

# DATA-DRIVEN CITIES: CONFERENCE FOR THE URBAN COMMON GOOD

12/02/2024 - Nairobi, Kenia



### USE CASE: ENZKREIS DISTRICT - AGENDA 2030 MONITORING (DE)

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# STRUCTURE

- Enzkreis district: Spatial organisation, cities and municipalities
- > 2030 Agenda Process: Enzkreis contribution and major milestones
- SDG Monitoring: Indicators and data
- SDG-Dashboard (Open SDG): success factors and challenges

Working session: further examples and insights





## **ENZKREIS DISTRICT**

- Suburban area, rural character, many small scale municipalities
- > 202.536 inhabitants, growing
- Total area: 574 km<sup>2</sup>
- > Population density: 353 p/km<sup>2</sup>
- > ordinary expenses (2023): 332.494.405 €
- spatial interdependencies with surrounding cities



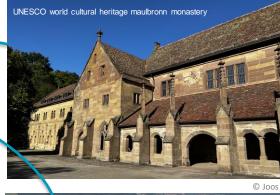




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- 28 cities and municipalities with wide range of sizes
  - o City of Mühlacker: 26.300 inh.
  - o Sternenfels: 2.800 inh.

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popular residential location







### **2030 AGENDA: ENZKREIS CONTRIBUTION** Major Milestones

Resolution of district council to contribute to the United Nations 2030 Agenda	07/2017
Implementation of 17 SDGs into mission statement for council and administration	12/2018
Participation of civil society to name specific measures via a digital platform	05/2020
<ul> <li>Resolution of sustainability strategy and SDG-Monitoring via indicators</li> <li>+ identification of key topics for district development, e.g. regional production, health care, climate change mitigation, education, inclusion, mobility (example)</li> </ul>	04/2022
Voluntary local reports (every two years), and SDG-Dashboard	04/2023

Collaborations (private sector, local governments, civil society) for a sustainable development in line with SDGs; measurable and governable via 85 indicators







Status indicators of sustainable development in the Enzkreis district



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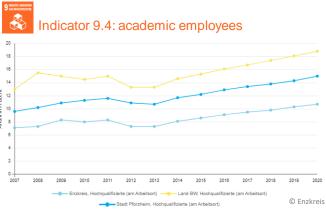




### **SDG MONITORING: Indicators and Data**

### publicly shared online





- > Enzkreis district SDG-Dashboard <a href="https://agenda2030.enzkreis.de">https://agenda2030.enzkreis.de</a>
- 85 indicators in all sectors, e.g. infrastructure (broadband, mobility, energy, water), private sector, land use, GHG-Emissions, health, education, housing, etc. in line with the SDGs
- shared data (mostly standardized, quantitative) in time series from different platforms<sup>1</sup> (recommendation from research group<sup>2</sup>), also proprietary data (own surveys) and (qualitative) explanation of Indicators
- > All data manually collected, analised and published with OpenSDG: <u>https://open-sdg.org</u> (Open Source)
- > Comparison with other political levels: Federal State of Baden-Württemberg; cities/municipalities in future
- Collaboration with different stakeholders to promote development (based on evidence according to data), e.g. district council, local governments, private sector, civil society



<sup>&</sup>lt;sup>1</sup> Federal statistical Office; Federal Institute for Research on Building, Urban Affairs and Spatial Development (INKAR)

<sup>&</sup>lt;sup>2</sup> German Institute of Urban Affairs, the Federal Institute for Research on Building, Urban Affairs and Spatial Development, German municipal umbrella organizations, Council of European Municipalities and Regions (German section), Bertelsmann Foundation



# ENZKREIS SDG-DASHBOARD (OPEN SDG<sup>1</sup>): success factors

- > Political support necessary: 2030 Agenda contribution and SDG-Monitoring are voluntary
- > Low purchase costs: Open source, free-to-reuse platform for publishing data related to SDGs
- Project based funding from federal ministry for economic cooperation and development, cooperation with Berlin university of applied sciences (urban planning and smart cities)
- > Low data volume: .csv-files, text, few pictures, easy coding (for professionals)
- > Possibilities for own design: (Corporate Identity), own structure and graphs, flexibility
- increasing numbers of use cases: possible collaboration between states, cities/districts, use cases, e.g.: Ghana, DR Congo, Rwanda, Germany, US, UK Los Angeles, Barcelona, Enzkreis

x

x

x

x

#### Challenges/lesson's learnt

- > personnel effort (and costs) in maintanance: rather high
- > Data collection: no automated interfaces, manual insertion of data necessary
- > Internal IT support recommended: (professional) set up, maintenance
- > No ready to use application: complex coding for nonprofessionals
- Clear allocation of responsibilites

2030 Agenda | Dr. Jannis Hoek

<sup>1</sup> Open SDG: collaboration between the UK Office for National Statistics (ONS), US government, nonprofit Center for Open Data Enterprise (CODE)



