Because the orchestrator lacks hierarchical control, all of these techniques rely on soft inducements: persuasion; convening relevant actors; material and ideational support (financing, guidance, technical assistance); and reputational incentives (recognition or endorsement, shaming) (Hale and Roger 2014; K. W. Abbott 2017a). Among these, convening and coordinating are particularly relevant to matchmaking platforms. Convening relevant actors is not only an important element of coordination, but also allows orchestrators to catalyze and shape the formation of new intermediaries and to establish mechanisms for dialogue, learning, and review (K. W. Abbott and Bernstein 2015). Coordinating the activities of intermediaries, as both a goal and a tool of orchestration, lowers transaction costs, provides guidance, reduces policy overlaps and gaps, and increases effectiveness (K. W. Abbott and Bernstein 2015). Furthermore, these techniques are more influential where the orchestrator possesses significant legitimacy and authority, derived from its “focal” institutional position and strong connections with other institutions and accepted leadership (K. Abbott 2014; Hale and Roger 2014). Because orchestration involves governance without mandatory authority or coercive power, legitimacy in the eyes of intermediaries and targets is essential (K. W. Abbott and Bernstein 2015).

In this context, matchmaking platforms can serve as an important tool for orchestration, to direct the efforts of a plethora of actors towards a service provision for accelerating the deployment of climate finance. More specifically, matchmaking platforms serve as “meta-intermediaries,” which are institutional mechanisms that organize intermediaries (Bäckstrand and Kuyper 2017). Orchestrators often employ meta-intermediaries to enhance the convening power of the orchestrator, structure and coordinate intermediaries’ activities, and enhance ordering (Abbott and Hale, 2014; Abbott 2017). Acting as the intermediary of intermediaries, these meta-intermediaries can perform a range of functions, from a knowledge “aggregating” role to a more “orchestrating” role (Ansell and Gash 2018; Geels and Deuten 2006).

With these meta-intermediaries, orchestration can then be conceptualized in terms of an orchestrator-meta-intermediary-intermediary-target (O-M-I-T) relationship. Table 1 illustrates how the cases in this study fit into the O-M-I-T relationship. As meta-intermediaries, platforms are transnational actors acting as an umbrella for a diversity of non-state and sub-state actors. Since platforms typically build on the voluntary contributions of independent or semi-independent stakeholders, they rarely exercise a sufficient degree of power over stakeholders to directly control their interactions (Ansell and Gash 2018). Orchestrating through meta-intermediaries would first enlist the cooperation of existing intermediaries or catalyze the formation of new ones. Where there are
multiple intermediaries, orchestration coordinates their actions (K. W. Abbott 2017a), then encourages and assists intermediaries and steers their behavior in line with the goals of the orchestrator.

**Table 1.** Case Selection and the O-M-I-T relationship

<table>
<thead>
<tr>
<th>Orchestrator</th>
<th>IRENA</th>
<th>CDP</th>
<th>Convergence</th>
<th>CleanTek Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediaries</td>
<td>Project owners, financiers, and service/technology providers</td>
<td>Cities and investors</td>
<td>Deal sponsors including fund managers, companies and others, and public, private, and philanthropic investors</td>
<td>Clean energy project developers and investors</td>
</tr>
<tr>
<td>Targets</td>
<td>Renewable projects in developing countries</td>
<td>City projects aimed at mitigation and adaptation</td>
<td>Blended finance deals supporting the SDGs</td>
<td>Clean energy deployment</td>
</tr>
</tbody>
</table>

3. **Platform-based Initiatives**

In response to the challenges associated with finding the right partners for projects with climate impact, numerous “networking” and “matchmaking” events have surfaced. For example, at the Global Conference on Strengthening Synergies between the Paris Agreement and the 2030 Agenda for Sustainable Development (Climate & SDGs Synergy Conference), a side event entitled, “Matchmaking to accelerate synergies between climate change and SDGs: Connecting public, civil and private sector for action on the ground,” was held on 2 April 2019. The Climate Technology Centre and Network (CTCN), the operating arm of the technology mechanism under the UNFCCC, held Private Sector Matchmaking Events in Manila and Brussels in June and November 2019, respectively. The GCF Private Investment for Climate Conference (GPIC), dubbed as the “only global conference on private investment for climate” and a global marketplace for climate action in developing countries, was held in 2018 and 2019, gathering 500-600 guests from more than 100 countries each time (GCF 2019).

Despite a series of events focusing on achieving similar objectives, there have been limited efforts to date to systemically measure and determine the effectiveness of one-time events. One-time events, which provide a set of opportunities that can be leveraged to optimize intended benefits (Ziakas 2015), are relatively easy to materialize compared to those that require stronger institutionalization. They can serve as a useful space to identify actors and potential matches, and form a common understanding around an issue area. However, events can also be perceived as a forum where powerful stakeholders control the benefits (Rojek 2013). If the invites are extended based on pre-existing connections and network, there is a risk of inviting those who are already “in.”

---

Above all, the sustainability of impact from these one-time events is inherently limited because of their temporal nature and subsequent transience of their outcomes, unless they are strategically institutionalized.

