

# Clean Energy: Lumituuli

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## 1 Profile of the Company

When established in February 1998 as a joint effort by local people at the Lumijoki municipality and Finnish environmental association, *Dodo*, Lumituuli Ltd. was the first nationwide, customer-owned wind power producer in Finland. Lumituuli produces wind power and uses its profits to make new wind power investments in Finland. Its main business operations consist of commissioning and operating wind generators and financing these activities via share sales targeted mainly at ordinary people (see also Kourula and Houtbeckers 2016). Electricity produced by the turbines is sold to the firm's shareholders. Thus, Lumituuli is a customer-owned firm with more than 1200 shareholders; mostly private citizens, but also other firms, associations, and municipalities.

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As an innovative collaborative project of local people at Lumijoki and an urban environmental association, the firm has received plenty of media attention. It won the *Vision of the Year 1998* prize in Finland and was later granted the *Finnish Social Enterprise Mark* by the Association for Finnish Work. The mark is given to enterprises that try to find solutions to social and ecological problems and whose business operations have positive side effects that benefit the whole of society.

In the following pages, we begin our analysis of Lumituuli by first elaborating on the institutional and technological context of the company. We argue that the activity of the company can be partly understood as a form of local community energy project. However, it is evident that the company has also been from the outset an organization that is not only committed to particular localities or to satisfying the financial interests of local contributors. As corporate by-laws state, the mission of the company is to advance wind power generation in Finland. Moreover, as the company essentially emerged from an environmental NGO, it has been more committed to promoting wind power as an effective way to mitigate climate change than to supporting its potential local or national benefits.

## 2 Lumituuli as a Progressive Business

The emergence of Lumituuli as a progressive business is connected to an institutional change: namely, the deregulation of electricity markets, which enabled new producers to enter into the competition. In 1998, when the company was set up, wind power production across the world existed only on a limited scale and was mainly organized by cooperatives, even in the leading countries such as Denmark (Bauwens et al. 2016). In Finland, the technology had hardly been commercialized, and the few sites that existed were mainly for experimental R&D activity. In the late 1990s in Finland, wind was not regarded as an option for power production, with no companies profiling themselves as wind power producers. Yet the deregulation of the market and the rapid development of the technology created fertile ground for this groundbreaking initiative: a consumer-owned and large-scale turbine.

The business model of Lumituuli comprised two key factors: First, the company was able to raise the capital for the first turbine investment solely through the sales of shares. This was crucial, as the bankability of wind power was extremely low. Capital simply was not available through the financial markets in Finland, particularly for new ventures such as Lumituuli. Moreover, capital contributions by citizens also ensured demand for electricity as share ownership was directly linked to the right to purchase electricity. The value proposition of the company was oriented toward Lumituuli's potential shareholders who effectively acquired shares in a turbine in order to guarantee themselves a supply of wind power, a commodity which had not before existed on the market. Hence, the financial standing of the company was extremely strong after the launch of a series of successful sales of shares and allowed for investment in technology which had not earlier been tested in Finland. The company's first turbine was the largest single turbine in mainland Finland at the time of its erection, and the first one erected on an artificial island without a fixed road connection.

The second key element of the business model was a strategic partnership with an existing energy company. The delivery of power to customers through the national grid required administration beyond the ability of a small venture. The other problem was that in many cases the electricity consumption of individual shareholders exceeded their entitlement of 500-kilowatt hours/year/share. Deregulation of the electricity market had, however, also attracted the interest of another market actor, Ekosähkö, who saw the opportunity to brand their existing hydropower and biomass-based power production as green electricity. Ekosähkö launched a significant sales campaign with only moderate results. The green electricity offering by this incumbent company based on existing power plants did not offer a value proposition similar to that of Lumituuli. Hence, the partnership between Lumituuli, which lacked the volume to administer sales, and Ekosähkö, which lacked a customer base and credibility, proved to be an effective one.

