PERSONAL INTRODUCTION

👤 **Daniel Orel**

Head of:
Business Development
Sales (Residential Customers)
Energy Procurement

📍 **With Stadtwerke Neumarkt since 2018**
🔌 Focused on innovation, customer solutions, and sustainable energy strategies
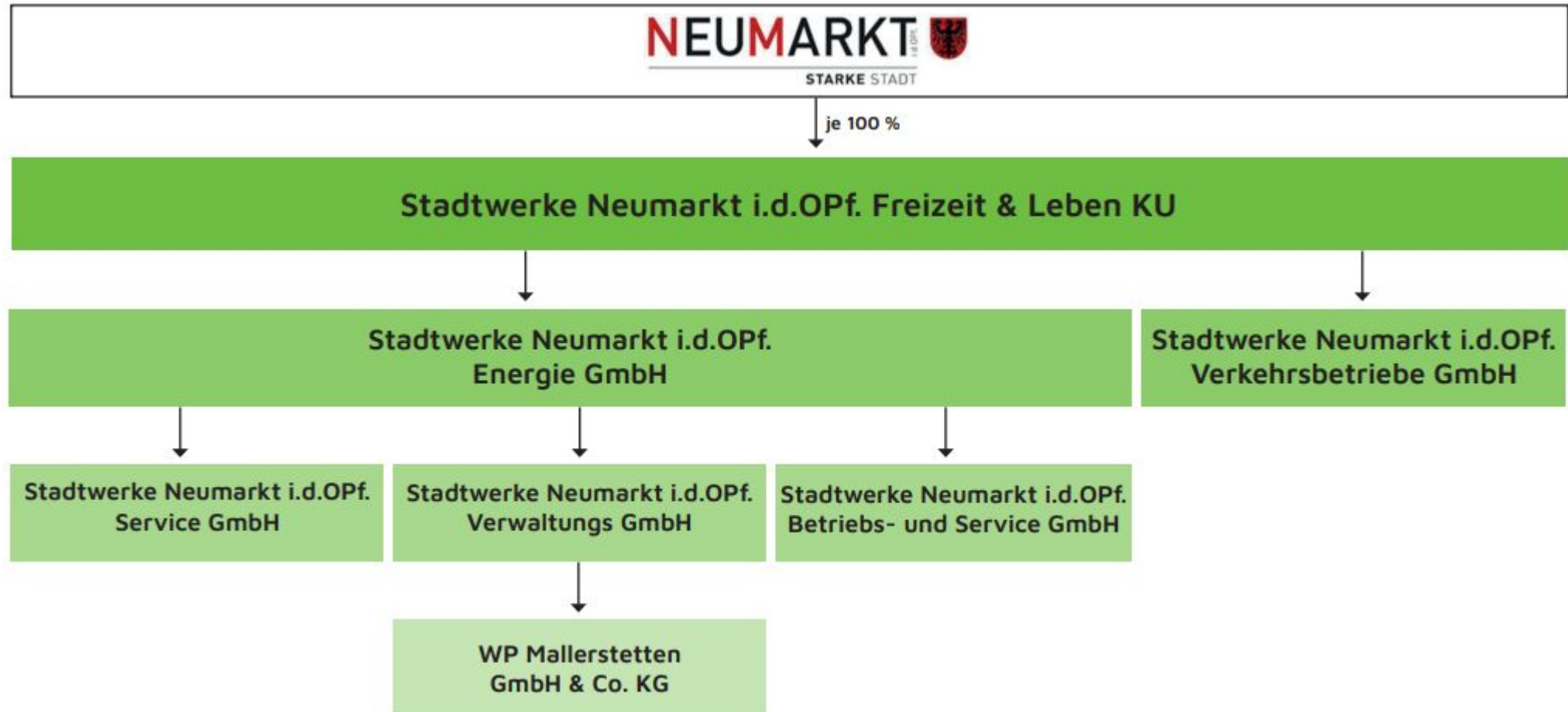
🎓 **Academic background:**
Bachelor's degree - **Technische Hochschule Nürnberg (OHM)**
Master's degree - **Hochschule für angewandtes Management (HAM)** in Ismaning

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TOPICS

1. WHO WE ARE

2. BUSINESS AREAS

3. FROM TRADTITIONAL UTILITY TO MODERN ENERGY PROVIDER – FUTURE?

4. THE CHALLENGE

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WHO WE ARE

BUSINESS AREAS / GRIDS / INFRASTRUCTURE

🔌 We manage the **electricity grid**

🔥 the **natural gas network**

🌡️ and the **district heating systems** – all operated with a strong focus on reliability and efficiency

💧 We also supply and manage the **drinking water infrastructure**, ensuring top quality and secure supply for households and businesses

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BUSINESS AREAS / GRIDS / INFRASTRUCTURE

🖥️ Our **data center** supports digital operations and ensures secure IT services for internal and external use.

