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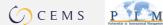
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#### ORIGINAL ARTICLE



# Professional ecologies in European sustainable finance



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#### **Abstract**

Finding direction in new policy areas requires a combination of mandate, expertise, and stakeholder engagement. Here we investigate the formation of the EU's sustainable finance agenda through activity in and around its High Level Expert Group and Technical Expert Group. Actors from different professional ecologies struggle to determine the treatment of sustainable finance and establish policy practices. Those who shape issue treatments can be supported by a capacity to influence from either official mandate, scientific esteem, or claims to experience. These are contending conjectures to locate action among the professionals engaged in the process. We adjudicate between mandate, esteem, and experience with an assessment of the network ties and career histories of those involved in sustainable finance. Our findings suggest that those with many ties and mixed careers win. Professionals identified as offering access to a potential network of investors exhibit greater control over how issues are treated, to the detriment of civil society actors. We demonstrate likely influence over issue treatment through a discussion of environmental and social disclosures and debt financing mechanisms in European sustainable finance expert groups.

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### 1 | INTRODUCTION

The European Union seeks to be a global leader in developing policies and regulations to mitigate climate breakdown. These initiatives include not only investment and infrastructure, such as through the European Green Deal, but the development of taxonomies and guidelines to foster sustainable finance. Assets formally governed under Environmental, Social and Governance (ESG) criteria are currently \$2 trillion (Dimmelmeier, 2021), and the global market for sustainable finance is estimated to be \$35 trillion, or roughly one-third of all professionally managed assets in the world economy (Aramonte & Zabai, 2021, p. 4). Within this market it has been established that investors are suspicious about the presence of a premium from green investments—a "greenium" (Larcker & Watts, 2020). The scientific and political coordination of a policy framework is crucial to market-making for sustainable finance (Thistlethwaite & Paterson, 2016). Different actors are keen to shape policy treatments and who the market empowers, including both public and private authorities (Green, 2013).

As has been well-established in the literature on interest group behavior in European finance, coordination around financial policies is "not so organized" (Woll, 2016). Lobbying and policy influence from the financial sector, business, and civil society groups is characterized by plurality (Pagliari & Young, 2016). While business does support the interests of finance when new policy frameworks are formed, this support comes from the "structural power" of finance rather than specific coordination activities. In cases where financial interests have actively coordinated to dominate policy these efforts have been transnational and relied heavily on technical expertise (Kalaitzake, 2017; Thiemann et al., 2021; Tsingou, 2015). Sustainable finance belongs, thus far, to a "weak field" in that positions among different professionals have not clearly consolidated the stakes at play (Mudge & Vauchez, 2012). Furthermore, in the case of sustainable finance there is no clear dominant economic idea that underpins policy framing, as is often found in other policy areas (Coman, 2019; Hernandez, 2020). As such sustainable finance in the EU context is a highly "contested concept" (Dimmelmeier, 2021).

Given there are no clear paths of coordination from the financial sector or among EU member states, how do actors influence expert groups tasked with developing a new policy framework? These expert groups are charged with assessing what is green and what is not. Such determinations strongly inform policy treatments for European sustainable finance, including what should be disclosed by companies in their accounting and reporting, the methodology for sustainability risk assessment, and mechanisms for debt financing. Who is empowered to establish content for these policy treatments, and how they are operationalized into policy, is vital for European sustainable finance. This includes if the aim of policy is to hold those engaging green finance to account, or whether market participants are able to incrementally establish evaluative criteria on sustainability. Here we answer the question of who is likely to have influence by investigating the formation of the EU's sustainable finance agenda through the composition and activity around the High Level Expert Group (HLEG) and Technical Expert Group (TEG). The purpose of the HLEG was to develop a sustainable finance action plan and the TEG to work on concrete technical proposals. Both expert groups have established the policy framework for EU sustainable finance, including what powers and privileges are given to the finance sector, to policy communities, and to civil society actors. We assess the networks and careers of those in and around HLEG and TEG to explain the micro-foundations of expert coordination for new policy frameworks (Paterson et al., 2014).

Our theoretical starting point in specifying how actors influence expert groups is to understand those active as members belonging to professional ecologies. The scholarship on professional

ecologies in sociology and political economy builds on theories about how professions engage in battles to settle how diagnosis, inference, and treatment should operate (Abbott, 1988), and how they organize across "linked ecologies" (Abbott, 2005). Battles for professional "jurisdiction" may take place in domestic settings but also transnationally (Fourcade, 2006; Hanrieder, 2019; Harrington & Seabrooke, 2020). Professional actors form alliances within their ecology and between ecologies as they compete to assert their jurisdictional claims for "issue control" (Ban & Patenaude, 2019; Henriksen & Seabrooke, 2016; Heusinkveld et al., 2018). Those successful in making such claims rely on different sources of influence to create common projects within and between ecologies, or to rebuff ecologies that may contend for jurisdiction. Expert groups provide a microcosm of "problem-solving collections of actors seeking to produce solutions" (Block-Lieb & Halliday, 2017, p. 47; see also Hendriksen, 2022).

