Review

Tackling Climate Change through Multi-Stakeholder Partnerships: Promoting SDG 17 to Combat Climate Change

Elena Bulmer [1],* and **Benito Yáñez-Araque** [2]

1   Department of Operations and Data Science, EAE Business School, 28002 Madrid, Spain
2   Department of Business Administration, Faculty of Law and Social Science, University of Castilla-La Mancha, 45004 Toledo, Spain; benito.yanez@uclm.es
*   Correspondence: elena_bulmer@campus.eae.es; Tel.: +34-6-3968-9420

Abstract: The seventeen Sustainable Development Goals (SDGs) aim to address environmental, social, global, and economic challenges. The SDGs were a continuation of the Millennium Development Goals and assumed a common vision for the year 2030. Efforts to achieve the SDGs must be carried out in an integrated manner, respecting the three pillars of sustainable development, which are economic, social, and environmental. This review analyses the viability of Sustainable Development Goal 17 (SDG 17), which aims to build global partnerships for development. It makes specific reference to multi-stakeholder collaboration between all sectors of society. While the first sixteen SDGs are dedicated to concrete actions, SDG 17 Partnerships for Development coordinates and facilitates the implementation of the other goals. SDG 17 promotes the "right way" of collaboration between different actors through the formation of multi-stakeholder partnerships, which are essential to foster sustainable development. Although SDG 17 has its multiple advantages, it also does have its limitations, such as the present absence of a lessons-learned repository to share and understand how multi-stakeholder partnerships can prove more effective in promoting the successful implementation of the rest of the SDGs, as well as that SDG 17 seems to be regarded as more appropriate to the achievement of the economic pillar of sustainability at the moment, rather than being applied more widely. In this review, we analyze two case studies located in the south-western part of France, from which one can observe the great number of stakeholders, some non-human, even inanimate, present even in relatively minor projects and how due consideration of the interests of all of them in a manner following due process (albeit lengthy) enables decisions to be reached correctly and approved projects implemented soundly. One of the projects was rejected and did not proceed, while the other was approved and is going ahead.

Keywords: sustainable development; sustainable development goal 17; SDG 17; climate change; SDG 13; SDG 7

1. Introduction

The United Nations (UN) established the seventeen Sustainable Development Goals (SDGs) at the United Nations Development Summit in Rio de Janeiro (RIO + 20) held in 2012. Its main goal was to conceive targets that would be undertaken to address environmental, social, and economic planetary challenges. On 25 September 2015, 193 United Nations countries approved the 17 Sustainable Development Goals. The SDGs—also known as the 2030 Agenda—were intended to end poverty, protect the planet, and ensure prosperity for all. The SDGs were a continuation of the Millennium Development Goals and assumed a common vision for the year 2030 that would broaden the vision of politicians and officials beyond their short-term national interests [1]. Sustainable Development Goal 17 (SDG 17) makes specific reference to the formation of global partnerships for development. The premise regarding this point is that these partnerships mobilize the exchange of knowledge, experience, technology, and other resources to better manage the remaining sixteen SDGs.

Although SDG 17 is sound in theory, in practice, there is still a considerable caveat on how to best implement this theory. Sustainable Development Goal 17, in its present state, has its limitations, as will be discussed later in this review.

Firstly, this review will analyze the potential viability and effectiveness of SDG 17 "Partnerships for the goals" (i.e., more specifically, Targets 17.16 and 17.17, which relate to multi-stakeholder partnerships). Secondly, it analyses the relationship between SDG 17 and SDG 7 (relating to affordable and clean energy). Finally, it analyses two case studies that highlight the importance of multi-stakeholder partnerships in renewable energy projects using two wind farm projects located in south-western France in the department of "la Vienne" (départment no. 86); the first in the communes of Thollet–Coulonges and the second in the commune of Liglet. The article will end with a set of conclusions and future directions section.

Energy is one of the biggest pillars of climate action. According to the UN Development Program (UNDP), energy accounts for 73% of human-caused greenhouse gases. Therefore, energy efficiency initiatives are key to curbing this, and the development of renewable and clean energy projects is presently being encouraged all over the world. Worldwide in 2022, the renewable energy capacity rose by 10%. With respect to the SDGs, the theme of energy is covered by SDG 7, "Affordable and clean energy", the objective of which is to ensure electricity for all while encouraging growth and aiding the environment at all levels. Through SDG 17 and the involvement of multiple actors via the development of multiple-stakeholder partnerships between businesses, civil society, and others, it will be possible to work together to try to curb climate change, which, in turn, might make the achievement of some development goals more difficult.

1.1. The SDGs

According to the United Nations (UN), the definition of Sustainable Development is "(satisfying) the needs of current generations without compromising the ability of future generations to meet their own needs". This definition of the term "Sustainable Development" is encompassed in the 1987 Brundtland Report, which was developed by the World Commission on Environment and Development and aimed to develop long-term solutions for any matter related to sustainable development. Among the points addressed are the roles of the international economy, population and human resources, food security, species ecosystems, energy, industry, and proposed legal principles for environmental protection [2].

The new SDGs came into force in 2015. There were 17 goals and 169 targets, and they were part of the acceptance of a document entitled "Transforming our world: the 2030 Agenda for Sustainable Development" [3]. The seventeen SDGs were established with goals at the country level; therefore, the strategies developed vary according to the priorities of each State. Similar to the MDGs, the SDGs were a statement of aspirations, a voluntary agreement rather than a binding treaty [1].

Efforts to achieve the SDGs must be carried out in a holistic and comprehensive manner, taking into account the three pillars of sustainable development, which are economic, social, and environmental. The SDGs urged companies to harness their creativity and innovation to address the challenges of sustainable development. They promote collaboration between all sectors of society using a bottom-up approach. The three main categories of stakeholders (i.e., businesses, governments, and civil society) must work together and with others to ensure long-term sustainability [4]. The development of the SDGs founded a new paradigm in sustainable development as a result of the appreciation of business as an essential social actor alongside governments and civil society [5–7].

Sustainable development can only become a reality, according to the SDG Partnership Guidebook 2020, if the different stakeholders collaborate and work together. Presently, we are experiencing the problem of resource limitations (i.e., this includes all resource types, whether they are economic, technological, natural, or anthropogenic). Their optimization is

therefore necessary, and this entails the need for there to be an alignment of interests of the different actors.

The business world is key in promoting synergies between necessary actors by conducting business responsibly, inclusively, and sustainably, sustaining livelihoods, reducing poverty, and promoting technological innovation. For example, regarding SDG 1, business has been one of the main drivers in some countries to help them recover from poverty. This is why governments, donors, the United Nations, and NGOs have become involved with businesses to help catalyze business investment and to better incorporate responsibility, sustainability, and inclusiveness. Companies have an extensive environmental, economic, and social footprint due to the broad scope of their activities and the multiple actors with whom they engage to maintain their supply chains. They have a direct influence and impact on risk mitigation at different levels and, consequently, also on actively promoting environmental, economic, and social well-being. Examples of mitigation actions include addressing environmental degradation arising from its operations and preventing human rights violations, such as child labor.