Furthermore, these type of event- and forum-focused networking opportunities cannot address the criticism that the origination and transaction of deals is mired in the 20th century process, which depends on physical networks of developers, investors, and intermediaries (Salisbury and Khvatsky 2018). The current process for climate project financing relies on expertise, judgement, and good faith of individuals (Carter and Plant 2020). The traditional development finance institution model, for example, is reactive, responding to project sponsors proposing an investment (Kenny 2019). Specialist funding agencies like the GCF also vet applicants as best they can by looking at project details in funding proposals and figuring out whether the project needs their limited concessional funding (Carter and Plant 2020). Investors also tend to operate within limited networks, and it is hard to identify new investment partners (Guarnaschelli 2015). Above all, “luck” is a key factor for a project developer or a startup finding a resourceful investor with an aligned focus on technology type and geographic location (Salisbury and Khvatsky 2018). Therefore, when we consider the system-level changes that are needed to address the entire delivery chain of climate finance, one-time events cannot effectively and sustainably address the fragmented nature of the climate finance landscape. How current transactions originate and get implemented tend to result in a lot of small projects in a piecemeal manner, which in turn yields small benefits that may not necessarily be efficient, scalable, or transformative.

To fill this gap, a number of online or virtual platforms have emerged to mitigate the frustration and transaction costs arising from matching different interests. A number of initiatives strive to serve as a centralized database of blended finance deals and facilitate transactions between a pipeline of investable projects and pools of investment capital. Many claim to be the “first-of-its-kind” and the “one-stop shop” with goals of providing data and connecting the capital with deals and partners. All of them serve multiple networks of investors, fund managers, intermediaries, project developers, and other relevant stakeholders, and these are taking place without an overarching framework. This section provides an in-depth assessment of selected cases that are already operating in this space and that can provide insights and lessons. The cases were chosen based on their objective and architecture: IRENA’s Sustainable Energy Marketplace, CDP’s Matchmaker, Convergence’s Deal Platform, and CleanTek Market. These platforms provide an integrated portal where different actors in climate project financing are visible and matched based on their interests. Where these platforms diverge is in their scope, mechanisms, and business model. In subsequent sections, I explore these cases and examine how matchmaking on the respective platform works.

**IRENA Sustainable Energy Marketplace**

IRENA was established in 2011 as an intergovernmental organization to facilitate cooperation, advance knowledge, and promote the adoption and sustainable use of renewable energy. Recognizing the importance of improving the transparency and liquidity of renewable energy and energy efficiency markets in developing countries, IRENA launched the Sustainable Energy Marketplace in 2015 to provide a virtual platform with regional hubs to bring together relevant actors and facilitate matchmaking, ultimately to bring projects to fruition and increase investments in the energy sector (IRENA 2015b). The Marketplace is a free platform, with no cost involved at any stage of registering or using the platform.
When it was launched, the Marketplace targeted renewable energy projects in the Africa Clean Energy Corridor (ACEC) region but subsequently expanded to cover all of Africa, Latin America, and the Caribbean. To capitalize on its successful first two years of operation and in response to requests from IRENA Members, the Marketplace expanded again to cover all developing and emerging markets in Asia, Southeast Europe, and SIDS (IRENA 2020).

In addition to connecting project developers with investors, the Marketplace offers several project facilitation tools: the Project Navigator provides templates and best practices for project developers; the Global Atlas for Renewable Energy offers information on renewable energy potential; REsource has data and statistics on renewable energy; the joint International Energy Agency/IRENA Policies and Measures Database provides country-level information on policies and regulations; and the Solar Energy Standardization Initiative helps streamline the development and financing process for solar projects. These tools are available to improve the quality of renewable energy projects and support early stage project development (IRENA 2020). IRENA also collaborates with international financing institutions, support programs and initiatives to assist in project development and provide access to project facilitation and technical assistance in developing countries. For example, based on the needs expressed through the platform and the number of times an investor profile or a geographic region was viewed, IRENA organizes tailored webinar and informational sessions (IRENA 2015a).

**How the Matchmaking Works**

The Marketplace provides a virtual platform with regional hubs that bring together (1) projects, project developers, and project owners; (2) financiers and investors; and (3) service and technology providers (technical, financing, legal, engineering procurement and construction [EPC], operations, and maintenance). To access the platform, project owners, financiers, and service/technology providers are required to create a profile. Project owners and investors must add at least one project or instrument, respectively, to complete the registration process. There are no specific requirements regarding project size, although it is expected that projects will be in the range of 1 MW to 50 MW and valued from US$1 million to US$100 million (IRENA 2015a). Once approved by IRENA through pre-screening, registered users can view all available projects, financing instruments, and services and technologies from all regions through a single integrated portal. Through search functions, investors can identify investment opportunities, and project developers can access relevant funding sources and expertise to advance their projects, with the ability to contact each other. The Marketplace also encourages sharing project pipelines and joint financing (IRENA 2017).

However, IRENA’s Marketplace does not track whether their matchmaking process results in the successful closing of deals, because once the initial match is made between investors and project developers, the conversation often goes off the platform and into direct correspondence and transactions (Vincent 2020). Therefore, it is not possible to determine Marketplace’s effectiveness and success rate.