Under the terms of the partnership between Lumituuli and Ekosähkö, Lumituuli plans, commissions, owns and operates wind turbines to produce power for its shareholders. Ekosähkö provides the services needed to operate on the electricity market place, including

balancing power production and invoicing. In practical terms, all Lumituuli shareowners who wish to use their entitlement to electricity need to become customers of Ekosähkö. In addition to buying administrative services from Ekosähkö, in most cases, they also buy some electricity from Ekosähkö. Further benefits follow: Lumituuli is able to top-up the power produced by its own turbine with power from Ekosähkö, which lowers the threshold for individuals to get involved in Lumituuli, and ensures the delivery of electricity. On the other hand, Lumituuli shareholders constitute a large and dominant segment of the customer base of Ekosähkö. Moreover, Lumituuli's brand value as a progressive business meshes with Ekosähkö's operations, which have received less public interest. Cemented through the mutual benefits it provides, the partnership has lasted more than 18 years and remains the backbone of both operations.

The earning proposition of the company is robust because of the two, above-described key elements of the business model. The board of the company can set the electricity price for customer-owners who are committed to the company and loyal customers. Shareholders have also been found to be effective at disseminating the brand message and recruiting more members. Indeed, the marketing budget of the company is extremely modest and targeted at outlets for the progressive green movement. Yet each new sale of shares brings new customers to Ekosähkö as well.

As the company has aged, strategic responses have been required to maintain and develop the business model. First, shareowners who were initially attracted by the unique offering of Lumituuli often find that their life situations have changed, making the original offering redundant. Lumituuli has thus set up services to facilitate the aftermarket sales of company shares in order to maintain a committed constituency of buyers and support the value of the shares. Lumituuli also plans new share offerings according to the supply of and demand for existing shares.

A second development relates to changes in the subsidy system for wind power in Finland. A feed-in tariff for wind power improved the profitability of the business in 2011 to the extent that Lumituuli had the opportunity to invest in wind power without any stipulation on the

consumption of such electricity. While Lumituuli had been operating using the logic of providing consumers with opportunities to acquire green electricity via the ownership of Lumituuli shares, Lumituuli bonds (launched in 2012) represented an alternative logic and value proposition. These bonds were designed to be a responsible, profitable, and progressive investment opportunity. While the original reason for setting up the company was a direct attempt to challenge the existing fossil-based energy regime of Finland, the bonds expanded the established discourse of green growth and the opportunities for investing in sustainability. In order to avoid fragmentation of the value proposition and institutional complexity, the bond scheme has been kept moderate in size compared to direct capital investments.

Progressive business, we claim, is more than about running a successful, legitimate enterprise. Indeed, by purely financial measures, Lumituuli can hardly claim to be a notable success. The profits on the company balance sheet are relatively unimpressive. What is more interesting and relevant to this chapter is to note the influence of the company on the emergence of wind power as a sector and the learning leveraged through the activities of the company, as well as the stretching of the institutional context. While citizen ownership has remained marginal in Finland and is regarded by some as a failure (Ratinen and Lund 2016), the detailed study of Lumituuli as an actor also hints at some success.

Electricity generation has been based on centralized, large production units, and distribution networks. Such a configuration was premised on both particular technologies and institutional arrangements. Large-scale power generation technologies not only include nuclear reactors, but also technologies such as combined heat and power (CHP) production in an urban setting, and large-scale hydro projects. In addition to such technologies, institutional arrangements have favored large-scale centralized production. In many countries, Finland included, power generation remained a monopoly until quite recently, which effectively blocked new actors from entering the market.

Renewable energy sources have begun to challenge centralized electricity generation. Community energy projects represent a way of broadening the constituency of energy systems. These projects involve

local generation of electricity using technologies such as wind, solar, PV, and biogas. Walker and Devine-Wright (2008) propose that community energy initiatives question both the way that the benefits of energy production are shared, as well the way that such organizations are operated and managed. Community projects have indeed enabled local stakeholders to make investments in and capture value from projects within neighborhoods, as well as help, accumulate the capital needed to promote a change in the power generation mix and diversify the capital bases of energy investment (Bergek et al. 2013).