We contend that influence within expert groups reflects three claims to authority in which

We contend that influence within expert groups reflects three claims to authority in which the audience is willing to defer or "obey" an actor (Weber, 1978, p. 53). All of those present in expert groups have a claim to authority, but this claim relies on interaction within the expert network to crystallize into influence. In the context of sustainable finance, those present are there based on either: i) an official mandate; ii) scientific esteem; and iii) issue experience. These options of claiming influence from an official organizational position, from recognized expertise in a peer community, or by offering connection to a community of interest have been established in the literature on professional ecologies and policy coordination (Coman, 2020; Thiemann et al., 2021). Below we present these three claims to likely influence as conjectures that can be assessed against the network and career data. From this data we assess who is central in and around HLEG and TEG, creating a two-level network to distinguish professional and organizational affiliations and connections (Henriksen & Seabrooke, 2016). We also investigate the career histories of prominent actors and how their experiences may support claims to influence on the framing of sustainable finance. To verify the relevance of this data we present evidence from interviews with central actors in the network, which helps to discern if they rely on mandate, esteem, or experience in their claims to influence.

Our findings suggest that it is not only those with a mandate and scientific esteem that can influence the direction of sustainable finance. Key players in and around HLEG and TEG assert their influence through experience; in being known for handling sustainable finance as an issue and having access to a network of stakeholders. In this regard experience rather than abstract knowledge (scientific esteem) or formal position (official mandate) matter (cf. Eyal, 2013; Sending, 2015). The prominence of those with a career history in investment in HLEG and TEG is outsized in that their framing of sustainable finance induces deference and influences the behavior of others. Those who have feared that large investors may have influence on the composition of evaluative practices for green finance have good reasons for concern (Baines & Hager, 2022; Petry et al., 2021). We note how civil society actors are compelled to frame their contributions in the conventional language of finance (cf. Kastner, 2019). We also find that those able to depict themselves as sustainability experts friendly to corporate interests are able to command more voice. Specifically, one issue of contention in the expert groups was over whether company disclosures should favor an established "impact" policy or be developed incrementally with market actors. Investors supported a "process" rather than "impact" treatment and won. Policy treatments on debt financing also reflect the influence of finance professionals, replicating other policy products but with more market flexibility.

Our article makes two contributions to the literature. First, we show the benefit of assessing fragmented coordinated policy communities through the combined lens of network and sequence analysis, which allows the identification of those with likely influence. Second, we show that in

a period in which sustainable finance is open to public and private influence, investors and those identified as sustainability experts are important for policy treatments.

# 2 | PROFESSIONAL ECOLOGIES AND INFLUENCE IN EXPERT GROUPS

The key driver in scholarship on professional ecologies is that actors coordinate and compete to influence how issues are treated. Professional ecologies form around an issue, forging alliances through common projects ("hinges") and encouraging ideas and practices from their own ecology to gain prominence in other ecologies ("avatars") (Abbott, 2005). To unravel how this occurs one can study the actors, locations, and relations. Contemporary examples include hinges created between academic economists and policymakers on austerity policies in economic councils (Farrell & Quiggin, 2017), as well as financial regulation in central banking networks (Thiemann et al., 2021), and the exchange of avatars between economists and lawyers on various cases (Mudge & Vauchez, 2012). In such cases professional ecologies maneuver to distinguish what is to be considered in-scope and out-of-scope for discussion, and especially who is qualified to speak on what an issue is and means (Seabrooke & Tsingou, 2015). Actors from professional ecologies create boundaries to foster influence, including some and excluding others (Liu, 2018). Their claims to influence can also be supported by their relationship to official authority in the state and its agents. This is common for the maintenance of professional jurisdictions (such as licensing arrangements, Abbott, 1988) and also true for influence in expert groups on unsettled issues.

This work on professional ecologies provides a means to examine how likely influence is asserted in expert groups, which are tasked with making a collective decision on how an issue should be treated. This literature suggests that issue treatment will follow those who are able to form alliances with other professional groups to secure their claim to jurisdiction and foster a "settlement" among professions and relevant organizations (Abbott, 1988, 2005). Professionals develop stratagems of action among organizations (Fourcade, 2006; Mudge, 2018), seeking to change how they treat issues and using organizational networks as opportunity spaces to assert influence (Blok et al., 2018; Henriksen & Seabrooke, 2016; Liu et al., 2022). Given that the professional ecology framework has no a priori assumptions on how actors claim influence, this approach can learn from other explanations on how experts claim authority in policy settings (cf. Coman, 2019).

There is a library of literature on how actors claim influence in expert groups, especially in the European context that provides a "living laboratory" for adjudicating if formal mandates, scientific expertise, or private interests can forge policy (Eberlein & Newman, 2008). How power is legitimated and how authority induces deference are common themes in this research, including the specification of input, throughput, and output processes in multilevel governance (Schmidt, 2020). The balance between political and expert influence has frequently been questioned, especially in relation to how much policies are explicitly politicized and what power experts have to place them back into the shadows of technocracy (Littoz-Monnet, 2020; Radaelli, 1999). The balance between official mandates and the use of experts has been studied in the development of modes of governance that permit more policy experimentation and deliberation (Overdevest & Zeitlin, 2018; Seabrooke, 2012). A further theme has been the importance of official mandates in developing standards that contain market-based actors (Renckens, 2021). This literature suggests that there may be three paths for how those in professional ecologies can

claim influence in expert groups: official mandate, scientific esteem, or issue experience. These paths can also be framed as conjectures.

First, on official mandate, the extensive literature in public administration and EU studies would suggest that on politicized issues those with a formal mandate have a direct claim to influence (Radaelli, 1999). From this expectation we have our first conjecture:

C1. MANDATE: Those with mandated responsibilities have a greater capacity to influence expert groups.

