

# Naturstrom AG



# Summary

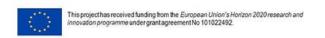
Naturstrom AG aims to provide a 'clean, safe and economical' energy supply based on renewable energy. It claims sustainability is the core of its business activity, and more than 300,000 households, companies, and associations are using its energy products, which are focused on the areas of electricity, heating and mobility and include energy delivery, energy production, energy infrastructure and decentralised energy supply.

# Why is it a case of energy citizenship?

It is a case of energy citizenship because citizens can opt for the renewable energy supplied by Naturstrom in their homes, workplaces, or other organisations in which they are active. Naturstrom also supports and connects local energy projects, where citizens can play a more active role in energy production.













- 1. Producing and delivering renewable energy regionally;
- 2. Driving forward the energy transition and the further expansion of renewable energies;
- 3. Supporting citizen participation and allowing citizens to participate in the energy transition.

# The story and the typology

Naturstrom AG was founded in 1998 as a joint stock company by members of environmental and renewable energy associations, including BUND (Friends of the Earth Germany), NABU (Nature and Biodiversity Conservation Union), BWE (German Wind Energy Association), and EUROSOLAR. In 2003, its 100th energy production site was built, and in 2004, there were more than 50,000 customers. The case has changed in form and expanded its services in many ways. However, its typologisation regarding the agency and outcome orientation of the state of energy citizenship that is enabled has not changed since its formation.

Type 4: Do it their way (within organisations) Transformative outcome / Individual agency



Type 1: Do their bit

Type 4: Do it their way (within organisations) Transformative outcome / Individual agency



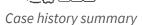
Type 1: Do their bit



Type 7: Do their share



Type 8: Go ahead



Type 4: Do it their way (within organisations)

Transformative outcome / Individual agency



Type 1: Do their bit



Type 7: Do their share



Type 8: Go ahead









#### Phase 1: Creation of the case, 1998 - 2005

From the very beginning, Naturstrom has played a pioneering role in the field of sustainable energy supply. Since 1999, the tariff provided by Naturstrom has been awarded the highest quality, the green electricity label. The reason for this is the high level of funding for new eco-power plants (1 euro cent net per kWh). In its founding phase, it was a small emerging company among large energy companies, the innovative concept being that it financed the building of new renewable energy plants. The first was a small photovoltaic system in Weil am Rhein in 1998. One of the biggest obstacles

then was the low legally determined electricity feedin tariff and higher solar panel investment costs.

		Individual			Collective	
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Reformative	1. Do their bit (in the household)	3. Do their bit (within organizations)	5. Make their voice heard	7. Do their share	9. Do the job	
Transformativ	2. Do their own (in the household)	4. Do it their way (within organizations)	6. Make their vote count	8. Go ahead	10. Make their claims	

Main type: Do it their way

Transformative outcome / Organisationally embedded agency

Secondary type: Do their bit

Reformative outcome / Private in the household agency

#### Phase 2: Consolidation of the case, 2005 - 2011

Since approximately 2005, Naturstrom AG has expanded its business areas by building its own ecopower plants to further the energy transition. A growing awareness of the emerging climate crisis and the long-standing opposition to nuclear power are helping Naturstrom and the few other independent green electricity providers to grow out of their niche, taking green electricity into the mainstream. From 2007 onwards, the number of Naturstrom customers will double yearly, albeit from a very modest level initially. Naturstrom is the first company to offer up to 100% eco gas on the German market. Naturstrom is building up a pool of smaller green electricity producers who sell their electricity directly to Naturstrom. Still, to resell this electricity as green electricity per the law, the plant operators must waive the statutory feed-in tariffs. Naturstrom can pay slightly higher prices because energy suppliers who market green electricity directly in this way are exempted from the EEG levy under strict conditions. More than half of the electricity that Naturstrom has supplied to customers since 2008 comes directly from wind

turbines in Germany. At its peak, there are more than 200 plants from which Naturstrom draws its electricity. At the end of the 2000s, there were no other electricity suppliers in Germany who sold green electricity from eligible wind or solar systems to household customers nationwide. It was not until the early 2010s that other energy suppliers appeared alongside natural electricity providers and changed their procurement practices

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Main type: Do it their way

Transformative outcome / Organisationally embedded agency

Secondary type: Do their bit

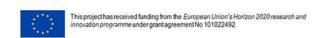
Reformative outcome / Private in the household agency

Secondary type: Do their share

Reformative outcome / Citizen-based and hybrid agency  $\,$ 

Secondary type: Go ahead

Transformative outcome / Citizen-based and hybrid agency







#### Phase 3: Current state, 2012 - 2023

The reactor catastrophe in Fukushima in March 2011 marked a turning point: an increasing number of people started taking a stand against nuclear energy and switched to green electricity from Naturstrom, independent of the coal and nuclear industries.

In 2014, the legal basis for the Naturstrom supply model was eliminated from the Renewable Energy Sources Act. Nevertheless, the direct marketing of green electricity prevails and is now standard for larger green power plants.

