



City of Leinwig · Lord Mayor's Office · D612MN Leinwig, Germany

To the
Climate Solutions Council
(via email)

Wednesday, January 3, 2018

Appointment to develop a community energy plan (CEP) for the City of Leinwig

Dear Climate Solutions [Council](#),

In my function as the Lord Mayor of the City of Leinwig, I am addressing you on behalf of our community. We need your support for innovating our city's energy portfolio and developing a concept for a sustainable energy supply for the near and intermediate future until 2030.

Leinwig is a city with great potential. As a community, we want to be on the forefront of those [localities](#) that [implement](#) a 100% renewables goal, which means that we want to generate our electricity entirely from renewable sources. We do not see the energy transition as an obligation, but as an opportunity for attracting businesses and creating jobs in the renewable energy sector and beyond.

As you know, our city has made great progress since my administration took office ten years ago. Leinwig City and County joined forces in 2008 to achieve our ambitious climate action goals when the joint Climate Protection Office was formed to coordinate local and regional climate actions in our area. In 2010, our [county council](#) decided [unanimously](#) that Leinwig county should become a certified 'renewable energy region' and operate on using 100% renewables in the electricity and heating sectors by 2030. Today, eight years later, we are on track to tremendously increasing the share of renewable energy sources in our portfolio, but – as the Leinwig Kurier recently reported – this timeline might prove too ambitious. The success of our 2030 goals is at stake.

National and international commitments. As a county and community, Leinwiggers are leading the way to a sustainable future by example. Our plans go well beyond national and international targets. Both the EU and the German federal government are pushing for a reduction of greenhouse gas emissions to 20% below 1990 levels by 2020, and Germany has pledged to increase the energy coming from renewable sources to at least 18 percent by that year. While these goals were decided at the highest government levels, our citizens know that it is at the regional and local levels where these targets must be met.

Our current state. Today, our county feeds over 700 GWh of electric energy into local and regional grids. It gives me great pride that, already today, 55% of this energy is generated from renewable sources in Leinwig County. Among the largest contributors are wind energy (23%) and biomass (27%), both of which have been booming in our region in the last decade. Another notable, [decentralized](#) source of energy is solar power, which today accounts for roughly five percent of our total energy supply. Fossil and [non-carbon-based](#) energy sources still make up 45%, but their share is dropping, thanks to our community's efforts. About one fifth of the county's energy is generated in nuclear power plants, 15% from coal, and seven percent from mineral gases. While we are embracing renewable energy sources, the fact

Dr. Michelle Johannsen

**Lord Mayor of the City of
Leinwig**

City of Leinwig
Lord Mayor's Office
Hansa Alley 1
D612MN Leinwig
Germany





that we have such a diverse energy portfolio has made our community less [vulnerable](#) to natural and political impacts.

Environmentalism. Leinwig is a city with a rich history, and the same is true for the environmental movement in our region. Leinwiggers know that their fate depends on the available resources and the way we use them wisely. In the last century, our community was home to many vocal supporters of the anti-nuclear movement, and it still is today. Our [proximity](#) to the radioactive waste disposal facility in Gorleben and the experience of [nuclear flask](#) transports being directed through our county are part of our collective memory and we know that how we generate our energy will impact our way of life.

Saving energy in buildings. As a local administration, we can pave the way to a sustainable future. We are [auditing](#) the energy consumption in public buildings and will reduce it dramatically through improved energy efficiency measures and renovating to ensure energy efficiency of public buildings. The same can be done by our citizens, as we know that each one of us must act if the 100% renewable energy goal is to be met. A pilot study at Leinwig University showed that the only [viable](#) way to achieve our ambitious goals must include the private sector as well. The scientists at Leinwig University agree that increasing energy efficiency in residential buildings is indispensable. We have equipped libraries with [energy auditing kits](#), many of them booked out six months in advance. Consumer [councils](#) are offering inexpensive energy [audits](#) to home owners and renters.