The second argument about more open governance structures remains contested. Cowell et al. (2011) claim that community benefits are mainly considered a means to roll out a pre-given agenda, such as using wind turbines as an effective way to mitigate the carbon emissions of power generation. For these authors, offering monetary compensation to offset the negative impacts of energy projects on local communities conflates a plurality of values into a unified monetary measure. While compensated, if made to accept energy projects local stakeholders can feel marginalized. Cowell et al. hence emphasize the openness of the processes and the opportunities they create for participation in project planning and execution, rather than focusing on the compensation they provide for the downsides of such projects. Progressive and effective community energy projects can thus be expected to use diverse organizational forms to open the door to distributed governance and decision-making. Indeed, community projects with different organizational forms already exist: In the UK, these include cooperatives, community charities, and development trusts (Walker 2008), whereas in Germany profit-driven local projects prevail, and in Denmark wind power generation is often organized through cooperatives (Bauwens 2016).

It seems fair to claim that Lumituuli has opened up new ways of participating in wind power development in Finland. Positions on the board of management have been open to interested shareholders, regardless of the share of ownership, and have enabled individuals to develop their own capabilities in terms of wind power. Annual assemblies have included topical discussions about wind power development, in addition to their formal roles. Perhaps more importantly, Lumituuli has increased practical engagement with and the utilization

of knowledge, as shareholders have been active and effective at peer-to-peer marketing.

However, local citizens in the municipalities where the turbines are operating have showed only scant interest in investing in Lumituuli. This is despite dedicated marketing efforts and a good local reputation in Lumijoki and the other municipalities in which the company has operations and the relocation of the headquarters from the capital region Helsinki to Lumijoki. Lumituuli appears to have engaged those who are already well positioned for participating in energy debates. The empowerment of new actors is not a logical outcome of small-scale energy projects, as Schreuer (2016) has suggested. In the case of Lumituuli, a politically progressive company at the forefront of the energy system transition has been met with some sympathy by local residents, who nevertheless have only in rare cases opted to become part of such political activity.

The increase in the number of community energy projects has the potential to challenge preexisting energy systems, incumbent actors, and the institutions which govern electricity production. Bauwens et al. (2016) state that Denmark and Germany are the leading countries, each with more than 600 renewable energy cooperatives. In 2002, Danish wind power generation was dominated by cooperatives and single-owners of turbines. However, as the size of the turbines increased and the industry matured, small-scale manufacturers faced difficulties and a competitive disadvantage compared to the large wind power developers and operators, while the absolute number and the significance of local ownership drastically declined (Bauwens et al. 2016). The increase in scale has both required more professional management (Schreuer 2016) as well as multiplied the demand for capital. Policy shifts have also variously supported or undermined the opportunities for small and locally owned energy projects. Overall, while wind energy appears to have gained a better footing in terms of energy policies, the organizational form and the role of ordinary citizens in such systems remains much more open.

Small-scale energy producers have developed specific strategic responses to the technical and institutional changes which have disadvantaged them. Bauwens et al. (2016) highlight the joint

marketing efforts of such organizations in Denmark, Germany, and the Netherlands. On the Finnish markets, Lumituuli has offered and acted as a market channel for the electricity produced by other small wind turbine operators via its partnership with Ekosähkö. Lumituuli has also acquired small amounts of shares of other operators and has facilitated learning through exercising shareholder rights. The company has also challenged institutions quite literally by filing complaints against utilities for setting unfair prices for grid connection and by lobbying against the administrative practices related to the feed-in tariff which disfavors small companies.

Lumituuli's role as a forerunner in the wind power business in Finland has had other manifestations as well. Lumituuli board members have served on the board of the Finnish Wind Power Association (FWPA) as the perennial voice of small-scale producers, obtained expert positions in several academic and policy institutions, given parliamentary testimonials and contributed to the promotional activities of the industry (e.g., during the annual Day of the Wind organized by FWPA).