1.2. SDG 17

Sustainable Development Goal 17 entails the creation of global partnerships, making reference specifically to multi-stakeholder collaboration between all sectors of society. However, although the context of multi-stakeholder partnerships may be very well described on paper, the questions linked to the main challenges are the following: How to promote collaboration between stakeholders as varied as governments, scientists, and NGOs? How will it be possible to ensure that they work together in a systematic way to achieve the shared vision of the Sustainable Development Goals?

The objective of SDG 17 is to enhance and improve the way in which global partnerships are executed and revitalized in the areas of finance, technology, trade, capacity development, policy coherence, partnerships, and data. To accomplish this objective, two main working approaches have been presented. The first entails the creation of global alliances encouraged by governments, thereby reinforcing collaboration and development. Secondly, the latter may be complemented by the development of multi-stakeholder partnerships operating at all levels (i.e., global, national, and regional levels) to incorporate knowledge and experiences to achieve the other sixteen SDGs. The latter opens the discussion on how the different stakeholders should best work to achieve their specific goals [8].

SDG 17 promotes the "right way" of collaboration between different actors through the formation of multi-stakeholder partnerships, which are essential to foster sustainable development. The premise regarding this point is that these partnerships promote the exchange of knowledge, experience, technology, and other resources between the different parties to achieve the global development agenda of 2030. Strong partnerships must encourage increased participation, inclusion, and diversity, along with involving international cooperation and coordination [9]. However, reality shows us that the position and involvement of different stakeholders often vary, leading to inconsistent goal setting and consequent ineffective results. Therefore, there is an urgent need to determine how multi-stakeholder partnerships can be improved to promote and increase the participation and inclusion of these often-under-represented stakeholders.

This cooperative and co-production approach is highly aligned with a multi-governance context. Multiple governance is defined as the compendium of the different ways undertaken to manage common affairs of both individuals and institutions (i.e., both public and private) [10]. Traditional governance was often associated with a single group of actors, which in most cases was the government; however, the situation is changing thanks to the participation of an increasing number of different stakeholders, so today's governance is not reserved for a single actor [11–13]. "Traditional modes of state regulation have come to be considered as limited in their scope, effectiveness, authority or legitimacy, when they try to address global environmental problems" [11] (p. 366), such as those encompassed by the SDGs. This change in governance has come to give, over time, an increasing role to

non-state actors such as non-governmental organizations, civil society, local governments, and companies. There are examples of signed multi-stakeholder agreements ranging from initiatives by non-state actors to certification projects for initiatives related to timber, mining, or sustainable tourism.

The concept of "co-production" is presented by Von Schnurbein [8] in the field of public services, wherein he highlights the importance of including citizens in the provision of public services. At present, the term is utilized in a broader context, such as the governance, creation, and management of public services [8]. Joshi and Moore [14] highlight the significance of long-term co-production, whereby the alliances formed between different stakeholders and the resources are committed by all the groups involved. The co-production concept can be applied to the SDG scenario, as, according to SDG 17, a multi-stakeholder context is necessary to enable production and provide resources for accessing technology and to ensure worldwide availability and supply.

The co-production approach is highly aligned with a multi-governance context. Multiple governance is defined as the compendium of the different ways of managing common affairs available to individuals and institutions, both public and private [10]. Traditional governance was often associated with a single group of actors, which in most cases was the government; however, the situation is changing thanks to the participation of an increasing number of different stakeholders, so today's governance is not reserved for a single actor [11–13]. "Traditional modes of state regulation have come to be considered as limited in their scope, effectiveness, authority or legitimacy, when they try to address global environmental problems" [11] (p. 366), such as those encompassed by the SDGs. This change in governance has come to carve out, over time, an increasing role for non-state actors such as non-governmental organizations, civil society, local governments, and companies. There are, for example, signed multi-stakeholder agreements ranging from initiatives by non-state actors to certification projects for initiatives related to timber, mining, or sustainable tourism.

One of the main priorities of SDG 17 is the development of multi-stakeholder partnerships. In 2018, progress was made in this type of association in 51 of 114 countries. These associations are not only between states but also between different social actors. The big question that now arises is how all these different actors from the public and private sectors, as well as civil society, can work together to promote and carry out the goals of the SDGs? Undertaking a multi-stakeholder approach to governance helps to; (1) ensure the participation of a greater number of said parties, (2) identify and overcome the barriers that could hinder the participation and commitment of the actors, (3) develop a multi-stakeholder network as proposed by SDG 17.

Negotiated agreements tend to produce fairer, more efficient, and stable solutions compared to decisions that have been made unilaterally (i.e., for example, by national governments). This shows that governance approaches based on multi-stakeholder participation are considerably better than traditional ones. Therefore, project stakeholders should be involved at all levels of governance, from local to regional to international. At each of these levels, agreements need to be developed and negotiated to ensure that the multi-stakeholder governance context is maintained. Most public collective governance initiatives are based on facilitating transparency, accountability, and (stakeholder) participation. These three critical components are essential to strengthen governance at all levels. In this sense, SDG 17 is useful to promote global alliances and multi-stakeholder governance in a world that is totally interconnected between national and local governments, companies, civil society, and academia.

Regarding SDG 17, multiple actor governance is based on targets 17.16 and 17.17, as mentioned below:

17.16 Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology, and financial resources, to support the achievement of the Sustainable Development Goals in all countries, particularly developing countries.

17.17 Foster and promote the formation of effective alliances in the public, public–private, and civil society spheres to mutually benefit from the capabilities, experience, and strategies of the respective alliance partners in pursuit of agreed common goals.

One of the main priorities of SDG 17 is the development of multi-stakeholder partnerships. In 2018, progress was made in this type of association in 51 of 114 countries. These associations are not only between states but also between different social actors. The big question that now arises is how all these different actors from the public and private sectors, as well as civil society, can work together to promote and carry out the goals of the SDGs. With respect to the previously presented 19 targets of SDG 17, targets 17.16 and 17.17 highlight the role of multi-stakeholder partnerships in achieving the other sixteen SDGs [15].

The 2030 Agenda for Sustainable Development has led to considerable progress since it came into force in 2015 (although this progress was uneven between developed and developing countries). However, the context of COVID-19 has led to a re-examination of the achievements made during this period (i.e., from 2015 to 2020). The COVID-19 pandemic is an example of a black swan event creating a situation in which complex systems evolve unpredictably, bringing about unforeseen changes and transformations that affect power structures and relationships, and this is precisely how it has occurred in these circumstances with the SDGs. The COVID-19 pandemic has highlighted the importance of promoting global collaboration between different sectors and stakeholders. Countries, as a consequence, have had to adapt their processes accordingly to this context. The importance of multi-stakeholder partnerships can be perceived in the development of COVID-19 vaccines. An example of the latter is the COVID-19 Vaccines Global Access (COVAX), where it is possible to witness a scenario of a collaboration between governments, scientists, companies, civil society, philanthropists, and community organizations [16].