Solar power. The Climate Protection Office, in cooperation with the Lower Saxony Department of Energy, is conducting solar checks, estimating the efficacy of photovoltaics on private homes and advising on the installation of solar panels. Yet we must not forget that Leinwig is an attractive tourist destination and owes this, in large part, to its stunning medieval architecture and the preservation of its historic town center. This is first and foremost a cooperative effort made possible by the owners of [listed buildings](#), who have joined forces in a local association for the preservation of historic architecture in Leinwig. There is large public support for preserving the historic character of the city, although it makes the possibility of installing renewable energy plants like photovoltaics within the city center virtually impossible.

Wind. Regarding the booming sector of wind energy, city and county have recently declared eight priority areas for the installation of wind turbines. I do not have to tell you that, while there is public support for the [100 RE](#) plan, environmental activists are very outspoken about the consequences this might have for the local flora and fauna as well as for the population directly affected by such wind parks. Which of the prioritized areas will eventually be used for new wind parks and to what extent will have to be carefully planned and negotiated with all [stakeholders](#).

Bio-mass. The biggest renewable energy source in Leinwig County is energy (heat and electricity) from biomass and biogas. Today, over one fourth of the electricity generated in our county comes from this energy source. It is more reliably available than solar and wind power, and it secures jobs of farmers in our region. Yet, you know as much as I do that electricity from biomass requires large land areas, the cultivation of [monocultures](#) and other costs.

Finances. Maybe most importantly, you will have to develop a sound and solid financial plan to secure the [implementation](#) of our city's renewable energy action plan. Complex problems call for creative solutions. Especially when it comes to promoting energy efficiency programs in the industrial and commercial sectors, financial incentives by the local government and public-private partnerships (for example, involving Leinwig University) are imperative. Why? Because we estimate that industry and commerce account for two thirds of our



city's overall electricity use, so integrating these sectors into a sustainable energy action plan is indispensable.

Transportation. In addition, Leinwig's traffic accounts for 30% of our city's carbon dioxide emissions and thus offers a great potential for reduction. Improvements like optimizing public transit, developing cycling infrastructures, promoting bike- and car-sharing programs, and installing charging stations for electric vehicles are just some of the innovations that could help transform the city's transportation sector. We do not have to 'reinvent the wheel' here. Other communities in Europe and across the Atlantic have [implemented](#) a host of solutions that specifically target the challenges they face in the transport sector. Provided some adjustments are made, I am convinced that we can adapt some of their approaches to match our needs.

Education and public relations. And finally, the city's and county's commitment to a 100 percent renewable energy portfolio is an investment in our region's future and, at the same time, requires that future generations continue and intensify these efforts. Protecting our planet is a task that will accompany us [indefinitely](#). Thus, education for sustainability from [K to 12](#) and public relations work will decide whether our local sustainability efforts will indeed be fit for the future and continue to positively affect the quality of life in our community after I leave office. In much the same way, how we are going to present our renewable energy plan to the public, for example in the form of a public campaign, will determine its acceptance among our citizens.

The road ahead is not going to be an easy one, and the tasks that the energy transition poses for our community are no doubt challenging. But I would not have reached out to you if my administration and I did not firmly believe that these challenges are solvable and that you have the capacity and the know-how to achieve this. We are asking you to develop a renewable energy action plan for our community that adequately addresses the aspects mentioned in this letter.

As a community and county, we have set ourselves these climate and energy targets:

- **Reduce greenhouse gas emissions to 40% below 1990 levels by 2020, to 60% by 2030 (and to 80-95% by 2050).**
- **Increase the amount of energy from renewable sources for electricity to 85% by 2030 (and to 100% by 2050). Increase the share of renewable energy sources for heating to 50% by 2030.**
- **[Phase out](#) and replace energy from nuclear power plants entirely by 2022.**
- **[Implement](#) other actions and measures, for example regarding transportation, energy efficiency and education, to ensure that our climate and energy targets are met.**

The clock is ticking, and you will have to present your blueprint to our energy commission at the end of this week. Please find more information, and additional materials attached to this letter. Leinwig City and County are counting on your help. We hope you will answer our call and help to build our future.

Yours,

Dr. Michelle Johansen, Lord Mayor of the City of Leinwig