In addition to providing a platform for actors to directly interact, IRENA conducts project assessments and active facilitation on a selective basis (Vincent 2020). Based on project assessments, IRENA provides hands-on support for project development for early-stage projects, identifying specific needs and next steps. For more advanced projects, the assessment becomes the basis for matchmaking, in which projects and financing institutions, as well as other relevant stakeholders depending on the specific needs of a project, are partnered to ensure successful deals.
As of October 2020, IRENA’s Sustainable Energy Marketplace is retiring and transferring its project pipeline to the Climate Investment Platform (CIP). The CIP was launched in 2019 by the Green Climate Fund, IRENA, SEforAll, and UNDP to "declutter and streamline developing countries’ access to climate finance" (CIP 2020a). One of CIP’s tracks is a Market Place, which would provide a one-stop portal for project proponents to navigate the landscape and facilitate their access to capital on the demand-side, and for capital providers to source and pre-screen projects on the supply-side (CIP 2020b). IRENA has created a dedicated website titled “IRENA for CIP,” which facilitates the transfer of the project pipeline from IRENA’s Sustainable Energy Marketplace (Vincent 2020).

CDP Matchmaker

Formerly Carbon Disclosure Project, CDP is an international nonprofit that leverages investor and buyer power to motivate companies to disclose and manage their environmental impacts. The idea of CDP’s Matchmaker was born out of the CDP research that examined barriers to private sector investment in urban climate mitigation projects (Hooks 2020; de Boer 2015; Deng-Beck and Price 2016). Climate-related activities in cities are often isolated from economic development outreach, creating communication and information barriers between cities and potential investors. The main conclusion was that the finance is out there, but cities are often unaware of how they can attract it, and investors are unaware that these opportunities exist (de Boer 2018). Matchmaker was set up to bridge this divide by working with cities to highlight projects in flood control, waste management, sustainable transportation, renewable energy, water management, and energy efficiency.

In 2017, CDP’s Matchmaker was launched as a joint initiative of CDP and EIT Climate-KIC. While there was massive demand and interest from cities for the Matchmaker platform, the projects proposed by cities were either not bankable or too early in the project cycle to attract investors (Hooks 2020). Therefore, CDP started working more closely with cities and soon realized that cities needed more project preparation support, noting a lack of communication among project developers and project managers, and between sustainability and finance officers at the local government level. In response, CDP has been holding in-person workshops convening financial sustainability officers, investors, and other stakeholders to build network and capacity before the projects enter the platform. CDP has also launched the Sustainable Finance Training Cohort to offer professional development opportunities for city professionals for education, knowledge sharing, capacity building, and project disclosure.

How the Matchmaking Works

At Matchmaker’s core is a marketplace where cities showcase planned projects on climate mitigation, adaptation, and resiliency to the finance sector. There is no pre-qualification process for projects to showcase in Matchmaker, other than the discussion and agreement between CDP’s Matchmaker team and local governments on which climate projects are to be highlighted. The minimal threshold is low, and projects can participate as long as they are affiliated with local government and tackle the city’s mitigation and/or adaptation projects (Hooks 2020). Local governments submit selected projects on the Matchmaker platform with the contact point or project manager. Projects on the platform then wait for interested investors. In 2019, over 1,200 projects worth US$96.8 billion were disclosed by more than 400 cities globally through the CDP-ICLEI Unified Reporting Platform (CDP 2020).

Matchmaker is an investor-facing platform. While Matchmaker does not charge local governments to submit projects to be highlighted, the platform requires an annual subscription to investors. While cities themselves...
do not have access to Matchmaker, subscribed investors can browse a library of suitable projects. Subscribed investors can have access to the dashboard detailing cities’ climate and sustainability activities and screening capabilities to identify urban climate projects based on the desired criteria.

As a nonprofit organization, CDP cannot serve as a broker or structure a financial deal. While Matchmaker does not brokerage deals or directly introduce projects to investors, it identifies and showcases quality projects through a highly labor-intensive process. CDP’s team reviews each questionnaire sent to cities on an annual basis to collect information and identify demand, review potential projects with impact, work with local governments to improve the quality of projects, and other purposes.

Despite a huge database of more than 1,200 projects, Matchmaker has yet to make a direct one-to-one matchmaking. However, it is difficult to determine the effectiveness and utility of the platform, because CDP does not restrict cities from publicizing or showcasing their projects elsewhere. As a mission-driven organization, CDP wants to maximize the likelihood of projects getting financed by investors (Hooks 2020). For now, CDP measures success by capacity building at the local government level to put climate projects forward and by acquiring a better understanding of different needs and interests (Hooks 2020). CDP also sees networks and partnership that develop out of the platform’s work. For example, the launch of Matchmaker triggered an agreement between CDP and the Mississippi River Cities & Towns Initiative (MRCTI) to grow Mississippi River resilience and sustainable infrastructure projects (Hooks 2020). Matchmaker has also helped develop and establish linkages with the climate finance ecosystem, including the Cities Climate Finance Leadership (CCFLA), the Leadership for Urban Climate Investment (LUCI), and the Sustainable Infrastructure Foundation (SIF).