In 2020, the 2030 Agenda Accelerator was created by the United Nations Department of Economic and Social Affairs (UN DESA) and The Partnering Initiative in collaboration with several other stakeholders to considerably aid and speed up the creation of effective partnerships to achieve the Sustainable Development Goals. One of the Agenda's main goals is to construct stakeholder alliances to help institutions establish stakeholder alliances (i.e., between different stakeholders such as civil society, business, government, NGOs, foundations, academia, and others).

1.3. The Limitations of SDG 17

SDG17 has been criticized because it focuses primarily on the economic pillar of sustainability—although, in theory, it does strive to address all three pillars equally (i.e., the environmental, social, and economic pillars). Moreover, the SDGs were established to expand the scope of the Millennium Development Goals (MDGs) that were initially created to provide development assistance from "providers" to "recipients", thereby widening the SDG approach beyond development so as to include multi-stakeholder partnerships.

It can also be argued that the original purpose of the MDGs has not been abandoned today, even with the development of the SDGs, but that the SDGs represent a wider and more effective concept in pursuit of more ambitious goals. "The classification of multi-stakeholder partnerships as (merely) "public, public-private, and civil society partnerships" presents a restricted view of the wide range of possible multi-stakeholder partnerships, as well as levels of work to be able to meet the SDG targets" [17] (p. 32), hence the need to widen the base and scope of stakeholder participation in pursuit of the SDGs.

Flexibility needs to be promoted by multi-stakeholder partnerships. However, nowadays, there is a limited scope of collaboration that can result from multi-stakeholder partnerships. If the perspectives and viewpoints of the different social actors were to be considered, innovative standpoints could potentially be developed to manage the complex global challenges presented by the SDGs [17]. Multi-stakeholder partnerships can potentially encourage transformation from a political context, as well as empower the most vulnerable and marginalized actors. Additionally, the creation of a lessons-learned repos-

itory through the projects and initiatives performed via multi-stakeholder partnerships will help extend knowledge and create a shared comprehension of the importance of the role of different actors in society and in advocating change [18,19]. Exchanging knowledge should therefore be a priority to consider for the development of global alliances. However, complex problems often arise that are caused by the scarce data and information available nationally, which leads to data deficiency challenges at both regional and global levels [20].

Furthermore, the exchange of knowledge is essential to develop global alliances.

Data collection regarding the SDGs has always been a problem and was exacerbated during COVID-19 [20]. Recent studies suggest that there is currently a lack of knowledge regarding the effectiveness of multi-stakeholder partnerships in advancing the transition toward sustainable development [3]. According to statistics from the United Nations, data is available for only 61% of countries. Part of the reason for this situation is the closure of many offices during the pandemic. This lack of data is responsible for the incomplete information on the many kinds of multi-stakeholder associations in existence, thus hindering the sharing of knowledge between them and with others. Therefore, knowledge-sharing and accountability are key to being able to comply with the SDGs. A problem that should be highlighted here is the lack of metrics to measure how exactly this will be achieved [1]. However, what is clear is that there is an evident need for multi-stakeholder partnership evaluation methods to attain information based on academic data and consequently associate this research with policy-oriented work on community action [9]. According to van der Ven et al. (2016), the transformation toward the achievement of the SDGs will likely change the way our current political and economic systems work [21]. However, there is not enough quantifiable information to use as a basis to allow this change to begin.

According to Maltais et al. [22] from the Stockholm Resilience Institute, there are several recommendations that could be made in this regard:

- Develop a multi-stakeholder platform to promote the participation of actors from different sectors and social levels and collect information from already existing platforms.
- Give more prominence to less powerful groups that are not normally represented on multi-stakeholder platforms. Such a platform could facilitate addressing the complex and systematic issues highlighted in the different SDGs [23].
- Determine how multi-stakeholder partnerships handle conflict situations.
- The information to be collected should include data on the risks and potential of multi-stakeholder partnerships.
- Develop typologies and mapping exercises that could provide an overview of the different types of partnerships [9].

There is, therefore, a need for awareness-raising on how associations can be created and bring alongside both economic and social value for society, organizations, and people, thereby complying with the three pillars of sustainability. Moreover, collaborations should be encouraged both at the administrative and organizational levels (global, regional, national, and local) to connect actors across sectors and at different levels of society [18]. In this respect, innovation is key. New ways of working should be promoted via the promotion of a wide range of non-conventional sets of actors. The joint development (co-production) of knowledge and solutions to the SDGs will surely be enhanced with the participation of a broader range of stakeholders.

According to Pattberg and Widerberg [24], there are nine recommendations that could be made to improve the effectiveness of multi-stakeholder partnerships [24]:

- An optimal partner mix.
- Effective leadership.
- Establishment of specific objectives.
- Sustainable financing.
- Management of work processes.
- Periodicity in monitoring, reporting, and evaluations.
- Active meta governance.
- Favorable political and social context.

- Adapt and adjust to the context of the problem.

It is, therefore, very easy to question how realistic the scope of multi-stakeholder partnerships and SDG 17 are. The use of benchmarking exercises will prove useful to find out why some multi-stakeholder partnerships are more successful than others in achieving the targets set by the SDGs.

1.4. SDG 17 and Climate Change

The main aim of the staging of the Paris Agreements in December 2015 was to reduce greenhouse gas emissions. United Nations Former General Secretary Ban Ki Moon, during the adoption of the Paris Agreement in COP-21 in Paris, noted that the Paris Agreement was a monumental triumph for both people and our planet and that it set the basis to progress towards ending poverty, strengthening peace, and ensuring a life of dignity and opportunity for all. Regarding the SDGs, the global problem of climate change is tackled by SDG 13, titled "Climate action". The SDGs present hope for the future of climate change policies.

What is important to highlight is that as negotiations of the Paris Agreement (i.e., under the United Nations Framework Convention on Climate Change) and the SDGs are being managed in different platforms and there is presently a problem regarding the fact that both cannot provide data and information and relate sufficiently to each other, there is therefore still room for improvement in this regard. The argument is that countries should nationalize their own SDG targets and measurement criteria so as to be able to incorporate climate change into their national agendas.

The 17 SDGs (and 169 targets) incorporate certain elements of climate policy that are associated with the following:

- Mitigation of greenhouse gases (GHG).
- Adaptation to adverse impacts of climate change
- Finance.
- Technology transfer for developing countries.
- Capacity building for all stakeholders.
- Encouraging cooperation and partnerships among all.

These elements are encompassed in the climate policy of the United Nations Framework Convention on Climate Change. Ari (2017) carried out an analysis of how these elements were associated with the different SDGs. Regarding SDG 17, climate change issues are relevant as regards (1) finance, (2) technology transfer, (3) capacity building, and (4) cooperation and partnerships. Making specific reference to technology (i.e., environmentally sound technology), regional and international cooperation should be encouraged.