🌐 We offer a **fiber-optic telecommunications network -** a key step toward a smart, connected city.

🚗 We operate **public EV charging infrastructure**, helping to drive the transition to e-mobility.

Each of these segments is part of our integrated strategy to build a sustainable, resilient and future-ready city infrastructure.

BUSINESS AREAS / ENERGY GENERATION / RENEWABLES

🌬️ **Wind turbines**

We are involved in regional wind energy projects and support their integration into the local grid.

☀️ **Photovoltaics**

We operate and support solar installations on buildings, private homes, and commercial rooftops — making the most of available surfaces for clean electricity.

♻️ **CHP plants (combined heat and power)**

We use various fuels – including **natural gas**, **biogas**, **wood pellets**, and even **power-to-heat** – to produce heat and electricity simultaneously, maximizing efficiency.

💧 A small amount of **Hydropower**

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BUSINESS AREAS / ENERGY AND SERVICES

⚡ **Electricity**

🔥 **Natural gas**

☀️ **PV und heat pumps (HP)**

🏘️🏘️ **Energy sharing**
🏘️🏘️ **Energy community models**

🚗 **E-Mobility**

🌡️ **Heat (contracting)**

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BUSINESS AREAS / MOBILITY

🚌 **City bus / Public transport**

🚗 **E-Carsharing**

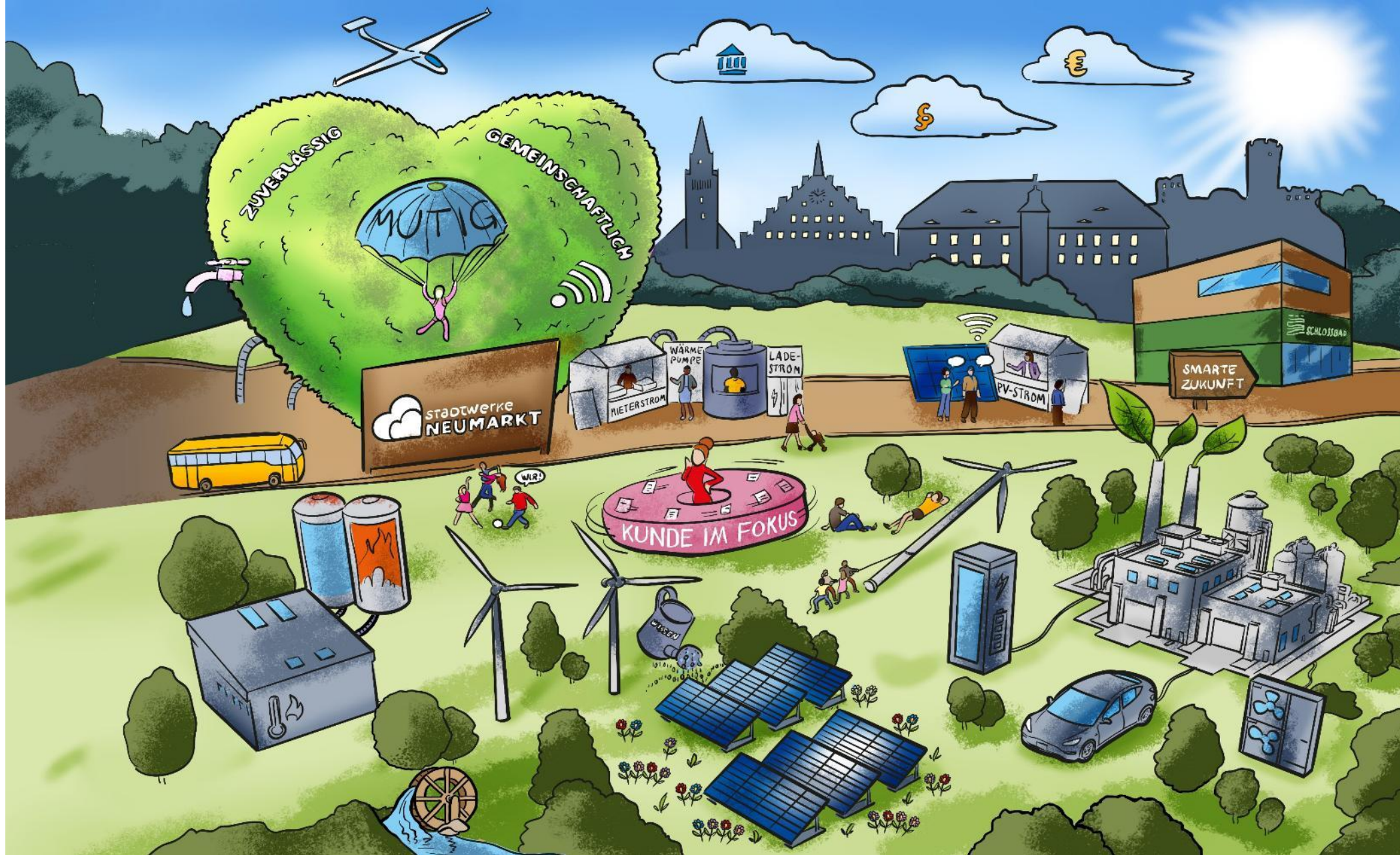🅿️ **Parking management & garages**

🔌 **E-Mobility**

BUSINESS AREAS / FREIZEIT UND LEBEN

🏊 **Schlossbad (All-season swimming facility)**
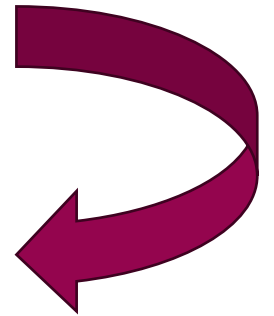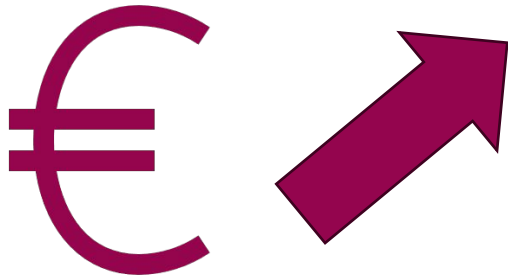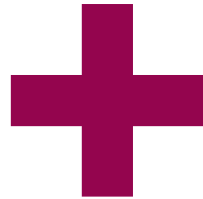⛱️ **Sauna area, indoor and outdoor pool**

⛸️ **Mobile ice skating rink (seasonal)**

All our products, services, and values – together they form the engine of the region. Without them, Neumarkt wouldn't run.

FROM TRADITIONAL UTILITY TO MODERN ENERGY PROVIDER

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THE CHALLENGE

NEXT STOP: THE FUTURE – PUBLIC TRANSPORT IN NM