Convergence

Based in Toronto, Canada, Convergence is an independent organization that generates blended finance data, intelligence, and dealflow to increase private sector investment in developing countries. Convergence was first announced in 2015 at the Third International Conference on Financing for Development in Addis Ababa, Ethiopia, to help private investors overcome barriers to SDG investment in emerging markets, such as high design costs, lack of knowledge and data, and high search costs due to a limited network (Convergence 2015). Convergence was subsequently established as an entity in 2016 by a group of partners, including Canada’s Department of Foreign Affairs, Trade and Development (DFATD); the World Economic Forum; Dalberg Global Development Advisors; and the Global Development Incubator (Convergence 2015). Convergence initially had three areas of focus: building an Investment Network, a community of accredited investors and deal sponsors connected via an online platform that puts interested capital in touch with deals in need of financing; Market Building Tools that include a database of past deals, case studies, and workshops; and Design Funding that provides grants for the design of innovative blended vehicles (Larrea 2016; Gulamani 2020; Price 2015). Convergence’s initial focus revolved around the Investment Network, which was dubbed the “world’s first platform blending private, public, and philanthropic capital” (Convergence 2015).

In April 2017, Convergence launched its Deal Platform, previously known as the Investment Network, which received early commitments from a diverse group of potential users, including Black Rhino, MasterCard, Gates Foundation, Rockefeller Foundation, and the Governments of Canada, Ethiopia, the Netherlands, and Senegal (Price 2015). Soon after, however, Convergence faced a different set of demands from its stakeholders for building a common understanding of blended finance, having coherent language around blended finance transactions,
and demonstrating working examples and case studies to resolve persistent complexity and confusion around blended finance (Gulamani 2020). Acknowledging that a digital platform in itself is insufficient, Convergence decided to deepen its focus to build capacity in blended finance across the field. In doing so, Convergence prioritized developing market building tools and supporting the design and launch of catalytic blended finance solutions, as it saw these activities being vital for establishing a growing field for a digital platform (Gulamani 2020). Before actively participating in the Deal Platform, Convergence Members in the early stages of blended finance first benefit from relevant trainings to acquire working knowledge on blended finance, build necessary capacity, and pursue innovative designs of blended vehicles (Gulamani 2020).

Convergence has 200 Members, including deal sponsors, investors, public agencies, and philanthropic foundations (Convergence 2020). Convergence provides services such as data and insights on past blended finance transactions, curated dealflow, and training workshops for practitioners. After four years of operation, Convergence has built expertise and reputation in the climate and SDG finance arena through its capacity building activities, database, and active knowledge sharing. Convergence is now seeing more interest and appetite from investors to join the membership and utilize the platform (Gulamani 2020).

**How the Matchmaking Works**

When prospective Members join Convergence, they are asked to specify their preferences, which can be updated, if necessary, as priorities change. For example, when donors and investors join Convergence, they specify their target sectors and regions, the financial instruments they can deploy, types of deals they are looking for, the ticket size they can finance, and more. When deal sponsors and project developers join Convergence, they are able to publish deals actively fundraising on the platform, with details pertaining to the transaction, the impact focus, who the anchor investor is, the blended finance structure, and the type of capital they are seeking. To be eligible, deals must have four characteristics: first, a blended finance structure; second, a confirmed third-party interest expressed in terms of a letter of investor’s intent or an agreement with the anchor investor, as this functions as the closest proxy for deal quality in the absence of due diligence; third, a minimum ticket size of US$5 million; and fourth, a target of at least one SDG in one or more developing countries (Convergence website; Gulamani 2020). All deals are screened by Convergence for quality and fitness with the mandate (Convergence 2020b). In 2020, Convergence had 70 deals in its database seeking close to US$6 billion of funding (Gulamani 2020).

Convergence’s matchmaking is a two-step process that utilizes both an algorithm and the involvement of Convergence staff. An algorithm performs initial matching between investors and deal sponsors, after which a Convergence relationship manager steps in as needed to facilitate the process (Gulamani 2020). While Convergence primarily puts the responsibility on deal sponsors to reach out and initiate conversations with potential investors on the Convergence platform, a relationship manager is ultimately required, since deal origination has historically been a relationship business (Gulamani 2020).

In accordance with its securities registration status in the Canadian province of Ontario, Convergence neither performs due diligence nor receives any part of the transaction fee. Convergence is not a crowdfunding platform, and no money is exchanged on the platform. Convergence primarily curates the space and facilitates the formation of connections between private and public investors and organizations seeking capital. The

---

4 Convergence has compiled the largest database of blended finance projects implemented to date, around 500 blended finance transactions that represent US$140 billion in aggregate financing.
achieving speed and scale in climate finance

conversations between prospective investors and project sponsors, once initiated on the platform, almost immediately go off the platform and turn into direct conversations (Gulamani 2020). In addition to tracking the number of transactions on the platform and press releases about deals, Convergence often has to follow up on the initial exchange of messages to determine if the deal went through, often a time-consuming process that can result in incomplete data. For these reasons, it is difficult to determine direct attribution of Convergence in matchmaking. To date, Convergence has featured nearly 150 blended finance transactions with a total target value of about US$15 billion on its Deal Platform. Based on platform activity and feedback from members, Convergence can only attribute millions of dollars mobilized directly to its platform rather than the billions of dollars needed to meet the SDG financing needs in developing countries. Convergence’s experience, however, shows that there is an appetite for blended finance and for leveraging digital solutions more actively to support fundraising. At Convergence, the platform is part of the solution, not the solution (Gulamani 2020).