Ari [25] carried out an analysis where he analyzed the interconnection between the SDGs and the Paris Climate Agreements. Ari determined the degree of interconnections between the latter, basing the analysis on the SDG targets and their relationship with the six key climate change elements of (1) mitigation, (2) adaptation, (3) finance, (4) technology transfer, (5) capacity building, and (6) cooperation partnerships. The results of this analysis may be viewed in Figure 1 (below). The degree of interconnection is determined on a proportion basis whereby the calculated number of climate change elements with which the specific SDG is associated is divided by six (i.e., the six key climate change elements listed above). As may be observed in Figure 1, SDG 17 seems to be the second most connected SDG regarding the Paris Climate Agreement [25], with a percentage of 66.7% of interconnection. In this respect, links are present between SDG 17 and the climate change elements of technology transfer, finance, cooperation and partnerships, and capacity building.
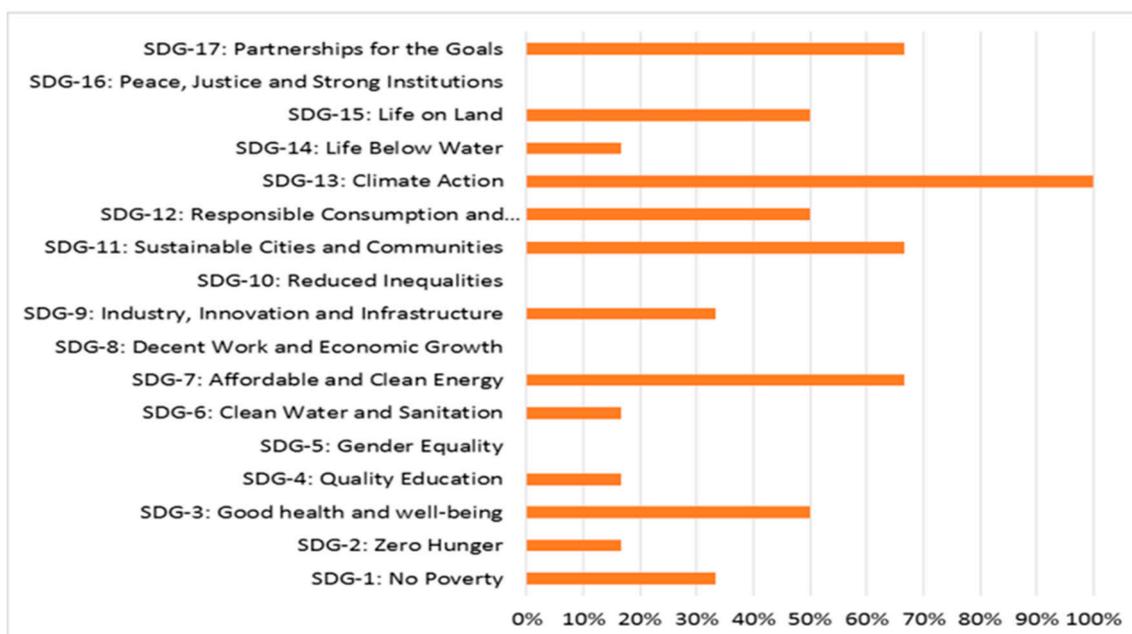
Figure 1. Interconnectivity between SDGs and Climate Agreements [25] p. 41. The bars in red represent the degree of interconnections between the latter, basing the analysis on the SDG targets and their relationship with the six key climate change elements of (1) mitigation, (2) adaptation, (3) finance, (4) technology transfer, (5) capacity building, and (6) cooperation partnerships The degree of interconnection is determined on a proportion basis whereby the calculated number of climate change elements with which the specific SDG is associated is divided by six (i.e., the six key climate change elements listed above).

By default, SDG 13 (Climate action) and SDG 7 (Affordable and clean energy) are very much associated with the Paris Agreements. As may be observed in Figure 1, similar to SDG 17, SDG 13 had an interconnection percentage with the Climate Agreements of 66.7%. SDG 7 emphasizes that all planetary citizens should have access to affordable, reliable, and sustainable energy. Furthermore, through this goal, greenhouse gas (GHG) emissions are reduced, thereby diminishing the effect of climate change. SDG 7 is associated with the climate action elements of climate change, technology transfer, cooperation, and partnerships, as well as finance elements. Finally, with respect to SDG 13, which represents climate action, there was an interconnection percentage of 100% between the latter and the six key Climate Change Agreement elements, as would be expected [25].

Further evidence focuses on how the Paris Agreement commitments are interconnected with the 2030 Agenda normatively and empirically. Most of the latter seem to demonstrate how climate change makes the achievement of some development targets more difficult to achieve. On the other hand, actions to mitigate climate change may, in turn, affect the other SDGs.

An assessment is necessary to determine the synergies and trade-offs between climate impacts and climate action in relation to the 169 targets of the 2030 Agenda. It is of considerable concern that climate change might influence all facets of sustainable development, making it essential to understand how climate change can enhance the SDGs and vice versa. However, although it is widely accepted that the two are related, there is limited research at the SDG level regarding potential synergies and tradeoffs [25]. A holistic perspective is therefore necessary in this respect. Figure 2 below shows the impacts of climate change on the SDGs, according to the United Nations. Each rectangle to the right of the relevant SDG represents the targets associated with the specific SDG. The targets highlighted in red represent those targets for which there is evidence associating the specific target with climate change. The authors Nerini et al. [26] found that 72 of the 169 targets across 16 SDGs could be undermined by climate change [26].
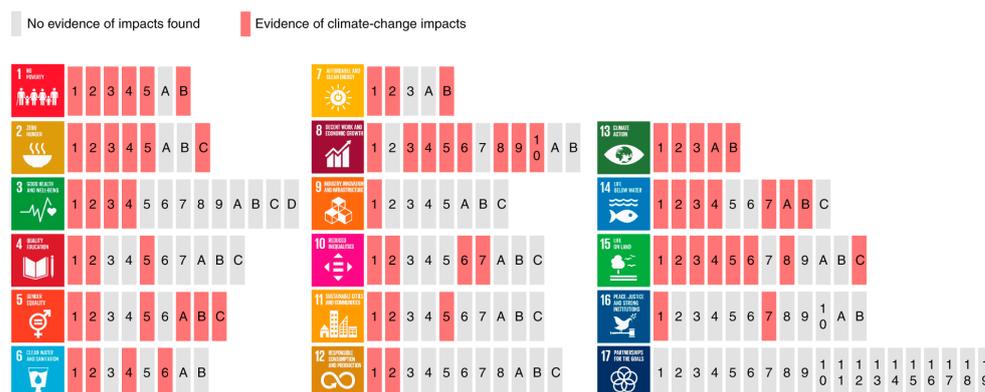
Figure 2. Impacts of climate change on the achievement of the SDGs [26]. Each rectangle to the right of the relevant SDG represents a Target. For Targets highlighted in red, we found published evidence of impacts. The absence of highlighting indicates the absence of identified evidence, which does not necessarily mean an absence of an impact.