Since 2015, Naturstrom has developed more and more innovative projects in which ecologically generated energy is consumed directly on-site with electricity projects, sustainable local heating solutions and district concepts. Therefore, it can be seen as fostering forms of energy citizenship corresponding to both the ideal types 7 and 8. The organisational structure and the main goals of Naturstrom have remained mainly the same in that Naturstrom shares are primarily held by micro shareholders (about 1700), employees share in the profits, and shares are not traded on the stock exchange, so no other company, such as a conventional energy supplier, can influence Naturstrom. Corporate goals are not aimed at short-

term profit maximisation, and there are no yield or dividend targets; instead, most profit remains in the company to enable energy transition projects and growth.

The company will mainly continue as it did, focussing on expanding its number of renewable energy plants with citizens, municipalities and other companies and supplying consumers with renewable energy. They plan to look more into the topics of digitalisation and, connected to this, future models of energy communities.

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#### Main type: Do it their way

Transformative outcome / Organisationally embedded agency

Secondary type: Do their bit

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Secondary type: Go ahead

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# The aspects of energy citizenship

Citizens, as employees or outsiders, can be stakeholders of the company and in this way take part in the internal decision-making, according to their shares in the company. Citizens, communities, and companies that are cooperating with Naturstrom in relation to energy projects/plants have voting rights as well. Finally, employees have the option to buy shares, too. In the end, a limited group of people play a part in the decision-making process and ultimately, decisions are made by the management board.

Citizen control

Citizens can express their views, but their views are not necessarily taken into account



Naturstrom recognises the 1.5°C target explicitly on their website, where they are vocalising their support for Fridays for Future and their success with a lawsuit against the federal climate protection law that now has to be corrected in that the reduction goals for  $CO_2$  emissions need to be reformulated more explicitly. They also write: 'The judgment also proves that we have climate protection in our own hands and can achieve the 1.5°C target.'

Carbon limit

Explicit recognition with mention/objective
of reaching the max. carbon footprint



There is no explicit mention of energy democracy, but the focus is on producing renewable energy in the form of a company with goals concerning sustainability but also profitability. Participation is possible for consumers, shareholders and owners/producers, so there is an interest in decentralisation and supporting local communities to build their own renewable energy projects, which relates to making the energy system more safe, sustainable and democratic.





### Democratic energy future

A more democratic energy future is a core concern of the case, and is part of the vision

Access is fairly open, equity and justice are explicitly pursued, and Naturstrom considers economic, ecological and social sustainability to be core values. The main and only limit is that people with low incomes are probably not able to afford Naturstrom electricity. However, Naturstrom is making an effort not only to aim at homeowners with their renewable energy projects but also address renters with tenant electricity.



# **Equity and justice**

Equal access is granted, but limited by various criteria

Environmental sustainability has been, since the company's founding, 'at the core of the company'. This mainly includes the goals of **replacing fossil fuels** with renewable energy by producing or enabling citizens to produce renewable energy and delivering renewable energy. Naturstrom pursues this goal inside and outside of their core business, including their offices, IT equipment and vehicles.

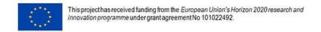


# **Environmental sustainability**

**Environmental sustainability is a core issue, and is considered in goal setting** 









#### Further information



<u>facebook.com/naturstrom</u> youtube.com/user/naturstromTV



www.naturstrom.de



kundenservice@naturstrom.de



#### References

- Information available on various aspects of the case on the case website (Accessed 30.09.2023):
  - <a href="https://www.naturstrom.de">https://www.naturstrom.de</a>
  - https://www.naturstrom.de/aktuelles/1-5-grad-danke-fuer-diesen-historischenerfolg
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- Interview with a case employee
- Vadovics, E., Szőllőssy A., and Vadovics K. (2023). Introduction and Methodology for the EnergyPROSPECTS Detailed Case Summary Reports. EnergyPROSPECTS (PROactive Strategies and Policies for Energy Citizenship Transformation). Zenodo. <a href="https://doi.org/10.5281/zenodo.10075408">https://doi.org/10.5281/zenodo.10075408</a>



#### Source of images

https://www.naturstrom.de



#### Case study authors

#### Mapping and detailed case research by:

Claudia Buse & Ariane Debourdeau, Technische Universität Berlin

# **Case study summary prepared by:**

Kristóf Vadovics, Edina Vadovics & Anita Szőllőssy, GreenDependent Institute

**Proofreading by Simon Milton / Reviewed by case participants** 









# **EnergyPROSPECTS** partners

University of Galway (GAL)
University Road, H91 TK33, Galway, Ireland

Université libre de Bruxelles (ULB), Avenue Franklin Roosevelt 50-1050, Bruxelles, Belgium

**GreenDependent Institute (GDI)**, 2100 Gödöllő, Éva u. 4., Hungary

Universiteit Maastricht (UM), Minderbroedersberg 4-6, 6200 MD, Maastricht, Netherlands

**Applied Research and Communications Fund** (ARC Fund), Alexander Zhendov Street 5, 1113, Sofia, Bulgaria

Notre Europe – Institut Jacques Delors (JDI), 18, rue de Londres 75009, Paris, France

University of Latvia (UL), Raiņa bulvāris 19, LV-1586, Riga, Latvia

Technische Universität Berlin (TUB), Straße des 17. Juni 135, 10623, Berlin, Germany

Universidade da Coruña (UDC), Rúa da Maestranza 9, 15001 A Coruña, Spain