CleanTek Market

Based in Melbourne, CleanTek Market was launched in 2017 with the goal of connecting startups, investors, project developers, and service providers to accelerate clean technology investment in developing and developed countries by creating a global cleantech ecosystem. While CleanTek Market does not have an established host organization as the other cases do, it has secured a range of international partners to help facilitate the growth and industry uptake of the platform, including U.N.’s WIPO Green, WWF Australia, Asia Pacific Biogas Alliance, Australian Renewable Energy Agency, and large advisory firms such as Baker Mckenzie and KPMG (CTKN 2020).

Dubbed as the world’s first online platform for renewable energy technology (Symons 2017), CleanTek Market was designed to tackle three key barriers that restrict climate finance flows: visibility, deal size, and information asymmetry (Salisbury and Khvatsky 2018). First, an online ecosystem created by CleanTek Market raises the visibility of organizations active in the cleantech sector. Second, investment tools are being created to aggregate small projects into larger investible legal entities or special purpose vehicles (SPVs), thereby enabling institutional investors to efficiently deploy their capital. Third, a tiered validation process designed to rate the quality of dealflow on the platform, mitigating the challenge of information asymmetry between stakeholders. The first tier algorithmically scores each deal using over 20 criteria to indicate its overall quality. The second tier uses discrete dealflow channels managed by industry-trusted organizations to validate the deal. The third tier uses pre-approved agents on the Platform to review and qualify specific deals (Salisbury and Khvatsky 2018).

At its core, CleanTek Market is a matchmaking platform that connects users based on their criteria. There are six project categories: renewable energy, waste, clean water, energy storage, climate & carbon, and transport. Investors can provide grant, equity, and debt investment opportunities on the platform. As of 2020, there are more than a thousand projects on the platform with more than 7,000 users and subscribers from 30 countries. CleanTek Market is also rolling out other service modules, namely Industry Services and Transaction Services. Industry Services include modules that deliver industry insights and enable targeted campaigns to the Platform’s users. Transaction Services include modules that facilitate investment via the Platform, including deal aggregation, investor syndication, crowdfunding, corporate power purchase agreements, and project refinancing (Salisbury and Khvatsky 2018).

5 CleanTek market website, as of Oct 2020 https://www.cleantekmarket.com/projects
How the Matchmaking Works

A unique aspect of CleanTek Market is that the platform uses advanced algorithms and machine learning to connect project developers with investors, end users, advisors and other intermediaries. In order to access the platform, an organization needs to register and add the company profile. The user then completes the search criteria to get connected. CleanTek connects the user with buyers, sellers, or service providers based on the information provided using its smart algorithms. Smart algorithms, which represent the base layer of CleanTek Market’s technology, refer to the algorithms developed by CleanTek to efficiently match users in accordance with their specified criteria. While these matching algorithms are similar to those used by other matchmaking platforms for dating, employment, or real estate, CleanTek Market’s algorithms have capacity to support higher-order data management requirements of the Industry and Transaction Services (Salisbury and Khvatsky 2018). These algorithms are continuously refined to improve their effectiveness in channeling information to users, or streamlining deal origination between buyers and sellers.

Furthermore, machine learning is used to find patterns in individual and aggregated user behavior to predict what information and activities can be curated for a particular user. As the user base expands into the tens of thousands, CleanTek will be able to enhance the user experience on the Platform by predicting the user’s likely needs. Data collected on user patterns will be applied to determine the “trustworthiness” of a user based on its activities on the Platform in comparison to others. This result would then be incorporated into the user’s overall rating (Salisbury and Khvatsky 2018).

CleanTek Market is also working with its legal partners to create “standard contracts” for specific transactions (e.g., power purchase agreements or SPV structuring). These standardized contracts will be translated into “smart contracts” by encapsulating their key terms into a blockchain-distributed ledger, and enabling automated execution and settlement upon the contractual terms being satisfied. Whereas the legal status of such smart contracts is still debated, their use will provide documented evidence of parties agreeing to use the blockchain facility for the execution of contracts. Over time, all platform-based transactions will be executed via smart contracts.

Using algorithms and blockchain-backed applications, CleanTek streamlines the process of identifying and evaluating dealflows as well as the transaction processes. This “light-touch frictionless approach” using algorithmic and blockchain tools to match, authenticate, contract, and settle, significantly reduces the risks and costs associated with deal origination and transactions.

4. Discussion

The cases assessed in Section 3 represent platforms whose main function is to serve as a matchmaker among different actors for climate project financing in developing countries. Motivations and value propositions largely overlap, with all of them striving to serve as a one-stop shop for investors, intermediaries, and project sponsors and to provide them visibility and relevant information to lower search and transaction costs. These efforts are made ultimately to facilitate matching the supply of and demand for climate finance at scale. They all provide “spaces” in the form of an integrated portal for tailored information about projects, financial instruments, and available services, where the users can search for information of interest, filtering by specific criteria. While
doing so, these platforms provide multi-level intermediation among local, national, and/or international actors (Chris Ansell and Gash 2018). This vertical intermediation is challenging yet necessary for climate investment that often utilizes international and national resources to finance projects at local and regional levels. Based on theoretical insights on climate regime, platforms, and orchestration, Section 4 discusses the role and features of these platforms, particularly with respect to their positioning as meta-intermediaries for orchestration, and draws common themes and insights from them. To do that, I assess whether the orchestrator has significant leverage and authority to determine the effectiveness of orchestrating (Abbott 2014), and assess the type of techniques the platforms employed to perform the role of meta-intermediary. I also assess whether the platforms simply enlist intermediaries or also steer their behavior in line with the goals of the orchestrator.