From Figure 2, it can be observed that most SDG targets (i.e., 15 out of the 17) have one or more targets that enable or reinforce climate change. SDG 17 does not seem to have any direct linkages to associations with climate. The absence of highlighting in red indicates the absence of identified evidence. According to the authors Nerini et al. [26], this lack of evidence does not necessarily mean there is the absence of an impact of climate change on the achievement of the SDGs [26]. As shown by Ari [25], there are associations between the climate action elements and SDG 17, highlighting that the formation of global alliances is necessary to try to help curb climate change [26]. Looking back at the rest of the SDGs, climate change is bound to affect the achievability of the goals that are associated with the well-being of human beings, such as employment, food, and water availability. The shortage of water, for example, may directly affect people´s health by curtailing their access to drinking water and sanitation. The same can happen with how climate change may impact agricultural lands, potentially affecting populations through the diminishment of crops and potentially leading to malnutrition [26]. Moreover, the knowledge and evidence regarding sustainable development and climate action appear to be rather dispersed and are divided between many different institutions, locations, and disciplines, both locally and internationally. This represents a critical obstacle to achieving an integrated and holistic understanding of the potential impacts of the SDGs on climate action. Such shared knowledge and shared experience are essential for the development of awareness and policy support programs aimed at curbing the problem of climate change. Currently, the way things are handled prevents progress in this respect. Firstly, climate development research requires there to be integration regarding methods used across different disciplines, such as the natural sciences, engineering, and humanities. Interdisciplinary research, in this regard, should be promoted as it facilitates the following benefits: (1) greater legitimacy, (2) the ability to retain cutting-edge scientific talent, as well as (3) the transmission of useful and necessary knowledge to society [27]. Furthermore, more efforts are needed to be able to develop practical frameworks to explore the associations among the different SDGs [28,29].

SDG 17, as shown in Figure 2, has no direct relationship with SDG 13. A question that may be posed at this point in the discussion is whether SDG13 and SDG 17 can have direct linkages or whether this association can be secondary through a prior interdependence such as that of SDG 17 with SDG 7, "Affordable and clean energy". One way to mitigate climate change is to transition to renewable energies in such a way that adverse effects on the environment may be avoided [26,30,31]. This transition towards renewables is necessary to be able to hold global average temperatures below 1.5 °C above preindustrial times as established by the Paris Agreement. According to the United Nations, energy use is the main contributor to climate change, accounting for 73% of human-caused greenhouse gases [32].

2. Case Study: The Thollet–Coulonges and Liglet Wind Farm Projects

France has the second largest wind resources in Europe. With regard to renewable energy projects, the French government has very well-established participatory procedures to ensure that all project stakeholders have the opportunity and the means to voice their perspectives with regard to specific projects. These procedures, although in a legal rather than a voluntary framework, do effectively embody the essence of SDG17 in their encouragement of all potential stakeholders to become involved through an established and open legal route to achieve approval of projects or to see them rejected. The procedures may turn out to be lengthy, but the wide participation of a range of stakeholders in a legally sound process ensures that all points of view and all objections are given due consideration and decisions that are, in principle, also sound are made and accepted and implemented.

So, despite the high potential for wind farm projects in contributing to national energy independence, developers are obliged to follow a perhaps lengthy and exhaustive process in France because of the many inherent constraints within a system that allows the participation of a wide array of stakeholders in an open and transparent manner. However, once the process is over and the project is approved, the developers will then be certain that there will be no further obstacles or objections and that they can carry on to completion.

2.1. The Thollet–Coulonges Project

One project involving multiple stakeholders that did become contentious was the Thollet–Coulonges wind farm project spanning jointly the two named communes located in the department of "la Vienne". The project initially consisted of the installation of 20 wind turbines of approximately 3300 kilowatts for a total power of 66 MW. The proposed project in the commune of Liglet, which is located a little way north, for 10 turbines providing 34 MW followed the same regulatory process.

These communes are located in the east of the Vienne department, in a sparsely populated area, the main economic activity of which is farming. The area essentially epitomizes "la France profonde", rural and settled. Thollet and Coulonges together have almost 400 inhabitants while neighbouring Liglet has just over 300. While agriculture is the main economic driver of these communes, there are, within a circumference of 20 km, a number of historic sites dating from the 12th century onward, one being a UNESCO World Heritage site; thus, there are tourism, cultural, and heritage considerations in the wider geographic area.

These wind turbine projects form part of an ambitious national program for the development of renewable energies and would contribute significantly to achieving the objective set by the then Poitou-Charentes region (now part of Nouvelle-Aquitaine) in terms of the development of its wind energy potential [33]. The Thollet–Coulonges project, initiated in 2013, was subjected to in-depth studies to determine the best locations of the wind turbines to enable the project to have the least possible environmental impact. Applications for Building Permits were submitted to the authorities in December 2014.

Despite the high potential for wind farm projects to contribute to national energy independence, developers now face many obstacles: developing a wind power project is a complex process in France because of the many regulations and environmental constraints within a system that allows the participation of a wide array of stakeholders in an open and transparent manner.

The Thollet–Coulonges project was widely contested, not least by very active local environmental associations, notably "Vent de Raison" and the Vienne anti-wind turbine federation, amplifying the views of a substantial part of the populations of the two rural communes. The two communes were very much split by the proposed project, and the bitter row even led to lengthy court action against members of the village councils over accusations of conflicts of interest in that they were, in some cases, farmers owning land on which the turbines would be situated, thereby entitling them to receive rental payments. Several members of both councils were fined, while in Thollet, the mayor had to step down, and a new council was elected.

It had seemed, in 2016, that the opponents of the project had the upper hand as a prefectural decree was issued refusing authorization for the project to proceed, considering the negative impacts that it would have on the landscape and built heritage, the residents (noise) birds and bats (collision mortality) and mice. However, in 2018, the administrative court of Poitiers, at the demand of the developer EDF Énergies Nouvelles, put the project back on track. Further appeals and counter-appeals ensued, delaying the project even longer.

In the end, it took over seven years for the process of its evaluation to be finally completed, and only through a concluding decision by the Conseil d'Etat, the very highest judicial organ of the state. Only now, in February 2023, is the project, now reduced to 15 turbines, getting underway with the publication of the call for tenders for the associated civil works.

The Thollet–Coulonges project is a very clear example of how the concept of multi-stakeholder partnerships and SDG 17 may be legally applied to allow the participation of a wide range of stakeholders, such as the environmental NGOs that, in this case study, had a significant weight in the decision-making process, which took seven years to complete.