We know from other cases on expert groups involving regulators that member states assign some tasks to European agencies, while also empowering experts from domestic agencies to have their own authority (Eberlein & Newman, 2008). The shadow of hierarchy among member states may empower particular actors within the expert group (cf. Héritier & Lehmkuhl, 2008; Kinderman, 2020), including guiding what constitutes legitimate knowledge in issue treatment (Matthijs & McNamara, 2015). This scenario is known to strengthen transnational policymaking, but also permits "blame games" across different levels of formal governance (Heinkelmann-Wild & Zangl, 2020). In any case, those with formal mandates may have outsized influence in orchestrating other experts toward a common target, as has been found in other EU sustainability-related cases (Schleifer, 2013).

Second, influence within the expert group may be a function of the esteem they receive for their scientific knowledge and policy experience within the peer environment. Accordingly:

C2. ESTEEM: Those recognized for scientific excellence have a greater capacity to influence expert groups.

Literature in public administration and the sociology of science provides good reasons why influence can derive from scientific esteem related to command over abstract knowledge. Peer identification of expert "cognoscenti" enables some actors greater voice, making esteem a "professional currency" (Baker, 2017). Studies have demonstrated that bureaucrats' perception of experts as highly qualified on sustainability issues allows them to make bolder policy choices (Liu et al., 2017). Those recognized for their scientific excellence and command of abstract knowledge can also fend off the politicization of issues and keep their framing as apolitical, including on ethically charged issues (Littoz-Monnet, 2020). Making issue treatments highly technical empowers particular experts while limiting policy alternatives (Brugger & Engebretsen, 2022; James & Quaglia, 2022). Those esteemed as part of the core of the expert community are able to induce deference in others, while those perceived as fragile will decline in status (Merton, 1988).

Third, influence in expert groups may be a function of experts' perceived experience with managing and treating issues.

C3. EXPERIENCE: Those recognized for experience in handling issues have a greater capacity to influence expert groups.

Actors sitting in or around the expert group may be perceived as brokers to an external network with resources. There is a significant body of work that suggests that being known for experience trumps those officially mandated or esteemed for their command over abstract knowledge (Eyal, 2013). This includes research on how "club governance" is exercised by those that can provide technical expertise in closed fora while also being tied to an elite political and

economic network that strongly influences policy direction (Tsingou, 2015), work on how informal networks stay with formal regulators even after their official use expires (Vantaggiato, 2020), and arguments suggesting that while financial lobbying is not particularly well organized, it is perceived as carrying structural power because of lucrative opportunities (Woll, 2016). Research on revolving doors, and *pantouflage*, between financial firms and public authorities would also indicate that those operating in expert groups may be thinking of their own future careers in addition to the task at hand (Chalmers et al., 2021; Seabrooke & Tsingou, 2021; Vauchez & France, 2021). Applied to sustainability issues, studies have shown that expert communities can form around *potential for* collaborations rather than *actual* collaborations (Fransen et al., 2020). This body of research suggests that those who can call on experience are well positioned to have influence (Kortendiek, 2021).

These conjectures—mandate, esteem, and experience—on how actors from professional ecologies can assert influence in expert groups will now be examined against the case of the EU's HLEG and TEG on sustainable finance.

### 3 | RESEARCH DESIGN

### 3.1 | Empirical context and data

The European Commission established the HLEG in 2016. The group's mandate was to come up with recommendations for an EU strategy on green finance, as a part of the Capital Markets Union (European Commission, 2016b). The group consisted of 20 experts, who were appointed from a pool of 103 eligible applicants. As per regular procedure, the Commission appointed experts following an open call for applicants, as well as selecting experts based on a group of stakeholders. The members came from civil society, the finance sector, and academia. They were selected based on personal expertise, contributions to sustainable finance related work and prominence of their affiliation (European Commission, 2016a). The HLEGs work began in the beginning of 2017 and culminated with the publication of their final report a year later. The report sets out seven priority actions for the EU on sustainable finance. While the EU Commission is not bound by the advice provided by expert groups, they embraced the HLEG recommendations almost in its entirety in the EU Action Plan on Sustainable Finance adopted in 2018. In addition to the Action Plan, the EU Commission also announced several regulatory packages and the establishment of the TEG.

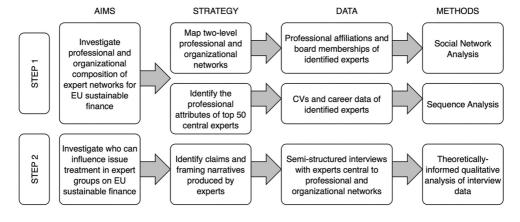
The mandate of the TEG was to assist the Commission in the technical development of four of the HLEG proposed measures: a green Taxonomy; an EU green bond standard; methodologies for climate benchmarks and disclosures for benchmarks; and guidance to improve climate-related disclosures (European Commission, 2018b). A crucial element here was whether these measures should be based on an established measure of "impact" in ESG disclosures, or if these disclosures would roll-out as "processes" with more market-based guidance. The compulsory or voluntary characteristics of debt-financing mechanisms were also on the table. Like the HLEG, the TEG consisted of experts from civil society, academia, business, and the finance sector. The group had a narrower brief than the HLEG, and the 35 members were selected based on technical expertise (European Commission, 2018c). Due to the technical nature of their work, several outreach events and consultations took place to receive additional input. The TEG's final reports and recommendations were presented at a stakeholder conference in March 2020. Following this, the

Commission extended the mandate of the group until September 2020 to allow TEG to conclude their technical work.

### 3.2 | Analytical strategy

Our approach is a layered mixed-methods approach, where we draw on both quantitative and qualitative methods to increase the robustness of the research design (see Figure 1). We deploy social network analysis and sequence analysis, methods that are particularly useful when exploring the micro-level structures of networks, and combine this data with qualitative interviews.