First, while they vary in institutional character, the orchestrators in this study have significant legitimacy, authority, and organizational competence, which in turn also increase the profile and convening power of the platforms. All possess – through either their major activities or partnerships with those with considerable expertise and authority (e.g., CleanTek partnering with WWF) – substantial legitimacy with their target audiences. In particular, IRENA, CDP, and Convergence have an accepted leadership position in renewable energy, information disclosure, and blended finance, respectively. The orchestrators also utilize existing network and resources, or if they are newcomers like Convergence and CleanTek, take the time to build their expertise, reputation, and user base. CDP, for example, leveraged its existing network of cities and investors for Matchmaker and utilized an existing practice of sending out the annual questionnaire to identify demand and select cases to highlight. Convergence, as a newcomer, implemented extensive outreach activities and information sharing to build its reputation in the field of blended finance. These practices are important, because the platform needs to succeed in attracting a critical mass large enough to induce enough members.

Second, the platforms employ several techniques – such as building social capital through a pilot phase, convening and coordinating, and adapting to the demands from their users – to perform the role of meta-intermediary for orchestration. The platforms, through their pilot phase and outreach activities, put significant investment in social capital, created the network of “trusting” relationships among members, and successfully enlisted the cooperation of existing intermediaries before launching a full-fledged initiative (e.g., IRENA’s Sustainable Energy Marketplace and CDP Matchmaker). Pilots in particular can be used to support the implementation of new initiatives and to convince others about them. Once established, the platforms also demonstrate institutional and functional evolution by actively partnering and linking with other services that complement the platform. In particular, since a quality pipeline of projects is a constant barrier to the effective functioning of the platform, some platforms have demonstrated their adaptiveness by restructuring their operational model and priorities. Responding to high demand for trainings, capacity building, and stakeholder engagement and recognizing their importance in the effective operations of the platform, Convergence and CDP reorganized and tailored their model to build necessary technical and operational skillsets among their users. While preparing and hosting a series of workshops, webinars, and consultations to build capacity is a time-consuming and long-term process, Convergence and CDP focus on them to ensure that their matchmaking platforms meet their goals of sourcing a quality pipeline of projects and attracting the right type of investors. IRENA’s Marketplace has gone a step further by retiring the platform and merging its services with other international organizations, with an increasing emphasis on country ownership and synergy with partner organizations.
Third, despite the same objective, the business model of each platform varies. While some platforms are free (IRENA Sustainable Energy Marketplace), others rely on subscription-based fees from a certain type of users (e.g., CDP Matchmaker charging investors and not cities) or all users (e.g., Convergence and CleanTek) for their operations. As the platform-building process develops, architects of the platform need to address the issue of longer-term sustainability, since raising start-up funding may be a lot easier than creating medium and long-term revenue streams. The platform also has to establish its own identity and credibility independent of the institutions that originally created it (Reid, Hayes, and Stibbe 2014).

Fourth, while these matchmaking platforms are often dubbed as “Tinder” or “OkCupid” for renewable projects (Symons 2017), the study shows that they do not function as conventional matchmaking platforms. Although the target audience and objectives of these two types of matchmaking platforms are fundamentally different, they share one major similarity: both strive to achieve the ease and efficiency of searching for a match and the expansion of options beyond the users’ traditional social or professional circles (Anderson, Vogels, and Turner 2020). Creating an account and profile, and setting specific criteria are universal across the cases and correspond closely to how personal matchmaking works. However, the cases significantly diverge in the matching process. While conventional matchmaking platforms rely on rating systems and algorithms to connect different profiles, the platforms in this study employ a range of functions, from simple filtering with limited facilitation (IRENA Sustainable Energy Marketplace) to labor-intensive manual review of criteria and expectations (CDP Matchmaker) through a hybrid of algorithm and staff expertise (Convergence), to automatic matching based on a smart algorithm and blockchain (CleanTek). Only Cleantek Market has committed substantial material resources by developing algorithms and blockchain applications; other orchestrators rely almost exclusively on convening authority, ideational support, and reputational incentives. While some maintain that blended finance is ultimately a relationship business requiring intensive human intervention and facilitation, the cases demonstrate that climate matchmaking platforms do not fully embrace and utilize digital finance and financial technologies, which provide opportunities for greater decentralization and for developing economies to circumvent outdated processes in developing capital markets (Clark, Reed, and Sunderland 2018). Blockchain, for example, can be used for record-keeping, automation of processes and transactions, and transferring value through cryptocurrencies or tokens without requiring a central entity to validate transactions (OECD, World Bank, and UNEP 2018). Although the carbon intensity of sustaining the blockchain network is under debate, blockchain can potentially significantly transform how climate finance transactions work by contributing to greater contractual and financial standardization during the bidding and procurement stages of projects, facilitating the comparability of projects, and helping financial allocations by investors. Coupled with artificial intelligence technologies, blockchain can improve data analytics of infrastructure systems and provide global visibility over climate actions, help track climate financing flows, and encourage greater alignment of these flows. Blockchain can also provide better data on the identification, measurement, and management of investment risks and improve risk mitigation (OECD, World Bank, and UNEP 2018). Therefore, the potential and utilization of these financial technologies should be further explored to transform the way climate finance transactions originate, match, and execute.