2.2. The Liglet Project

In France, the landscape is among the principal reasons invoked by local administrations for rejecting projects. Because of the visual impact that these projects can have on the landscape, they are rarely compatible with the present conception of European landscapes. In landscapes that are more industrial or that lack heritage landscapes, there tends to be more acceptance; however, these types of renewable project developments in rural areas, long settled and sometimes with outstanding architectural and cultural heritages, besides incipient rural tourism, have a tendency of always being controversial.

Such was also the case with the proposed wind turbines project in the commune of Liglet, situated a little to the north of Thollet and Coulonges. Again, the project was very much contested; again, a very long legal and administrative process was followed step by step. The Prefect of the Vienne département had already refused to authorize the project in 2019, but further appeals were launched, and the process only came to an end in December 2022 after eight years of wrestling with the decision; again, the Conseil d'Etat definitively refused the pursuit of the Liglet project [34].

One interesting feature of the lengthy legal and administrative process followed in France is that the interests of non-human stakeholders such as birdlife and bats are given their full importance, as well, as in the Liglet case, a completely inanimate stakeholder, namely the landscape as both a heritage and a cultural element worthy of its due respect, in its own right. Another feature of note is that environmentalists may well be led into philosophically conflicting situations, often being ideologically committed to the harnessing of wind power but not wanting this to be at the expense of established rural life, a phenomenon labelled in English as NIMBYism (Not In My Back Yard)!

Noteworthy in the Liglet decision was that the main grounds for its refusal were that the building of ten masts, each of 180 m in height, would severely impact the landscape or the views in an area where there are protected heritage buildings from the 11th and 12th centuries, notably the UNESCO World Heritage site of the Abbey of Saint-Savin with its outstanding wall and ceiling biblical murals and the Priory of Villesalem, an important example of church architecture of the period, in the neighbouring commune of Journet. It was held that the distant views from Saint-Savin would be affected and that this would be harmful to local tourism.

This emphasizes the point that economic factors alone do not suffice to get projects through the comprehensive approval process in France. Whether such an approach could be adopted in other countries may be debatable since France does have the established cushion of its investment from decades ago in a substantial fleet of nuclear power reactors which are the backbone of its energy generation. Perhaps not coincidentally, France also

has a much lower percentage of its energy generated by wind turbines than much of the rest of Europe.

Although the French process does lead to lengthy delays in final approval or rejection of projects, it is noteworthy that the process is rigorous and fair, allowing for both administrative and judicial hearings, appeals and counter-appeals in which stakeholders of all descriptions may participate. In only very few of these proposals will agreement be reached easily. However, the fact that due process and established procedures are followed ought to lead to conclusions that can be accepted as being good and fair, whether one may feel one has won or lost.

The lengthy process, leading to considered decisions reached after taking account of submissions from all stakeholders, as well as due consideration of the interests of non-human and even inanimate stakeholders, decisions that may reasonably be assumed to be fair and good, would tend logically to ensure compliance with SDG 17, namely wider stakeholder involvement, and with SDG 13, effective climate action. In some cases, as with Thollet–Coulonges, projects are given approval, while in other cases, such as that of Liglet, the balance falls the other way, and projects are refused. That is the nature of an open and transparent process.

Again, this case study highlights that SDG 17 and multi-stakeholder partnerships are essential to make fair and ethical decisions, not leaving out the voices of stakeholders that would otherwise not be considered, such as those of environmental NGOs or neighborhood communities. Presently, multi-stakeholder partnerships only include people; however, this second example makes us question whether non-human beings could also be included in the equation to be able to make better informed decisions regarding the planetary challenges that we are currently faced with, such as climate change.

3. Discussion

In this review, the potential viability of SDG 17, "Partnerships for the goals", regarding SDG 7 and consequently SDG 13 (relating to climate action) was analyzed using two wind farm projects located in south-western France in the department of the "la Vienne": the first in the communes of Thollet–Coulonges and the second in the commune of Liglet. With regard to renewable energy projects, the French government has very well-established participatory procedures to ensure that all project stakeholders have the means to voice their perspectives with regard to specific projects.

The Thollet–Coulonges project, although widely contested over the seven years of evaluation and legal proceedings, was finally approved in December 2022 after years of wrangling with the decision, again, of the Conseil d'Etat. It is only now, in February 2023, that it is underway with the publication of the call for tenders for the associated civil works.

In France, the inanimate stakeholder of the protection of the landscape is among the principal reasons invoked by local administrations for rejecting projects. This point was very pertinent regarding the final refusal of the proposal for Liglet. The project, which is similar to that of Thollet–Coulonges, was also very much contested; however, in December 2022, after eight years of wrestling with the decision, again, of the Conseil d'Etat, to definitively refuse the pursuit of the Liglet project. Noteworthy in that decision was that the main grounds for its refusal were that the building of ten masts, each of 180 m in height, would severely impact the landscape in an area where there are protected heritage buildings from the 11th and 12th centuries, notably the UNESCO World Heritage site of the Abbey of Saint-Savin.

These two examples demonstrate the worth of the application of SDG17 in projects such as wind farms, projects perhaps contentious and perhaps viewed as disruptive of established lifestyles. Effectively, the French approval process harnesses the stakeholder participation targeted under SDG17 from the very earliest point possible in the process, thus pre-empting objections and co-opting participants into the process in order to achieve legally binding outcomes.

The lengthy process, leading to considered decisions reached after taking account of submissions from all stakeholders, decisions that may reasonably be assumed to be fair and good, would tend logically to ensure compliance with SDG 17, namely wider stakeholder involvement, and with SDG 13, effective climate action. In some cases, as with Thollet–Coulonges, projects are given approval, while in other cases, such as that of Liglet, the balance falls the other way, and projects are refused, which is the result of open and rigorous procedures.

The multilevel governance theory, which posits that policymaking involves multiple layers of government, non-governmental organizations, and other stakeholders, can shed further light on the implementation of SDG 17 in the context of renewable energy projects in France. By acknowledging the complexity of governance structures and the role of various actors in decision-making processes, this theory can help us better understand the intricate dynamics at play in the Thollet–Coulonges and Liglet wind farm projects.

In the case of these two wind farm projects, multilevel governance theory highlights the importance of involving actors from different levels of government, local communities, the private sector, and civil society in the decision-making process, as presented by SDG 17. By engaging stakeholders from diverse backgrounds and various levels of authority, the French approval process for renewable energy projects becomes more inclusive and robust, thus ensuring that the concerns and interests of all stakeholders are taken into account.

This collaborative approach, in line with the principles of SDG 17, serves to strengthen the legitimacy and acceptance of the final decisions regarding wind farm projects. In the case of Thollet–Coulonges, the project was ultimately approved after years of evaluation and legal proceedings, demonstrating the effectiveness of multilevel governance in fostering dialogue and consensus-building. Conversely, the Liglet project was refused due to concerns about its impact on the landscape and cultural heritage, a decision that was reached after extensive deliberation and stakeholder input.