The opportunities for wind power production have also been promoted via business networks. While concrete effects are hard to specify, it is true that Lumituuli collaborators and owners have taken up central positions in the industry: for example, PVO Engineering, which served as the technical consultant for the first turbine commissioning of Lumituuli in 1998, was later involved in setting up Winwind, the largest Finnish turbine manufacturer, which operated from 2000–2013. In a similar manner, the energy company ST1 became a major shareowner in Lumituuli in 2008 prior to starting to invest using their own capacity. It eventually became one of the biggest turbine operators in Finland. Finally, the fact that local and national green politicians (some of whom have also served on the board of the company) are also owners has policy implications and indicates strong familiarization with the emerging technology.

In conclusion, the company seems to have succeeded in its primary mission of promoting wind power in Finland as a means of mitigating climate change. Some of its success stems from good timing regarding key technical and institutional changes. Turbine development has now



reached a level of technical performance and reliability unforeseen in the early years of wind power. Most critically, the deregulation of energy markets in Finland opened up opportunities for the entry of new actors who were embedded in different institutional settings than the traditional power producers. The success of Lumituuli clearly also hinges on mutually beneficial partnerships and the political legitimacy which stemmed from its origins as an NGO and its pursuit of explicitly social aims.

Lumituuli exemplifies a business enterprise which has pursued explicit political goals with some success. It also raises questions about in which kinds of political systems can such activities fit and flourish. Finland has undergone a distinct process of energy system privatization as public utilities and distribution networks have been sold off. On an international level, the failure to create global or EU-wide markets for CO<sub>2</sub> emissions is another obvious contextual factor which calls for more initiative and self-determination from private business. Indeed, in the remainder of this chapter, we argue that corporate political activity and progressive business models can be particularly effective in times of disruption and the rearrangement of the relationships between business and society.

To increase the analytical focus of the Lumituuli case study, we have sketched out some basic ways in which political and business goals in a society can be configured. Table 1 maps these configurations and offers an interpretation of the particular configuration of the case study environment for electricity provision in Finland.

The horizontal axis of Table 1 displays how strong or weak the public sector of a society is. The vertical axis shows the level of unity of operating logics across different sectors of society (i.e., a single and dominant operating logic which applies to public and private sectors of society versus. different operating logics).

In *Politicized society* there are no boundaries between sectors of society since the whole of society is governed by political doctrine(s). One example of this is the socialist order, where equality and democracy are overarching values, the means of production are publicly owned, and a strong democratic state is combined with firms run by labor in a democratic way. In this context, all major political, social, and economic

**Table 1** Basic combinations of business and politics in society (Adapted from Goodman and Mäkinen 2016)

	Strong public sector	Weak public sector
Dominant operating logic in society	<p>Politicized society</p> <p>Political doctrine applies to all sectors of society</p> <p>No boundaries between business and politics</p> <p>Example: Socialist utopia with democratically governed firms and democratic public spheres of society</p> <p>In the case of the environment: Electricity delivered by public utilities which are directly accountable to public policy</p> <p>Liberal democracy</p> <p>Politically oriented public sector</p> <p>Boundaries between business and politics exist</p> <p>Private firms focus on business issues in a market environment</p> <p>More or less robust and democratically governed public sector focus on political issues</p> <p>In the case of the environment: Global CO<sub>2</sub>-emission markets which are as neutral as possible in terms of specific technologies, markets or actors</p>	<p>Business society</p> <p>Business logic and privatization across the board</p> <p>No boundaries between business and politics</p> <p>Society as a business venture</p> <p>Example: Libertarian utopia, early industrial company towns</p> <p>In the case of the environment: Progressive businesses in the energy sector, with segments of progressive consumers developing new markets independently of government regulation. Lock-in effects between producers and consumers</p> <p>Mixed society</p> <p>Exchange regarding ends and logics of public and private sectors of society</p> <p>Blurred boundaries between business and politics</p> <p>Firms may focus on political and social issues and governments on business issues</p> <p>Public sector under privatization and politicized private sector</p> <p>In the case of the environment: Innovation policies which promote targeted solutions and seek to create niches and ultimately industries for low-carbon energy provision. Lock-in effects between business and government</p>
Plurality of operational logics in society		

issues are decided collectively through democratic processes, and there is only one dominant operating logic which applies to all sectors of society (Arneson 1993; Miller 1993). In the energy sector, public utilities which have the task of delivering fair energy services resemble this ideal type.