In our first step, we empirically analyze the two-level network of EU sustainable finance through social network analysis. We identify the experts involved in and around the HLEG and TEG on sustainable finance by mapping publicly available documents on members, observers, and contributors to the groups. To create a two-level network, data on current and previous professional affiliations was also gathered (Larsen & Ellersgaard, 2017). The most central experts in the network were identified using betweenness and Eigenvector centrality measurements, with clusters identified to locate professional ecologies. The centrality scores guided the data collection for the sequence analysis, where we analyzed the careers of the top 50 most central experts using optimal matching to identify commonalities. Sequence analysis enables for a descriptive clustering of the experiences of the most central experts in the network. While social network analysis allows us to visualize the EU sustainable finance network and the relational ties between the actors, sequence analysis can help explain if there is a pattern to why some actors are central (Ellersgaard et al., 2019). This can take the form of common career paths, knowledge claims stemming from experience, and positions carrying an official mandate (Coman, 2020). We corroborated the findings with eight elite interviews with professionals who are central in the network. These interviewees were asked about interactions in the expert groups, how their careers and networks informed their behavior, and tensions that arose in issue treatment. We also asked the to link interactions in the expert groups to particular issue treatments to link influence to outcomes.



### 3.3 | Relational analysis via social network analysis

Social network analysis allows us to visualize and analyze the social structure of the expert group network. The network consists of nodes and the connecting relations between them. As we are concerned with the two-level network of EU sustainable finance, the nodes in our network consist of both the professionals involved and the organizations to which they are affiliated. The data was collected through publicly available documents and sources. First, we mapped the actors involved in and around the HLEG and TEG. We included actors involved both as a formal member or observer, but also consulted experts who were listed in the interim and final reports. The initial mapping resulted in a population of 379 professionals. We then traced the current and previous affiliations of the individuals involved. This data was retrieved from publicly accessible sources of career data, such as LinkedIn. Data was also retrieved from organizational websites, Europass CV, and Bloomberg databases. This step in the data collection resulted in the identification of 1108 different organizations, with which the professionals involved in the first step either are, or have been, affiliated.

The data allowed the creation of a two-mode incidence matrix. We reduced the isolates in the network to one cluster and then visualized the two-level network with igraph in the R system. The nodes of the two-level network of sustainable finance consisted of the professionals and organizations identified in our mapping, and the relational ties between them, some 1760 edges. We also identified the most influential actors of the network by calculating betweenness and Eigenvector centrality (Freeman et al., 1979). Betweenness centrality measures at which point a node lies between other nodes in the network, allowing the identification of brokers in the network. This was supplemented by Eigenvector centrality, which measures to what extent a node is connected to other influential nodes in the network. We also applied a community detection algorithm to assess how groups within the network relate to each other. The algorithm identifies modularity optimization, finding local interactions in small communities and then searching through the network until maximum modularity is obtained (Blondel et al., 2008; Chalmers & Young, 2020). It also help us identify "multiple insiders", who have dense connections within more than one group (Vedres & Stark, 2010, p. 1156). We compare this community identification with our theoretically informed choice of professional ecologies.

### 3.4 | Descriptive sequence analysis via optimal matching

To supplement the network analysis, we conducted a sequence analysis of the most influential actors' careers (Blanchard et al., 2014). Sequence analysis enables us to analyze patterns in career trajectories and to compare how clusters of similar actors compare to those most central in the network analysis. The method has been applied to a number of cases to study career trajectories and policy formation, including on financial surveillance (Seabrooke & Nilsson, 2015; Seabrooke & Tsingou, 2021), economic policy (Coman, 2019), and taxation (Christensen, 2021).

Guided by selection from the network analysis, we traced the career trajectories of the 50 most central experts. Data on the experts' careers were mapped in a similar way as in the network analysis, mainly through public sources such as LinkedIn. We mapped the careers over a 10 year-period, 2010–2019. The career data was coded in a matrix based on the experts' main affiliations for each year, categorizing it depending on what roles they perform within professional ecologies. Our coding of these professional roles is expansive to identify what role are important and locate shifts between roles. As often is the case among influential "issue professionals"

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(Henriksen & Seabrooke, 2016), several of the actors were affiliated to or employed by several organizations at the same time, for example, as board members, experts or trustees. Since we are interested in describing the sequences of their career rather than mapping all their affiliations in this step, we kept the coding simple by only including their main affiliation. The coding scheme can be depicted below in Table 1.

To make the career state sequences and the cost of transforming from one state to another comparable, we apply the optimal matching (OM) algorithm to the data. The OM algorithm clusters similar careers together, allowing us to identify common patterns among the top 50 most influential actors' careers. The method considers the cost of moving between two states in the sequence. Moving from one career state to another can be costly due to the risk of failure. It can also require the acquiring of new skills or knowledge (Abbott & Hrycak, 1990). We understand cost as associated with moving between one profession to another (Coman, 2020). The cost of moving between professions has been set to the default cost of 2, whereas the cost of moving between a position in the same profession is set to 0. The data has been analyzed in R, using the TraMineR package for sequence analysis (Gabadinho et al., 2011).

### 3.5 | Verification through interviews

The network analysis and sequence analysis enabled us to study the micro-level power structures of the two-level network. We corroborated and triangulated the findings with qualitative interviews with elite professionals in the network. The purpose of the interviews was to understand experts' own view of who has a claim on influence. Table 2 reports those we interviewed.