Fifth, the lack of data and of proper monitoring and evaluation poses challenges to the effective operations of the platforms. The platforms in this study are relatively young, ranging from three to five years of operation. A common feature is that conversation almost always goes offline once initial matching takes place on the platform, making it difficult to determine effectiveness and attribution. While some architects, or orchestrators, expected this result, others did not. Furthermore, there is no official record on how long the projects
need to wait to be “discovered” by the investors on the platform, or the number of deals that have been successfully made and implemented. The information available to the public often stops at the number of projects and the amount of capital the platforms represent. Some turn to measuring success by gauging the positive spillover effects that created an ecosystem of partnerships and coalitions (e.g., initiatives that were established based on the ecosystem created by CDP’s Matchmaker) or the level of capacity building among their stakeholders (Convergence, CDP, IRENA). The movement away from an exclusive focus on quantitative targets, such as the number of deals made on the platform or the amount of capital mobilized, is not necessarily detrimental because of the need for a comprehensive assessment of climate finance transactions on the quality of deals and non-financial or value additionality (Choi and Seiger 2020). However, without proper monitoring and evaluation of activities and transactions on and off the platform, the effectiveness of matchmaking services remains questionable.

Lastly, despite the legitimacy of the orchestrator and various techniques and services offered by the platforms, they have yet to play an effective role of meta-intermediary in orchestration. The platforms studied in this paper, either through existing clients and networks or by partnering with established institutions with their networks, have attracted a critical mass of complementary service providers and built the necessary client base. The platforms offer matchmaking services among different project, finance, and service providers, as well as other capacity building services and stakeholder engagement efforts. What is lacking is a more active and tangible role of platforms as meta-intermediaries that can foster a vibrant ecosystem of public and private actors who, in turn, change their behavior and operate in line with the goals of the orchestrator. Only with the behavioral change that provides a governance solution can we determine that orchestration is taking place (Hale and Roger 2014; K. W. Abbott 2017b; CITE). For now, despite the name and mission of the platforms, many function more as a data aggregator and a limited database than as an active and automated matchmaking platform, often relying on time-consuming manual matching and expertise of platform managers. This approach deviates from “democratizing” the deal sourcing process and what is often thought of as the bottom-up, IT-based platform ecosystem. In addition, most platforms cannot function as a broker due to the nature of the organization and registration status. The brokering is an unmet need among the platforms surveyed, a finding that was echoed in the field of impact investment (Scholz, Selian, and Mohn 2018).

5. Conclusion

Achieving impact in the current climate finance landscape incurs significant search and transaction costs, imposing persistent barriers to mobilizing and scaling climate finance. Actors and constituents have to muddle through the system to find the right partners and projects to mobilize and deliver climate finance in an incremental manner. Difficulties with navigating this system and frustration with a piecemeal approach to delivering climate impact has prompted actors to come up with various initiatives, particularly focusing on providing platform spaces for matching investors with projects. The architect and host of these platforms acknowledge the mismatch between the supply of and demand for climate finance as a governance problem and recognize the disadvantages of fragmentation in this field. Establishing and operating a matchmaking platform is one way to mitigate fragmentation, ultimately to form systemic alliances among stakeholders for multiple, scalable projects and not one-off deals. As meta-intermediaries in the governance strategy called orchestration, these platforms can provide a governance solution and support climate finance participants navigating through the highly fragmented landscape.
However, these matching initiatives are yet to realize their potential, because of their limited usage and membership, and the varying degrees of coordination on the platform. Online platforms offer multiple advantages that can overcome the barriers that are stifling the flow of climate finance, such as the lack of visibility of projects and investors, information asymmetry, and the ability to connect with actors outside their physical network. With the application of financial technologies, the way transactions originate and reify can be dramatically transformed. Nonetheless, today’s matchmaking platforms often stop at enlisting various types of users, because their registration status or resources prevent them from playing a more active role in coordinating deals. Instead, some focus on capacity building, while others prioritize partnerships. All of these efforts are important and necessary, but I argue that the platform itself needs to play a more active role as a meta-intermediary in orchestration than simply providing information or a virtual “meeting” place. There is also a stigma associated with sourcing deals from an online platform, a belief that such deals must not have generated initial interest on the ground and therefore ended up online (Gulamani 2020). This stigma continues to prevent wide adoption and usage of the platform, which in turn contributes to subpar deals, perpetuating the cycle. Simply creating and running platforms is unlikely to address the fundamental characteristics of the climate finance landscape. The platforms would need to enlist the necessary quality and quantity of stakeholders that can provide diverse products and services, and actively coordinate and steer their behavior in line with the orchestrator’s goals.