*Business society* is a network of private agreements according to which the political relations of citizens to the institutions of a minimal state are like their relations with “any private corporation with which they have made an agreement” (Rawls 1996: 264–265). In this political setting, there are no boundaries between the sectors of society, and there is no room for collective decision-making processes and democratic operating logics since the whole of society is privately governed according to business logics. Historical examples of these systems include the early industrial company towns (Djelic and Etchanchu 2015; Green 2010). Regarding electricity provision, both the green electricity offerings by business and customer-owned companies and cooperatives which organize production for their own needs resemble the ideal types of strong link between production and consumption displayed by industrial towns.

*Liberal democracies* are combinations of democratically governed and relatively robust public sectors of society and the private sector, which consists of markets and business firms run according to business logics. In these settings, there is a separation between the political and the business spheres of society and between the democratic operating logic of the public sector and the business logic of the private sector. Liberal democracies represent mainstream Western ideas about the market economy and democracy. In electricity markets, international carbon emission taxation, regardless of which specific technology is used, resembles this ideal type. This example also highlights the fact that the political structures of liberal democracy require the strict regulation of single market actors.

Finally, *Mixed society* is a combination of the increasingly economical and business oriented public spheres of society, and politically and socially oriented private actors like business firms, and the mixing of these two spheres and operating logics. Even though this social order may seem to be a theoretical curiosity, in the contemporary political

culture there exist interesting social orders which resemble this combination of political and business logics. For example, private firms and government representatives (along with civil society associations) may take an active role in democratically governed multi-stakeholder forums and multi-stakeholder initiatives mixing the traditional business and public sector logics (see Goodman and Mäkinen 2016). Furthermore, the drive for transition management in the energy sector indicates the need for tailored policies that support technology niches and experiments that help technologies mature, as well as those that kick-start low-carbon industries.

It can be argued that now, in the twenty-first century, the politicized society and the business society remain utopias. Liberal democracy is the prevalent way of combining business and politics since it is the mainstream idea and practice throughout the Western world. However, as effective international carbon taxation remains a distant utopia, governments are being forced to nurture alternative technologies at close range, which implies the unavoidable meshing of politics and business. Mixed society is hence an interesting alternative configuration in a globalized world in which traditional liberal boundaries between business and politics are becoming increasingly blurred (Scherer et al. 2014).

Nordic welfare states have traditionally used the strong public sectors of society to promote high levels of general welfare, social security, and equality for all members. In Finland, a representative of Nordic societies, the significant task of the public sector has been to focus on political issues like supporting social justice and general welfare. The task of the Finnish public sector has been to promote socioeconomic equality, offer fair opportunities to all, and maintain an equitable and sustainable state of societal welfare. This applies to the Finnish electricity sector as well, where energy is traditionally seen as a public good and the basic responsibility of the state has been to support legally fair and stable prices for energy across the country.

Since in Finland the majority of political and social responsibility-related tasks have been undertaken collectively by the democratically governed public sector, the role of the business sector has been to concentrate on business issues, without extensive and visible political programs and targets. Furthermore, the relatively strong economic focus of

Finnish firms is related to the fact that they are expected to pay Nordic-level taxes, create jobs and invest in Finland (Mäkinen and Kourula 2014).

The traditional Finnish welfare state system represents liberal democracy, and more specifically, welfare-state capitalism, where the major aim of the robust public sector is to increase the general level of welfare and maintain democratic equality in society via redistributive socioeconomic policies and institutions (Freeman 2007). Here, the basic responsibility of the business sphere is to create economic value so that the strong public sector has enough economic resources to further general welfare and equality over time.