HACKATHON CHALLENGE: SMARTER PUBLIC TRANSPORT / BUS FOR NM

🚌Public transport in Neumarkt is facing increasing demands:
climate action, **demographic change**, and the need for **greater efficiency**.

🎯 **Your mission:**
Identify weak points and uncover potential in the current bus network

💡 **Develop creative and data-based solutions** to improve:

- **Route design & service frequency**
- **Capacity utilization & connections**
- **User-friendliness & network reach**

🗺️ *Optional visual:*
Map of Neumarkt with an overview of the bus network + image of public transport (e.g. bus, stop, passengers)

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THE DATA PACKAGE – YOUR TOOLS

Data categories (as visual icons or structured list):

Timetable data
– City and district of Neumarkt
– Schedules, routes, stops
Rail & third-party connections
– Deutsche Bahn, regional trains, possibly FlixBus etc.
Demographic data
– Population figures, age structure, population density
Infrastructure data
– Bus stops, Park & Ride areas, bike paths, etc.
Statistical data
– Load factors (if available), downtimes, passenger numbers (depending on availability)

💡 *Note:*
You may also incorporate **external APIs or open data sources**, such as the **Deutsche Bahn API** or the **Mobility Data Platform of Bavaria**, if helpful for your solution.

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YOUR MISSION – CREATE IMPACT FOR NEUMARKT

🎯 **Objectives & evaluation criteria**

What should be achieved?

Increase capacity utilization and reduce empty runs

Make public transport more attractive for commuters, students, and senior citizens

Identify service gaps and areas for improvement

Develop creative ideas for new mobility concepts (e.g. on-demand transport, micromobility)

How will your ideas be evaluated?

✅ Data-driven reasoning

✅ Level of innovation

✅ Feasibility and scalability

✅ User focus and quality of visual presentation

💬 **"Help us shape the mobility of tomorrow – local, digital, and sustainable."**

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