The interviews were conducted as semi-structured interviews via phone, Skype and Zoom. To allow the framing process to start early, we sent all the interviewees the interview questionnaire beforehand. The interviews were recorded and transcribed. We gave the interviewees the possibility to retract their interview material and participation in the study.

TABLE 1 Career coding

| Consultant | Economist | Finance | Activist | Policy | Academia | Engineer | Student |
|------------|-----------|---------|----------|--------|----------|----------|---------|
| С          | Е         | F       | N        | P      | R        | T        | S       |

TABLE 2 Interviewee IDs and organizational types

| Interview ID | Organizational affiliation |
|--------------|----------------------------|
| F1           | Asset management           |
| P1           | Scientific agency          |
| F2           | Asset management           |
| P2           | European Commission        |
| F3           | Asset management           |
| F4           | Investment bank            |
| N1           | NGO                        |
| P3           | European Commission        |

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### 4 | RESULTS

### 4.1 | Network findings—The EU sustainable finance network

Figure 2 shows our network and confirms that EU sustainable finance is indeed a contested space (Dimmelmeier, 2021), with the top 25 professionals and organizations labeled. The network consists of a mix of professionals (circles) and organizations (squares) from the finance sector, private sector consultancies, public organizations, international organizations, industry associations, academia and civil society. We can see the prominence of the European Commission. The network is low in density, suggesting the space is open for contestation over who has influence.

To identify the most likely influential actors in the network we set the node size dependent on betweenness centrality. This allows us to assess the actors' network access and to identify potential brokers in the network. As brokers, professionals have the potential to influence how ideas and information are understood and translated in the network by being viewed as carriers of "good ideas" (Burt, 2004). From the visualization, we identify a handful of professionals and organizations with high betweenness centrality at the core of the network. The center consists of

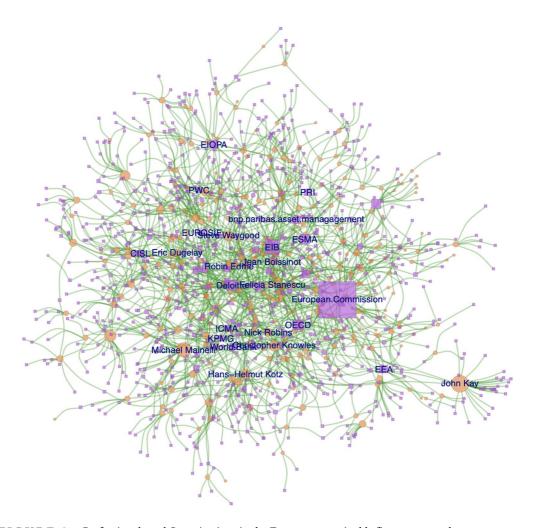


FIGURE 2 Professionals and Organizations in the European sustainable finance network

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a diverse group of professionals and organizations, from different professional ecologies. While professionals from the policymaking ecology are clustered in two groups in close proximity to one another, professionals from other types of organizations are more evenly distributed across the network. The outlier is the academic ecology. Rather than being dispersed across the network, the academics are clustered in close proximity to public institutions and policymakers.

To identify the top 50 most central actors, we calculated the respective betweenness centrality for the professionals and organizations in the network. Applying the community detection algorithm discussed above we found four ecologies. One of them (in light green) can be dismissed with only two experts, who are both heavily embedded in a national German network. The other three ecologies are more interesting and correspond to our theoretical assumptions. First, the light blue community is dominated by the policymaking ecology with stable careers, centered around the European Commission and the OECD. The red community contains a mix of experts, with the activist and consultancy ecologies the most prominent. Finally, the purple community is clearly the finance ecology, with professionals from that sector dominating. From Figure 3 we can also see brokers who are located between these detected communities and thus between professional ecologies. The top 50 group consists of a diverse group of professionals from policymaking,

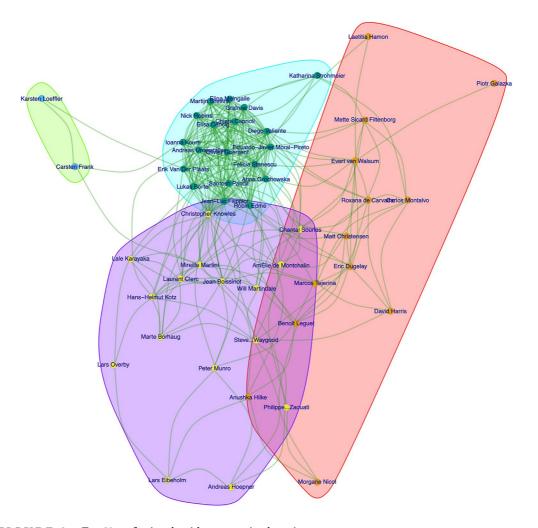


FIGURE 3 Top 50 professionals with community detection

finance, academic, consultancy and civil society ecologies. 52% of them are situated within the policymaking ecology, and mainly affiliated to EU institutions such as the EU Commission and the European Investment Bank (EIB). This points to the potential importance of official mandate in having influence. Being a formally appointed member of the HLEG or TEG does not, however, seem to be the determining factor for being central in the network. Among the top 50 central professionals in the network only four of them have an official mandate and have been part of either HLEG or TEG.

The most central actor is Christopher Knowles, who is a broker and "multiple insider" between the finance and policymaking ecologies. He is a professional who is neither employed by an EU institution nor a formal part of the HLEG or TEG. Currently based in Luxembourg, he is a former senior expert of the EIB who now works in the finance sector. Being highly central in the network, both for betweenness and Eigenvector centrality, his influence rests, in part, on being recognized for his experience with the treatment of sustainable finance as an issue. He is also connected to sustainability initiatives such as the Climate Bonds Initiative, the OECD Centre on Green Finance and Investment, the World Agroforestry Centre, and the Coalition for Green Capital.