However, since the 1990s Finnish society has been moving away from a traditional Nordic welfare state in the direction of more neoliberal society. In this process, the basic political ends of Finnish society are reframed. While the traditional Finnish welfare state promoted general welfare and social justice, the emerging, competitive Finnish state increasingly focuses on economic issues, and its political institutions are assigned relatively straightforward tasks related to increasing economic growth and competitive advantage. On the other hand, traditional welfare state tasks such as promoting general welfare and democratic social justice and related public responsibilities are undergoing privatization and the political roles of the business and civil sectors of society are becoming increasingly dominant (Eräsaari 2002; Julkunen 2006; Heiskala and Luhtakallio 2006; Tainio et al. 2014).

Seen from the perspective of our framework, contemporary Finland shows interesting features of a mixed society where the public sector focuses strongly on economic issues (GNP and competitive advantage), public institutions are under strong pressure to increase efficiency, and the traditional political goals of general welfare and social justice are being outsourced to other sectors of society. Simultaneously, the political role of the business sector is on the rise since the major goals of public and business sectors are quite similar, and the success of public sector actors is increasingly dependent on the activities of business actors. Moreover, the privatized public sector is creating increasing space for firms and civil society actors to take over traditional political and social responsibilities.

Furthermore, in the Finnish context, the reduced public sectors understanding of general welfare as economic growth offers business and civil society actors room to achieve broader and alternative political ends. Thus, it seems that in the setting of the emerging mixed society of Finland, the realization of political and social ends that go beyond business goals are increasingly dependent on how well private and civil society organizations combine in their activities business and political logics. In the following section, we discuss the hybrid organization of Lumituuli as a progressive business in this type of political context.

### 3 Challenges to Lumituuli

Lumituuli is an organization that combines progressive political ends with sustainable business activities. Its ultimate goal is to generate political discussion about the opportunities and potential of wind power and increase its use in Finland. To achieve this political end, the firm is building and financing economically profitable wind generators and communicating its experience to the public and political decision-makers. Such divergent goals and logics involve institutional complexity (Greenwood et al. 2011), and require hybrid organizations that can engage with several logics.

Hybrid organizations operate on the borderline between the private and public spheres of society and try to respond to social and environmental problems using economic means (Ebrahim et al. 2014). Generally speaking, the major challenges for hybrid organizations are often related to the problems of achieving different ends and merging the operating logics of the political and business spheres. A focus on both sustainability and economic profitability may lead to tension at the organizational level. Thus, hybrid organizations may need to engage in specific kinds of strategies to address the conflicting logics of the economic and political realms of society (Battilana and Lee 2014).

Institutional complexity is inherent in community energy projects but is also brought about as organizations grow and mature. Schreuer (2016) has analyzed the growth paths of Austrian citizen-owner wind turbines and claims that they risk being assimilated and incorporated

by the existing actors and business logics of electricity generation. The increasing number of citizen-owned power producers may need to professionalize if volunteering as a key organizational element is found to be inadequate. They may also start to operate on a nationwide basis, which in the Austrian cases described by Schreuer reduced the participation of peripherally located individuals. Finally, Schreuer also refers to incorporation, through which large preexisting companies gradually take over the activities of local energy projects. This may happen when utilities begin to build, operate, and maintain citizen-owned power plants, requiring only that citizen-owners become their customers, thereby reducing the role of the consumer to capital provider and electricity consumer.

Lumituuli seems to have been set up to avoid such concerns. From the beginning, it was not only a local energy project but also a nationwide citizen-owned turbine operator. It also partnered in a mutually beneficial way with an established energy company, thus effectively avoiding the threat of incorporation. Despite this, its institutional complexity has manifested in several ways. The company started out as fully volunteer-operated and achieved important early successes without any monetary compensation for the individuals involved. Since the involvement of a professional manager, power, and expertise have certainly begun to coagulate. Yet it is obvious that this change has been needed considering the changing operating environment of the company and the professionalization of the field of wind power production in general.