By incorporating the multilevel governance theory, we can better appreciate the interconnected nature of decision-making in the realm of sustainable development and the importance of fostering multi-stakeholder partnerships. In the context of renewable energy projects, such as wind farms, this theory further emphasizes the need for an open and rigorous approval process that includes stakeholders from various levels and sectors to achieve a balance between clean energy (SDG 7), effective climate action (SDG 13), and other relevant concerns.

Study Limitations

Although a thorough review has been carried out in this review, it does have its limitations. Two of its main limitations are noted below:

- The two case studies, although thoroughly analyzed through the compilation of mainly local press, could have been ameliorated had the authors of this study carried out face-to-face interviews to get a more holistic and richer perspective of the different stakeholders´ views on the development of the two renewable windfarm projects. There are in situ ways of analyzing and creating networks between the different actors, and this could be the basis of a future study. This could consequently be completed by the development of a stakeholder map where the linkages between the different project actors could be drawn and analyzed.
- Furthermore, the review that is presented in this paper is a practical review and not systematic. A systematic review may have provided a more structured approach to the analysis of the references, using critical methods to identify, define, and assess the research of our research topic.

4. Conclusions

This paper analyzed the viability and effectiveness of SDG 17, "Partnerships for the goals", in achieving the remaining sixteen SDGs via a practical review of the existing literature. Especially relevant for this analysis are the SDG 17 targets 17.16 and 17.17,

which deal with the formation of multi-stakeholder partnerships between a wide array of actors, such as NGOs and universities. Although SDG 17 works very well theory, in practice, it is another story. There is still a considerable caveat on how to best implement this theory. Sustainable Development Goal 17, in its present state, has its limitations, which are listed below:

- It mainly concentrates on the economic pillar of sustainability.
- The range of actors considered in multi-stakeholder partnerships is often still limited, although the French examples that are given show that this need not be inherently so. There is presently a lack of a lessons-learned repository that will help to deepen the understanding and the shared understanding of the effectiveness of the associations of multiple stakeholders to progress toward achieving Sustainable Development.
- There is a lack of evaluation methods to assess multi-stakeholder partnerships to attain better-founded information based on academic data.

In this review, the effectiveness of SDG 17 was analyzed in terms of SDG 7 (relating to affordable and clean energy) and, consequently, SDG 13 (relating to climate action) using two wind farm projects located in south-western France in the department of "la Vienne" (département no. 86); the first in the communes of Thollet–Coulonges and the second in the commune of Liglet.

In France, developers of wind farm projects are obliged to follow exhaustive processes that permit the involvement of a wide range of actors in an open and transparent manner. Developers, therefore, experience many regulatory and environmental constraints within the French legal system; however, that does allow for everyone´s voice to be heard. The first case study included in this paper dealt with the development of the Thollet–Coulonges wind farm. The project was widely contested by the local environmental associations, and there was no agreement regarding the project by the two communes in the area covered by the wind farm project.

The second project wind turbine project analyzed was in Liglet, a commune located north of Thollet and Coulancge. The project was very much contested principally and had to go through a very long legal and administrative process. The Liglet project, unlike the Thollet–Coulonges project, was finally refused in December 2022. The decision was mainly taken on the grounds that the building of the ten masts, each 180 m in height, would severely impact the landscape on the views in an area of the UNESCO World Heritage site of the Abbey of Saint-Savin, built in the 11th and 12th centuries.

From the analyses of both projects, it can be concluded that the French legal system might lead to lengthy delays regarding the approval or rejection of renewable energy projects such as those of the Thollet–Coulonges and Liglet projects. However, this rigid, well-established procedure is rigorous and fair through participatory planning, thereby permitting the involvement of stakeholders of all descriptions. From these two examples, it is possible to see how SDG 17 can be effectively applied to SDG 13 to help tackle the global problem of climate change through the prior interdependence of SDG 7, "Affordable and clean energy", creating a means of mitigating climate change by facilitating the transition to renewable energies.

5. Future Directions

All of the above makes us initially question the realistic scope attainable in multi-stakeholder partnerships. The French examples given demonstrate this is not something to fear. Performing benchmarking exercises to analyze why some multi-stakeholder partnerships are more successful than others in achieving the targets set by the SDGs is essential to progress satisfactorily toward the execution of the other SDGs.

Several future lines of research emerge that could contribute to our understanding of sustainable development and effective climate action. These future directions include the following:

- Comparative analysis of multi-stakeholder partnerships: A comparative study examining the implementation of multi-stakeholder partnerships and multilevel gover-

nance across different countries or regions could provide valuable insights into the effectiveness of various approaches, their challenges, and best practices in fostering sustainable development.

- Long-term impact assessment of renewable energy projects: Investigating the long-term socio-economic and environmental impacts of approved and rejected renewable energy projects could help identify the factors that contribute to project success or failure and inform future decision-making processes.
- Role of emerging technologies in stakeholder engagement: Assessing the potential of digital technologies, such as big data, artificial intelligence, and social media, in enhancing stakeholder engagement and communication during the approval process of renewable energy projects could reveal new avenues for effective collaboration and decision-making.
- Capacity building for multi-stakeholder partnerships: Exploring strategies for capacity building among different stakeholder groups, including local communities, NGOs, and private sector entities, could help improve the effectiveness of multi-stakeholder partnerships and enhance the implementation of SDGs.
- Integration of climate resilience and adaptation measures in renewable energy projects: Investigating how climate resilience and adaptation measures can be incorporated into the planning and implementation of renewable energy projects could provide valuable insights into improving the long-term sustainability of these projects in the face of climate change.
- Policy coherence and coordination across sectors and levels of governance: Analyzing the extent to which policies and regulations across sectors and levels of governance are aligned with sustainable development goals and climate action objectives could help identify gaps and opportunities for improving policy coherence and coordination.

By exploring these future lines of research, we can deepen our understanding of the complex interplay between multi-stakeholder partnerships, multilevel governance, and sustainable development. This, in turn, could lead to more effective strategies for achieving clean energy, climate action, and other critical objectives outlined in the Sustainable Development Goals.

References

1. Pogge, T.; Sengupta, M. The Sustainable Development Goals: A Plan for Building a Better World. *J. Glob. Ethics* **2015**, *11*, 56–64. [CrossRef]
2. Erling, H.; Linnerud, K.; Banister, D. Sustainable Development, Our Common Future revisited. *Glob. Environ. Chang.* **2014**, *26*, 130–139.
3. Gupta, J.; Vegelin, C. Sustainable development goals and inclusive development. *Int. Environ. Agreem. Politics Law Econ.* **2016**, *16*, 433–448. [CrossRef]
4. Stibbe, D.; Prescott, D. *The SDG Partnership Guidebook: A Practical Guide to Building High Impact Multi-Stakeholder Partnerships for the Sustainable Development Goals*; The Partnering Initiative and UNDESA: New York, NY, USA, 2020.
5. Castillo-Villar, R.G. Identifying determinants of CSR implementation on SDG 17 partnerships for the goals. *Cogent Bus. Manag.* **2020**, *7*, 1847989. [CrossRef]
6. Buhmann, K.; Jonsson, J.; Fisker, M. Do no harm and do more good too: Connecting the SDGs with business and human rights and political CSR theory. *Corp. Gov. Int. J. Bus. Soc.* **2019**, *19*, 389–403. [CrossRef]
7. Fukuda-Parr, S.; McNeill, D. Post 2015: A new era of accountability? *J. Glob. Ethics* **2015**, *11*, 10–17. [CrossRef]

8. Von Schnurbein, G. *Transitioning to Strong Partnerships for Sustainable Development Goals*; MDPI: Basel, Switzerland, 2020.