A similar narrative can be told about Steve Waygood, who is a broker and "multiple insider" between the finance and activist/consultancy ecologies. As the sixth most central actor in the network, he is strategically positioned to take on a brokerage role to navigate the ecologies. Waygood is one of the few actors in the top 50 who also was a member of the HLEG. He started his career in WWF, and was then employed by Aviva Investors in the finance ecology. In addition, he has been part of several expert and advisory groups over the years, such as the Task Force on Climate Related Financial Disclosures (TCFD), UN Principles for Responsible Investment, and served as chairman of the UK Sustainable Investment and Finance Association. By having a mixed career and ties to several adjacent ecologies, professionals like Knowles and Waygood can draw on experience and knowledge from not only the finance ecology, but also from policymaking, academic and civil society ecologies, respectively.

### 4.2 | Career findings

To investigate if there is a pattern to why some professionals occupy central positions in the EU sustainable finance network, we conducted a sequence analysis of careers. Many of the top 50 actors find themselves in the policymaking ecology at one point during their career. The sequence analysis indicates that the frequency of being in the policymaking, academic, and civil society ecologies increases over time. Figure 4 shows the result with two distinct clusters, with the colors reflecting the communities identified in Figure 3. The timeline reads, left to right, from recent roles into previous roles from 2019 to 2010.

The two clusters above are clustered at the individual level, where each line is an individual career. Cluster 1 consists of a group of 28 professionals with mixed career trajectories and higher career entropy. Having a career in finance is the most common, and also the most stable career state. Still, the majority of the group tend to frequently move between different ecologies. There is a tendency of a push toward policymaking at the end of the career sequences of cluster 2. Recent studies have shown that having mixed career trajectories is common for professionals seeking "issue control" (Christensen, 2021), including in sustainability networks (Henriksen & Seabrooke, 2016). In the finance and economics ecologies, however, influence is commonly seen as a property of esteem from educational training and affiliations (Baker, 2017; Helgadóttir, 2016;

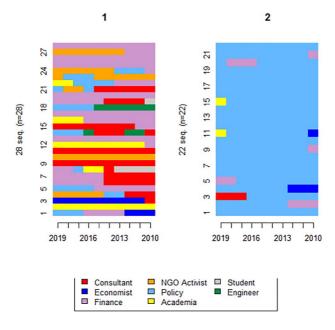


FIGURE 4 Two clusters of careers in European sustainable finance

Thiemann et al., 2021). The second cluster consists of 22 actors with long, stable careers in policy making. These professionals have spent the main part of their career in EU institutions, such as the European Commission, the EIB or the European Supervisory Authorities of the financial system. While some have a background as economists or finance sector professionals, most of them have been employed as policy professionals between 2010 and 2019. For this cluster transitions to other ecologies seldomly take place.

In Figure 4 we can see that mixed careers are only important for the first cluster. Those in the second cluster are likely to rely on their official mandate for influence, or from esteem linked to recognition for policy experience or scientific esteem. There is no clear indication that a long career in science provides a privileged position in the network, nor that educational pedigree is a marker of centrality, as has been found in economic policy networks (Coman, 2020; Helgadóttir, 2016). We do note that for those in cluster 1 mixed careers may expand network ties as well as bolster esteem for policy experience and scientific esteem. We know from prior research that revolving doors in club-like elite policy communities are common (Brugger & Engebretsen, 2022; Tsingou, 2015; Young et al., 2017), particularly in the EU context (Chalmers et al., 2021). This type of practice is more frequent in the first group, where we know from the network analysis that there are also many ties to several different boards, as well as affiliations and advisory positions to ecologies outside of their jurisdictional home.

### 4.3 | Interview findings

The findings suggest that issue experience is likely to have more influence than official mandate and scientific esteem. To verify our findings, we conducted elite interviews. While DG FISMA, the agency responsible for financial services at the EU Commission, started working on sustainable finance in 2016 following the G20 green finance study group, our interviews also show that

several advocacy efforts took place to encourage the Commission to adopt sustainable finance policies. Both financial institutions and NGOs are recognized by the interviewed professionals to have been involved in lobbying the Commission to set up the HLEG. The importance of having practitioners from the financial sector, in addition to civil society and policy representatives, was communicated by interviewees. From the Commission's perspective, having a focus on scientific and technical expert knowledge in the TEG was seen as a way to depoliticize and build support for its proposals. Interviewee P2, a senior Commission representative, hails the Taxonomy as best controlled through scientific excellence:

[The] Taxonomy should be science-based otherwise it would be difficult to ensure that financial markets participants, governments and other players who will use it, can really trust it.

Interviewee P2

For others the issue is not scientific excellence but that there is a means to build consensus on issue treatment through informal networks. A common feature for the most central experts in our study is that they all have extensive networks of people in the sustainable finance field with whom they can discuss ideas and receive information from. Being seen as experienced and "knowing well" by others in the network is particularly important (Lazega, 1992). This enables professionals to have influence, even if they are not formally a part of the HLEG or TEG. This is the case for Interviewee F2 who, despite not being a formal member of either the HLEG or the TEG, is one the most central actors. The interviewee was happy to proclaim this status:

And obviously I have a network of people, acquired over the years and [...] we talk quite often, sometimes just a chat to be friendly, but if somebody has a new idea they often want to bounce it off a trusted peer. [...] It is very informal. It is not very structured. It is people basically, who are committed to trying to move the envelope forward.