Another key challenge has been to uncouple profit-seeking from investment in “own” power production capacity. Corporate bylaws and annual assemblies of shareholders have been central to maintaining the company not as a tool for making profit, but as a producer of low-carbon electricity and an example to other Finnish actors.

The credo of Lumituuli is based on promoting wind energy in Finland. Since 2013, Finland has used a feed-in tariff for wind energy which has resulted in substantial building activity, the emergence of new large-scale investors, and the scaling-up of project sizes. With the speed of new installations, the firm’s mission seems to have been accomplished. Yet another turbine by Lumituuli will not affect development to any significant extent. The feed-in tariff has also brought to the table

other wind turbine financiers who are channeling private money into turbine investments.

Currently, the role of the company is perhaps clearest in terms of the call for different organizational forms in which citizens own the means of production; in the case of Lumituuli, this refers to the turbines which generate the power for their needs. However, and as international experience indicates, policy support and subsidy schemes are not stable and social goals may reemerge as more salient in the future. The feed-in tariff, which has created a wind gold rush in Finland since its introduction in 2011, is short-lived. New projects are no longer being accepted for these lucrative support schemes, but will need to find yet another logic for their existence. As political decisions are pending in 2016, subsidies will promote the further centralization of wind power production in Finland.

## 4 Conclusions

The institutional transitional process of Finnish society toward a more competitively oriented, mixed society seems to have supported the existence of Lumituuli. As the state withdrew from operating utilities and has failed to tax carbon, private enterprises have much to contribute in political terms. It appears that in the emerging, competitive Finnish society, the realization of political ends like promoting sustainability will be increasingly dependent on the capability of hybrid organizations such as Lumituuli to combine business and political logics.

The opportunities for progressive business depend on institutional arrangements that differently distribute political agency in society. Furthermore, it can be argued that the determination of the level of progressiveness of business is partly based on political interpretations. For example, Lumituuli challenges the mainstream liberal democratic social order in which private firms are not supposed to be openly political actors. From the liberal democratic perspective, Lumituuli hardly represents the ideal organization. On the other hand, the current crisis of the liberal democratic social order creates progressive political, social, and economic roles for hybrid organizations like Lumituuli.



The case of Lumituuli also partly reveals the features of industry internal dynamics. To the extent that progressive businesses challenge existing, incumbent actors, events which open the field to competition and entry appear to be key opportunities for progressive business. Such internal industrial dynamics may be of critical importance for progressive hybrid organizations, insofar as their business logics introduce new products and services which existing market actors fail to provide.

Citizen-ownership models have different roots and contemporary forms. Cooperatives have traditionally operated in order to raise capital and organize the shared use of products without necessarily having a progressive, political aim. Crowdfunding, through which citizens and consumers can collectively promote developments which lack market credentials, is a contemporary form of investment activism. The practices and existing platforms for crowdfunding would indeed seem to support the emergence of semipolitical actors akin to Lumituuli. Yet raising capital is only one of the challenges such organizations face. As the case of Lumituuli suggests, the successful integration of political aims and existing business practices is of key relevance.

## 5 Questions to Address

- How has Finnish society conditioned and supported the business of the case study company Lumituuli?
- How and to what degree has Lumituuli adapted to specific and general circumstances?
- How has Lumituuli been able to change its own operating environment?
- What are the core competences of Lumituuli?
- How was responsibility conceived by the people working at Lumituuli? What role did it play in the success of the company?
- What kinds of learning outcomes and resources has the case company been able to develop over the course of its operations (since 1998)?
- What kinds of network ties and shared interests does the case highlight?

- How do progressive businesses contribute to the development of new technology?
- Do progressive businesses follow an evolutionary path? What do you imagine will happen to Lumituuli?

