

## Agenda

**Stadtwerk Münster:** Municipal energy strategies and assets and tour of power plant.

**York: Barracks** developing a sustainable community, net zero new construction strategy, redevelopment and conversion strategies for large non-residential buildings

### Sustainability & Resiliency

**Recommendations:** Lauren Jensen, Sustainability Coordinator for the City of Rochester



Trees on the grounds of the York Barracks, the site of a future sustainable community in Münster. Green spaces will be a defining feature of the development.

## Green All Around

Münster is green in more than one sense of the word



Trees line the bike highway and many other streets in Münster.

Every day the delegation has been in Münster I have been struck by the realization that most of the time I do not feel as though I am in a city of over 300,000 people. There are a couple reasons for this, such as the lack of skyscrapers, but the main reason is the trees. Outside of the city center, almost every street in Münster is lined with beautiful old trees that provide shade and an ambiance of peace.

Vegetation is part of design in Münster and other cities in Germany. Parks, green spaces, and preserving old growth trees is prioritized in development plans. For example, there is a new rule in Münster that every flat roof must be a green roof, meaning it has dirt and on it that allows vegetation, such as grasses and flowers and the development plans for the communities at the York and Oxford barracks (former housing for the British military) are intentional about leaving as many of the beautiful old trees as possible because

they are beneficial for physical health, mental, health, and the environment and are aesthetically pleasing. These are facts, which research has proven and supported, but it does not take an expert to realize this. Many delegation members have commented about how pleasing it is to walk, bike, or ride down any street in Münster because of the trees.

Americans know that our lack of trees and other vegetation in cities is an issue that needs to be addressed, and I think Minnesota could be a leader in bringing more vegetation to our cities. One day, all our neighborhoods and business districts could feel as pleasant and inviting as the streets of Münster.



Left, electric cars charging at stations in the York Barracks.

Right, Delegation members tour the York Barracks. The buildings will be reposed into housing and kindergartens (ages 1-6) rather than demolished.



## York and Oxford in Münster

Green, sustainable communities emerging from former British military barracks

Münster is undertaking an imaginative project: turning the site of former British military barracks into a sustainable community. These barracks, which were built in 1940 and used until 2014, will be refurbished and converted into housing for singles, couples, and young families rather than being torn down. As many trees as possible will be left and the plans centralize ‘garden living’. There will also be several kindergartens within the community (for children ages 1-6), one school, businesses, and access to public transportation. The goal of the project is to provide affordable but quality housing in a sustainable community.

There are three things that stand out to me about this project, and I think they are things we should do in Minnesota.

First, the commitment to incorporating

and preserving green spaces. I have already mentioned the trees – in addition to the commitment to leave them the building plans for the new construction include green roofs and green walls to help with cooling. This means letting vines grow on the structures and designing flat roofs where vegetation can grow.

Second, not all the construction will be new. The existing barracks are in good shape and are aesthetically pleasing, so rather than waste the materials and building new units, many of the apartments in the community will be in the refurbished and modernized barracks. In the US we have the tendency to tear down and rebuild, which can be wasteful, but Münster is showing that having something nice doesn’t necessitate tearing down the old.

Third, the building codes are more intense, especially when it comes to insulation. The walls and insulation layer of new construction and renovated buildings in Münster are MUCH thicker than the codes in Minnesota specify. This seems logical for us to do because it keeps the heat or cool in, which makes the buildings more efficient and saves money.

Personally, I think I would like living in a community like this one. Sustainability, green space, and energy efficient housing. What else could you ask for?



Delegation members listen to our guide at the Stadtwerk power plant.

## The Impact of Habits

How do we help people understand the impact of their everyday decisions?

A point of conversation today was the impact of our daily habits and the lifestyle we are used to, particularly our energy use. We are an increasingly digital society, which requires a lot of electricity. This is a social challenge. Precipitating changes in habits is not an easy or fast process, but it is a question both Germany and Minnesota are asking when it comes to electricity use and energy conservation.

When we visited Münster’s power plant I was struck by the effort that is necessary to sustain our energy use habits. In addition to the main power generation system there are multiple redundant systems for emergencies or for periods in

the summer and winter when energy demands may be even higher than usual. The maintenance is also intensive. We happened to be there when a scheduled, routing rebuilding of one of the gas turbines was being rebuilt: a highly technical and labor-intensive operation.

Münster has a timeline in place for retiring this gas plant in favor of renewable options, but I think as many people as possible should be able to see how their electricity is generated. If more people realized how much effort is behind bringing light to their homes with a simple flip of a switch it might help precipitate changes in energy consumption.

### Cultural Fun Fact

Did you know...

Kiepenkerl were traveling traders They brought food from the country farms to the cities and then returned to the rural areas with salt, other goods, and news. The name ‘kiepenkerl’ comes from the basket they carried the goods in – kiepe – and a word for person – kerl.

There is a well know restaurant called the Kiepenkerl in Münster with a sculpture of its namesake outside it. This was the site of a terror attack on 7 April 2018, when a man drove a vehicle into the outdoor area of the restaurant. Four people were killed and about 20 others were injured.



The statue of a kiepenkerl outside the Kiepenkerl restaurant.