9. Maltais, A.; Weitz, N.; Persson, A. *SDG 17: Partnerships for the Goals. A Review of Research Needs*; Stockholm Environment Institute: Stockholm, Switzerland, 2018.

10. Commission on Global Governance. *Our Global Neighbourhood: The Report of the Commission on Global Governance*; Oxford University Press: Oxford, UK, 1995; Volume 2.

11. Newell, P.; Pattberg, P. Multifactor governance and the environment. *Annu. Rev. Environ. Resour.* **2012**, *27*, 365–387. [CrossRef]

12. Newell, P. *Climate for Change: Non-State Actors and the Global Politics of the Greenhouse*; Cambridge University Press: Cambridge, UK, 2000.

13. Betsill, M.; Correll, E. *NGO Diplomacy: The Influence of Nongovernmental Organizations in International Environmental Negotiations*; MIT Press: Cambridge, UK, 2008.

14. Joshi, A.; Moore, M. Institutionalised Co-production: Unorthodox Public Service Delivery in Challenging Environments. *J. Dev. Stud.* **2014**, *40*, 31–39. [CrossRef]

15. Sondermann, E.; Ulbert, C. Politics and Governance. Transformation through "Meaningful" Partnership? SDG 17 as Metagovernance. *Norm. Its Glob. Health Implement.* **2021**, *9*, 152–163.

16. What Is COVAX and Why Does It Matter for Getting Vaccines to Developing Nations. Conversation. 2020. Available online: https://theconversation.com/what-is-covax-and-why-does-it-matter-for-getting-vaccines-to-developing-nations-146284 (accessed on 9 March 2023).

17. Stott, L.; Scoppetta, A. Alianzas para los objetivos: Más allá del ODS 17. Partnerships for the Goals: Beyond SDG 17. *Rev. Diecisiete* **2020**, *2*, 29–38. [CrossRef]

18. Austin, J.E.; Seitanidi, M.M. Collaborative Value Creation: A Review of Partnering Between Nonprofits and Businesses: Part I. Value Creation Spectrum and Collaborative States. *Nonprofit Volunt. Sect. Quaterly* **2012**, *41*, 726–758. [CrossRef]

19. Stott, L. Parnerships for Sustainable Development, The monitoring and evaluation challenge, Great Insights. *Eur. Cent. Dev. Policy Manag. ECDPM* **2019**, *8*, 28–30.

20. Urcan, C.; Alkan, M.N. Sustainable Development Goal 17 in the EU and in Latin America: Initiatives in Frame of the SDG 17. *Uluslararası Kriz Ve Siyaset Araştırmaları Derg.* **2021**, *5*, 330–360.

21. Dzhengiz, T. A Literature Review of Inter-Organizational Sustainability Learning. *Sustainability* **2020**, *12*, 4876. [CrossRef]

22. Beisheim, M.; Simon, N. Multi-stakeholder Partnerships for Implementing the 2030 Agenda: Improving Accountability and Transparency. In *Analytical Paper for the 2016 ECOSOC Partnership Forum*; UNDESA: New York, NY, USA, 2016.

23. MacDonald, A.; Clarke, A.; Huang, L.; Roseland, M.; Seitanidi, M.M. Multi-stakeholder partnerships (SDG no. 17) as a means of achieving sustainable communities and cities (sdg no. 11). In *Handbook of Sustainability and Research*; Springer: Cham, Switzerland, 2018; pp. 193–209.

24. Pattberg, P.; Widerberg, O. Transnational multistakeholder partnerships for sustainable development: Conditions for success. *Ambio* **2016**, *45*, 42–51. [CrossRef]

25. Ari, I. The interconnection between sustainable development and the climate change negotiations: The Paris Agreement case. *Altern. Polit.* **2017**, *12*, 27–45.

26. Fuso Nerini, F.; Sovacool, B.; Hughes, N.; Cozzi, L.; Cosgrave, E.; Howells, M.; Tavoni, M.; Tomei, J.; Zerriffi, H.; Milligan, B. Connecting climate action with other Sustainable Development Goals. *Nat. Sustain.* **2019**, *2*, 674–680. [CrossRef]

27. Nilsson, M.; Chisholm, E.; Griggs, D.; Howden-Chapman, P.; McCollum, D.; Messerli, P.; Neumann, B.; Stevance, A.S.; Visbeck, M.; Stafford-Smith, M. Mapping interactions between the sustainable development goals: Lessons learned and ways forward. *Sustain. Sci.* **2018**, *13*, 1489–1503. [CrossRef]

28. Liu, J.; Hull, V.; Godfray, H.C.J.; Tilman, D.; Gleick, P.; Hoff, H.; Pahl-Wostl, C.; Xu, Z.; Chung, M.G.; Sun, J.; et al. Nexus approaches to global sustainable development. *Nat. Sustain.* **2018**, *1*, 466–476. [CrossRef]

29. Howells, M.; Hermann, S.; Welsch, M.; Bazilian, M.; Segerström, R.; Alfstad, T.; Gielen, D.; Rogner, H.; Fischer, G.; Van Velthuizen, H.; et al. Integrated analysis of climate change, land-use, energy and water strategies. *Nat. Clim. Change* **2013**, *3*, 621–626. [CrossRef]

30. Healy, N.; Barry, J. Politicizing energy justice and energy system transitions: Fossil fuel divestment and a "just transition". *Energy Policy* **2017**, *108*, 451–459. [CrossRef]

31. Yeeles, A. Sustainable development and climate goals. *Nat. Clim. Chang.* **2019**, *9*, 497–498. [CrossRef]

32. Goal 7 Affordable and Clean Energy. Available online: https://www.undp.org/sustainable-development-goals/affordable-and-clean-energy (accessed on 13 March 2023).

33. Les Services de l´État Dans La Vienne. Available online: https://www.vienne.gouv.fr/index.php/Actions-de-l-Etat/Environnement-risques-naturels-et-technologiques/Installations-classees/Eoliennes/Parc-eolien-Thollet-et-Coulonges (accessed on 13 March 2023).

34. Les Dix Éoliennes de Liglet Refusées par le Conseil d'État. La Nouvelle République. Available online: https://www.lanouvellerepublique.fr/ (accessed on 9 January 2023).