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## References

- Arneson, R. J. (1993). Market socialism and egalitarian ethics. In P. K. Bardhan & J. E. Roemer (Eds.), *Market socialism: The current debate*. New York: Oxford University Press.
- Battilana, J., & Lee, M. (2014). Advancing research on hybrid organizing—Insights from the study of social enterprises. *The Academy of Management Annals*, 8(1), 397–441.
- Bauwens, T., Gotchev, B., & Holstenkamp, L. (2016). What drives the development of community energy in Europe? The case of wind power cooperatives. *Energy Research & Social Science*, 13, 136–147.
- Bergek, A., Mignon, I., & Sundberg, G. (2013). Who invests in renewable electricity production? Empirical evidence and suggestions for further research. *Energy Policy*, 56, 568–581.
- Cowell, R., Bristow, G., & Munday, M. (2011). Acceptance, acceptability and environmental justice: The role of community benefits in wind energy development. *Journal of Environmental Planning and Management*, 54(4), 539–557.
- Djelic, M. L., & Etchanchu, H. (2015). Contextualizing corporate political responsibilities: Neoliberal CSR in historical perspective. *Journal of Business Ethics*. doi:10.2139/ssrn.2462772.
- Ebrahim, A., Battilana, J., & Mair, J. (2014). The governance of social enterprises: Mission drift and accountability challenges in hybrid organizations. *Research in Organizational Behavior*, 34, 81–100.
- Eräsaari, L. (2002). *Julkinen tila ja valtion yhtiöittäminen* [Public space and the privatization of the public sector]. Helsinki: Gaudeamus.
- Freeman, S. (2007). *Rawls*. Abingdon: Routledge.

- Goodman, J., & Mäkinen, J. (2016). *Corporate social responsibility and irreponsibility: A political perspective*. Naples: EGOS Conference.
- Green, H. (2010). *The company town: The industrial edens and satanic mills that shaped the American economy*. New York: Basic Books.
- Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E. R., & Lounsbury, M. (2011). Institutional complexity and organizational responses. *The Academy of Management Annals*, 5(1), 317–371.
- Heiskala, R., & Luhtakallio, E. (Eds.). (2006). *Uusi jako: Miten Suomesta tuli kilpailukyky-yhteiskunta* [The new division: How Finland became a competition society]. Helsinki: Gaudeamus.
- Julkunen, R. (2006). *Kuka vastaa? Hyvinvointivaltion rajat ja julkinen vastuu* [Who responds? The limits and public responsibility in the welfare state]. Helsinki: Stakes.
- Kourula, A., & Houtbeckers, E. (2016). Finland. In W. Visser (Ed.), *World guide to sustainable entrepreneurship*. Sheffield: Greenleaf.
- Mäkinen, J., & Kourula, A. (2014). Globalization, national politics and corporate social responsibility. In R. Tainio, S. Meriläinen, J. Mäkinen, & M. Laihonon (Eds.), *Limits to globalization: National borders still matter* (pp. 219–235). Copenhagen: Copenhagen Business School Press.
- Miller, D. (1993). Equality and market socialism. In P. K. Bardhan & J. E. Roemer (Eds.), *Market socialism: The current debate*. New York: Oxford University Press.
- Ratinen, M., & Lund, P. D. (2016). Alternative view on niche development: Situated learning on policy communities, power and agency. *Technology Analysis & Strategic Management*, 28(1), 114–130.
- Rawls, J. (1996). *Political Liberalism*. New York: Columbia University Press.
- Scherer, A. G., Palazzo, G., & Matten, D. (2014). The business firm as a political actor: A new theory of the firm for a globalized world. *Business and Society*, 53(2), 143–156.
- Schreuer, A. (2016). The establishment of citizen power plants in Austria: A process of empowerment? *Energy Research & Social Science*, 13, 126–135.
- Tainio, R., Meriläinen, S., Mäkinen, J., & Laihonon, M. (Eds.). (2014). *Limits to globalization: National borders still matter*. Copenhagen: Copenhagen Business School Press.
- Walker, G. (2008). What are the barriers and incentives for community-owned means of energy production and use? *Energy Policy*, 36(12), 4401–4405.
- Walker, G., & Devine-Wright, P. (2008). Community renewable energy: What should it mean? *Energy policy*, 36(2), 497–500.