Interviewee F2

It is a frequent theme for the interviewed actors to reflect upon their own professional networks, and cooperation has been an important strategy to influence the expert groups' agenda. Several of our interviewees stress that building alliances with others, often from different professional ecologies, is key. Having issue experience can enable actors to build cooperation on how to shape the issue. For some actors, who lacked the formal mandate to push for certain proposals or solutions, enlisting network ties to other stakeholders was mentioned as an explicit strategy to gain influence over the direction of discussions. In one example, the expert P1 was participating in the process in a supportive function as a part of DG FISMA. As he was prevented from influencing the agenda in an official capacity, he instead built informal alliances with NGOs that shared his idea on how sustainable finance should be treated to influence the HLEG's work.

The interviews indicate that being able to speak the "right" language is crucial. Experts from NGOs are depicted as being too political and detached from the "real" world—unable to comprehend how business works in practice. Some have, however, managed to gain influence in the network through multi-stakeholder initiatives, such as the 2° Investing Initiative and the Climate Bonds Initiative. A common feature of central NGO initiatives is that they often have ties to professionals from other ecologies through memberships or board members. In other words, they have successfully managed to create hinges with other ecologies. From the sequence analysis, we

know that the professionals from the civil society ecology tend to have mixed career trajectories. Drawing on knowledge from different professional ecologies, and particularly being able to speak the policy and finance language, proved key in order to be seen as knowledgeable in the network.

The WWF representative [Pascal Canfin], he was an ex-MEP. So he could speak the Commission language and the NGO language [...]. Ingrid Holmes, she was well aware of the financial network. She now works in a financial services firm. She did not at the time. For an NGO representative she was extremely well informed.

Interviewee F1

Both interviewees F1 and N1 transitioned from NGOs to the financial sector as a part of their career in sustainable finance. For them, moving into the finance sector has been a way to gain influence over sustainable finance issues. Doing so, they have managed to create avatars, by encouraging ideas on sustainability in the finance ecology. F1, who started off his career at a large "generic" NGO and then moved to an asset management firm, stated that he moved to be at an organization that could exert greater influence on issues. Not only does this exemplify how professionals strategically navigate the network, but also reflects the structural power of finance (Kalaitzake, 2017; Woll, 2016).

A demonstration of influence can be seen in the creation of new treatments to displace existing ones. Although there was seeming agreement on the fundamental elements of a European policy on sustainable finance, there was contestation around issue treatments. While most agreed that there was a need for a classification system for green activities (the taxonomy), disclosures, labels and benchmarks, debates in the expert groups centered on what should be prioritized and how far the proposals should go. ESG disclosures were particularly contested, where experts disagreed on whether disclosure rules, for both corporations and financial institutions respectively, should focus on "impact" or be developed incrementally as "process" with market actors.

It was during the work of the HLEG, that [Expert F1] said that it was too difficult to measure impact of responsible finance [and] that the only way to report was on processes. And it was the occasion of a major debate where I opposed him. [...] I mean, reporting on processes is a thing of the past.

Interviewee P1

In our interviews, F1—a multiple insider—raised the need for a better accounting framework, stating that without proper sustainability disclosures it would be difficult to measure impact. As argued by Interviewee N1, improved disclosures could also help increase investors awareness of material risks. Not only did N1 echo the established language of finance, but also the idea about sustainable finance as a risk-management tool for investors. Also mirroring language of financial risk management, the HLEG (2018) recommended the "upgrading of disclosures to make sustainability risks and opportunities visible" as one of its key recommendations in the final report. Taking an incremental stance, the HLEG states that this will require "trial and error by companies" and "promoting of best practices" (HLEG, 2018). To achieve this, the HLEG recommends for the EU endorsement of, and voluntary experimentation with, the TCFD recommendations and that inspiration should be taken from France's Energy Transition Law's "comply or explain" approach.

Following the HLEG recommendations, the Commission's (2018a) Sustainable Finance Action Plan committed to revise the current EU directive on disclosures—the Non-Financial

Reporting Directive (NFRD)—and guidance on alignment with the TCFD recommendations. As the TEG was tasked with developing the proposal further, the discussion became even more technical. Following this, NGOs and think tanks had less space to influence the disclosure rules according to Interviewee N1. Rather, the technical treatment of disclosure rules in the TEG provided an opportunity for experts recognized as having industry experience to dominate the discussion (cf. similar findings in Kalaitzake, 2017; Pagliari & Young, 2016). Commenting on the technical discussions on implementation in the TEG, P1 noted how institutional investors were fighting to keep the disclosures focused on "processes". A key broker in the network and "process"-supporter, Steve Waygood, summed up the influence of investors in the expert groups in noting that "policymakers should accept that the first batch of disclosures would be imperfect". 1

Another recommendation from the HLEG was the establishment of an European green bond standard. This proved to be a contested issue, both within the HLEG and the TEG. As highlighted by P1 and P3, the source of conflict was that several green bond standards and principles already existed. Established by a group of investment banks, the Green Bond Principles had existed since 2014. Monitored by the International Capital Market Association, the standard was already widely used in the industry (Langley et al., 2021). Another influential standard had been launched by the Climate Bonds Initiative. The organization was founded by a group of international organizations, NGOs and financial market participants, and provides both a green bond standard and a certification scheme. As mapped through the network analysis, several central experts in the network had ties to the Climate Bonds Initiative. Christopher Knowles, the most central actor in the network, was affiliated to the Climate Bonds Initiative as an advisor. Also, Sean Kidney, the CEO of the initiative, was mentioned as influential in several of the interviews. These actors were initially skeptical toward European agencies coming up with their own mandatory standard, arguing that it was "enough to have a market-based standard endorsed by the EU" (Interviewee P3). Their agenda was clear to many:

There is obviously always a little bit of an agenda behind certain positions and stakeholders. [...] So, when they say "but there's already a [green bond] standard out there, why should the EU come up with one?", that is clearly motivated by the fact that these guys are running the standards. You know, they want to capitalize on that. But that is always very easy to spot.