It is a challenging endeavor to create a matchmaking platform or a marketplace with a critical mass of users and participation from those with different agendas and combinations of skills, knowledge, or interests. Despite the difficulties, the fact that we continue to see the emerging array of similar matchmaking initiatives is a testament to the persistent challenges facing climate finance transactions. However, creating a new forum, platform, or space, may not be sufficient, in part because there is no common framework to coordinate the activities of multiple platforms. In fact, a number of similar initiatives in this space are trying to achieve the same objective, contributing to further fragmentation and overcrowding of the already heavily saturated climate finance landscape. Despite the legitimacy of the host orchestrator and solid user base, as well as the recognition of the importance of building a quality pipeline of deals before they are ready for matching, the effectiveness of these platforms remains difficult to determine.

Still, if well-designed and managed, platforms offer significant potential to transform the way climate finance transactions originate and reify. Each platform is a self-reinforcing model where more participation leads to more data, which in turn leads to a stronger governance mechanism, leading to further participation. Successful platforms must be robust in the face of different agendas and combinations of skills, knowledge, or interests. To play an effective meta-intermediary role and provide an appropriate governance solution to the defined governance problem, platforms need to play an active brokerage role or institute ways to steer the enlisted intermediaries’ behavior in a more efficient and improved way.

This paper offers many avenues for further investigation. First, there is a temporal dimension to the platform concept, as platforms generate collaborations and help modify them as conditions change. Therefore, platforms may serve as a strategy of adaptive governance, helping to generate or reorganize projects and networks as new opportunities and challenges arise (Chris Ansell and Gash 2018). In the face of external disruptions and shocks, such as the coronavirus pandemic, and a renewed focus on “building back better” with climate considerations, how these platforms demonstrate stability and flexibility can add value to collaborative governance. Second, innovation literature calls attention to the importance of “systemic intermediaries” operating at a strategic level between networks and systems (Van Lente et al. 2003). These systemic intermediaries act
as a catalyst for system innovation by intermediating between subsystems, in part by creating “platforms for experimentation and learning” (Klerkx and Leeuwis 2009, 855). Assessing platforms through this lens can contribute to the impact that platforms have on innovation. Third, some platforms focus on specific countries. These country-level platforms have the advantages of having a consistent policy and legal framework, buy-in from the government, knowledge and expertise from local actors, and a proper level of institutionalization with domestic entities. For example, the Government of Indonesia seeks to achieve the SDGs through the establishment of an integrated platform called the SDG Indonesia One – comprised of US$2.3 billion in public and private funds – to channel into SDG-related infrastructure projects. The Republic of Korea is planning to create a global platform for local public institutions and private firms participating in its Green and Digital New Deal projects (Jung 2020). How these country-level platforms operate within the country and with other platforms and intermediaries can yield practical implications.

Lastly, there are lessons to be learned from defunct platforms. It is not difficult to find defunct or inactive initiatives established to serve the same purpose. IPEx Cleantech Asia, for example, was launched in 2014 as a Singapore-based consortium of ReEx Capital Asia, a boutique fundraising firm, and DNV GL Clean Technologies Center, with initial seed funding from Asian Development Bank. Dubbed as the first-of-its-kind marketplace that would connect buyers and sellers for technology transfers, the now defunct IPEx aimed to serve as a one-stop shop that combines market development with the technical and financial services needed to structure and execute a deal. The Global Impact Investing Network (GIIN), an organization dedicated to increasing the scale and effectiveness of impact investing, launched an online search tool called ImpactBase in 2010 to connect members of the impact investing communities with one another through a single platform to facilitate more efficient networking and communication. In 2020, GIIN closed down the platform, citing the availability of other platforms that can provide more customized and targeted deal-making support (ImpactBase website). Mission Markets, a prominent impact investing marketplace, struggled for years to get established before closing its doors for good in 2017 (Locavesting 2018). ImpactUs, launched in 2017 with backing from the MacArthur Foundation, Ford Foundation, Kellogg Foundation, Open Road Alliance, Enterprise Community Partners, and City First Enterprises, aimed to accelerate the flow of capital to deliver public benefits by bringing new ease to connecting investors with vetted funds, as well as direct investments in social enterprises. The goal of ImpactUs was to achieve US$1 billion in transactions over five years. The Washington, D.C.-based firm expected to host 25 to 30 investment products on its platform in the near term, growing to several hundred over the next decade. By the end of 2017, it had listed less than a dozen investment offerings. In the following year, it ceased operations (Locavesting 2018).

Platforms have the potential to expedite the climate finance transaction processes and address the lack of a systematic and transparent way of sourcing and executing deals. Thus far, however, attention has been on creating matchmaking platforms. It is time to stop and check the current status before launching another platform destined for the same outcome. Innovative initiatives like the platforms assessed in this paper, as well as the ones that have been proposed, only provide a partial solution to the range of challenges that are preventing blended finance from effectively mobilizing a sufficient amount of capital, improving the quality of climate finance, and scaling effective climate interventions.
Achieving Speed and Scale in Climate Finance


Achieving Speed and Scale in Climate Finance


Vincent, Jef. 2020. IRENA’s Sustainable MarketplaceZoom.
