

Tuesday 14,
September
2021

Daily Dispatch

Madeline K. Lydon Reporting from Saerbeck, Germany

Issue #2

Agenda

Day's Hosts: Dr. Tobias Lehberg, mayor, City of Saerbeck and Guido Wallraven, technical director, Klimakommune Saerbeck

"Klimakommune Saerbeck — A city on its way to a sustainable future"

Guido Wallraven, technical director, Klimakommune Saerbeck

"Research Matters: renewable energy research at FH Münster University of Applied Sciences Research and in Minnesota"

Dr. Christof Wetter, professor of environmental technology, FH Münster University of Applied Sciences

Dr. Lee Johnston, director of operations, West Central Research and Outreach Center, University of Minnesota

"Saerbeck's focus on education"

Alfons Gunnigmann, board member, Förderverein Klimakommune Saerbeck e.V. nonprofit

Peter Engler, ASL education and learning center at Bio-Energy Park Saerbeck

"Waste management and the circular economy: a county perspective"

Kreis Steinfurt, County commissioner Landrat Dr. Martin Sommer

Eva Witthake, chief financial officer, county-owned waste management company Entsorgungsgesellschaft Steinfurt mbH (EGST)

Official ground-breaking ceremony for Enapter Campus with dignitaries

"Overview of the climate protection activities of Kreis Steinfurt county: structures, projects, goals"

Silke Wesselmann, head, climate protection and sustainability department, Kreis Steinfurt county

"Energieland 2050: renewable energy as a jobs engine"

Thomas Voss, board member, energy cooperative Die Energieländerwerker

"storch.energy start-up accelerator: renewable energy sector innovation and jobs"

Birgit Neyer, CEO, Wirtschaftsförderungs- und Entwicklungsgesellschaft Kreis Steinfurt (WESt mbH) business development agency

Daniel Schaschek, project manager, storch.energy

"Sustainable economic development across counties: Region 9 Development Commission"

Nicole Griensewic, executive director, Region Nine Development Commission

Picture Caption: To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other.



Turbines at Saerbeck's Bioenergie Park.

Bioenergie Park

Saerbeck's claim to fame is peaceful and impressive

You know you are at Saerbeck's Bioenergie Park when you see the windmills.

Statuesque, with their white and red blades steadily rotating, they are simultaneously imposing and hypnotic. Watching the blades is relaxing, a sensation enhanced by the numerous and beautiful trees – this place is truly a park – and the songs of birds and the September breeze...but not the turbines.

Contrary to what I have heard people in the US saying, the windmills are silent. Even standing directly below one I cannot hear anything other than the sounds of nature, the talking of the delegation members, and the trucks and heavy equipment in the composting center.

While the windmills are the most immediately striking feature of the Bioenergie Park there is much more that contributes to the wonder of the place.

Old military munition bunkers have been repurposed to support an expansive solar

field, hydrogen research is happening here, education is a central feature, and then there is the composting.

The Bioenergie Park is the site of Steinfurt County's organic waste management facility. All the garden, food, and household waste (all households in Germany compost these items) that can be composted is brought here and digested to produce bio waste, which is either turned into fertilizer for farmers or into biogas which then powers the plant to process more organic waste.

As composting becomes more popular or mandated in certain areas of Minnesota I think we will see opportunities for operations like this one to become part of an emerging circular economy.



Left, the old military munitions bunkers Saerbeck purchased to use as platforms for the solar arrays.

Right, organic waste waiting to be processed in the organic digester.



Opportunities Arise

Saerbeck's Bioenergie Park is Bringing Opportunity to Rural Areas

Saerbeck's Bioenergie Park produces more renewable energy than the town of Saerbeck can use. This excess energy is bringing more jobs to this rural area. Enapter, a manufacturer of hydrogen electrolyzes, broke ground on a new factory today. They chose to build this factory in Saerbeck because they want to ensure their electrolyzes, which they believe will make hydrogen a more economic option for renewable energy, will be manufactured with 100% renewable energy. The factory will even be directly linked to the Bioenergie Park. This development, which will bring 300 jobs to the area, is likely going to bring more resources to Saerbeck.

Jobs are not the only opportunities stemming from the Bioenergie Park -- there are many opportunities for education for students at all levels. The Bioenergie Park has out-of-school programs for children to learn more about

the natural world, physics, chemistry, and renewable and green technologies.

University students also benefit from the Bioenergie Park. Münster University, like the University of Minnesota, has many campuses throughout North Rhine Westphalia, and one of those branches is in Saerbeck. The university students have the opportunity to learn about and do research with renewable energy, and sometimes they bring their expertise to Minnesota as international interns.

What is impressive to me about these opportunities is how central to the community the Bioenergie Park has become to Saerbeck. This one visionary idea that came to fruition has brought many benefits to the people who live there. Morris, Minnesota has learned from Saerbeck and it using the Bioenergie Park as a model, and I think many other rural communities in Minnesota could too.



Members of the delegation get a close-up look of the re-purposed munitions bunkers while wind turbines generate electricity in the background.



Delegation members touring the education facilities at the Bioenergie Park.

Reasons to go Green

Virtue isn't the only reason Germany is focused on green industries

Yesterday I mentioned that in Germany, climate change is not a political debate. It is a fact that all political parties talk about needing to address. While many Germans see the need for aggressive climate action as necessary to stop the Earth warming beyond 2 degrees Celsius, being virtuous is not the only reason so many people are embracing green industries.

Several times in our visit, our German partners have stated that one reason communities, such as Saerbeck, adopt

renewable energy is because it will actually save them money...and can even make them money.

A popular model for funding renewable energy projects is to have citizens invest in the government owned project in exchange for a return (3-5% in Saerbeck) from the sale of the excess power to the grid. This could be an attractive model for Minnesotans as more communities look for ways to reinvent their energy sources.

Cultural Fun Fact

Did you know...

North Rhine-Westphalia, the state Saerbeck and Münster are in, has fourteen nature preserves, including the Rothaargebirge, Sauerland, and Siegerland forests, which combine to form Germany's single largest wooded area. Overall, the state is half pasture land and one third forest.



The Festival Town of Tecklenburg.