Interviewee P3

Following the HLEG proposal for a new green bond standard, the TEG was tasked with working out the technical specifications of the standard. The outcome of the TEG's technical work was the recommendation of a non-legislative voluntary standard, which should be aligned with the EU Taxonomy. This goes against the ambition expressed by the Commission to have an EU green bond standard "enshrined in legislation" (interviewee with P3). Despite the new standard being, in the words of one interviewee "absolutely useless"—as it did not go beyond the already existing standards—it was pushed forward to satisfy stakeholders linked to the expert groups. In 2021, the Commission proposed a voluntary EU green bond standard, aimed to work as a "gold standard" for green debt financing while opening up for the possibility to co-exist with already existing best market practices. The proposal of a new standard was a compromise between the finance and policymaking ecologies, with central actors from the finance ecology using their experience to make claims to issue treatment.

### 5 | CONCLUSION

Given sustainable finance is a new policy area in the EU, the determination of how the issue should be controlled has been up for grabs. We contend that there are three pathways to likely influence over issue treatment in expert groups. Claims to influence can come from an official mandate, scientific esteem, or issue experience. The logic here has been that those recognized as closest to the formal delegation of mandated responsibilities should be expected to have greater capacity to influence expert groups (C1). Our findings suggest that carrying an official mandate does not itself convey influence. While policymakers are in the top fifty network they are far from most central. Nor can one be influential from scientific esteem alone. We see little evidence for scientific esteem (C2) as a driver in being seen as important. While scientific esteem and educational pedigree may be important for how some networks operate (Helgadóttir, 2016; Henriksen et al., 2022), this is not the case for HLEG and TEG. Rather, the most important finding is that those who are central to the network are also those who have moved between professional ecologies and identified as those proclaiming issue experience (C3). In the case of EU sustainable finance it appears that the dominant path to likely influence is through experience. While earlier literature on policy making in the European Union has pointed to a battle between bureaucracy or scientists (Radaelli, 1999), our findings suggest that those seen as experienced with mixed careers and ties to finance are the most likely to carry influence. This finding accords with the view that professionals are increasing valued more for their capacity to work across organizations rather than for their occupational training (Evetts, 2011; Faulconbridge & Muzio, 2008).

Our findings align with prior literature that suggests that mixed careers are important in sustainability networks to gain influence (Henriksen & Seabrooke, 2016), and that groups working on sustainability are focused on potential ties from their activity over actual ties within the group (Fransen et al., 2020). Having mixed careers allows them to expand their network ties as well as speak the language of different professional ecologies. Notably, several professionals from the finance ecology have ties to the civil society ecology through not only previous employment but board seats and advisory positions. As a result of blurring boundaries between activists and finance professionals, we might see the rise of sustainability experts at the transnational level. Moreover, what is demonstrably clear is that those central to the network with mixed careers are now involved in asset management. This speaks to the power of asset managers as a new force in capitalism (Baines & Hager, 2022; Braun, 2022; Petry et al., 2021). This also aligns with work on how while financial lobby interests may be uncoordinated in the European context (Pagliari & Young, 2016; Woll, 2016), the shadow of hierarchy from the large asset managers is strongly perceived by those involved.

Methodologically, our approach narrowed in on those important in the network through centrality measures and community detection. This allows us to explore the network structure and zone-in on the key groups interacting. The key contribution here is to combine the network analysis and sequence analysis to infer plausible claims to likely influence based on network position and career experience. The use of centrality measures and community detection algorithms locate the key professionals and their local interactants, while the sequence analysis helps us determine if "vanilla" or more diverse careers are linked to likely influence.

Given that EU sustainable finance is still a contested concept (Dimmelmeier, 2021), we suggest that the professional ecologies approach is useful to explore how expert groups and policy communities develop frames for issues. While the professional ecologies literature has focused on the links between well-established communities, such central banking and academia (Ban & Patenaude, 2019; Thiemann et al., 2021), we use the approach to discuss how actors

from professional ecologies seek to advance issue treatments, and how mixed careers rather than vocation is important. Our findings contribute to advancing knowledge on who has influence over sustainable finance at the European level. They also suggest that interactions among professionals and experts are crucial in asset revaluation and the politics of distribution at a global level (Colgan et al., 2021). During a period of where sustainable finance is not yet settled, financial institutions, investors and the private sector have played an important role in guiding sustainable finance not only in Europe but also globally (Gabor, 2021). Private power in global governance is increasing (Bartley, 2022). We can see this both in the process of determining ESG company disclosures and in the character of green debt-financing mechanisms. As a result, it is those who are able to speak the established policy language of investors that are likely to have voice in expert discussions on EU sustainable finance. This is particularly the case for activists, who are forced to speak the established investor language to be seen as relevant.

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#### DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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#### **ENDNOTE**

<sup>1</sup> "Asset managers lobby Brussels to delay sustainable investing rules", Financial Times, 31 August 2020.

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