# **THANK YOU FOR YOUR KIND ATTENTION!**



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Further information about the 2030 Agenda in the Enzkreis district: Enzkreis district SDG-Dashboard (in german):

https://www.enzkreis.de/agenda2030 https://agenda2030.enzkreis.de

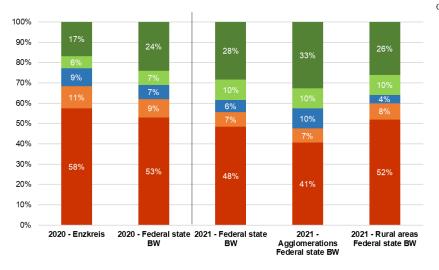




### SDG-DASHBOARD Example: Challenges in mobility



#### Indicator 11.7: Modal Split

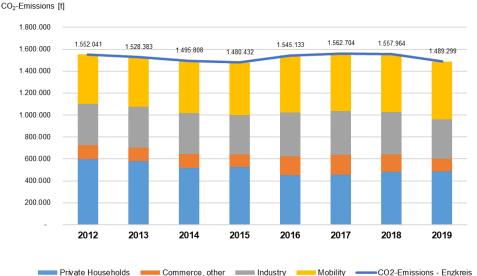


Car as driver Car as passenger Public transport Bycicle/Pedelec/E-Bike Pedestrians

very high share of car usage, even for rural area (Enzkreis categorized as agglomeration)







#### > rising GHG-Emissions in mobility sector:

- o 2012: 448.400 t GHG-Emissions
- o 2019: 527.500 t GHG-Emissions

- Analysis and interpretation of data
- > enables deeper understanding of challenges and interdependencies
- Promotes collaboration with stakeholders, e.g. district council, local governments, traffic association, private sector, civil society





### **OPEN SDG: Example for codes**

#### Staging metadata: html

#### sdg-enz-staging-data / meta / 11-7.md

👫 DrJannisHoek Update 11-7.md 🗸

Code Preview

Blame 55 lines (47 loc) · 3.42 KB

- 1 ---2 # 1. Indikator-Nummer eingeben sdg\_goal: '11' 3
- indicator\_number: 11.7 4
- graph title: global indicators.11-7-title 5
- 6 indicator\_sort\_order: 11-07-01
- 7 8 # 2. Grafikart auswaehlen:
- data\_non\_statistical: false # set to 'false' for chart/graph visualization 9
- 10 graph\_type: bar # chart types include: bar, line, binary
- graph\_stacked\_disaggregation: Verkehrsmittel ## uncomment this line for stacked bars. eplace 'Geschlecht' with the field of aggregation. 11
- 12 computation\_units: Anteil [%]
- 13 data\_start\_values: # initialize the field to be shown
- 14 - field: Region
- 15 value: Enzkreis
- field: Region 16 17
- value: Land BW field: Verkehrsmittel 18
- 19 value: PKW als Fahrer
- 20 field: Verkehrsmittel
- value: PKW als Mitfahrer 21
- 22 - field: Verkehrsmittel
- value: Fahrrad, Pedelec, E-Bike 23
- field: Verkehrsmittel 24
- 25 value: ÖPNV
- 26 - field: Verkehrsmittel
- value: Fußverkehr 27
- 28 29 graph\_limits:
- field: Einkommensklassen 30
- 31 minimum: 0
- 32 maximum: 100
- 33
- 34 # 3. Berechnung und Quelle eingeben:
- national\_geographical\_coverage: Enzkreis, Land BW 35
- 36 computation\_definitions:

#### Staging data: csv

sdg-enz-staging-data / data / indicator\_11-7.csv

beyersar Update indicator\_11-7.csv 🗸

Preview	Code Blame 11 lines (11 loc) · 360 Bytes
1	Year,Region,Verkehrsmittel,Value
2	2020,Enzkreis,PKW als Fahrer,58
3	2020,Land BW,PKW als Fahrer,53
4	2020,Enzkreis,PKW als Mitfahrer,11
5	2020,Land BW,PKW als Mitfahrer,9
6	2020,Enzkreis,"Fahrrad, Pedelec, E-Bike",6
7	2020,Land BW,"Fahrrad, Pedelec, E-Bike",7
8	2020,Enzkreis,ÖPNV,9

- 2020,Land BW,ÖPNV,7 9
- 10 2020, Enzkreis, Fußverkehr, 17
- 2020,Land BW,Fußverkehr,24 11





### **DATA-Example:**

#### Municipal partnership Enzkreis – Masasi, TZ (since 2011)



#### **Installation of solar systems** on schools, health centres and hospitals





MASASI

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- Project duration: 2021 2023; total costs: 350.000 € (35.000 € Enzkreis / 315.000 € Funding)
- > Installed systems: 34 (multiple) systems; on 6 schools, 1 hospital, 3 health centres, 1 environmental ecucation center

© Gewiese

- > Energy generation: 125 MWh (per year)
- > GHG-Emissions avoided: 28,20 t CO<sub>2</sub>eq (per year; compared to use of diesel generators)
- > Education and training for students on installation of solar systems

