

(Open) Data for AI, the City of Vienna approach

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The base is data,
OPEN data.

© Christian Stember

QUALITY OF LIFE

© C. Fürthner

Urban Challenges

Smart City Vienna is facing Global Megatrends



Urbanisation



Globalisation



Digitalisation



Climate Change



Vienna's Strength

Building blocks

City of Short Distances

Social Inclusion Policies

Social Housing

Vienna Employment Promotion

Kindergarten for free

Infrastructure Ownership

220k housing units

Public Transport System

Technical Infrastructure



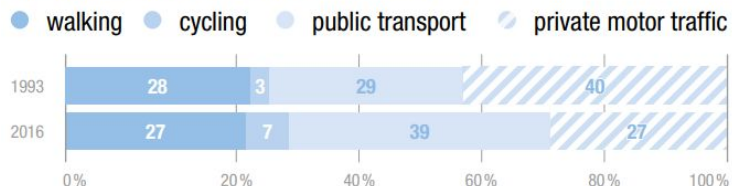
Vienna

Facts and Figures



Modal split

The modal split share of public transport has risen by ten percentage points since the year 1993.



In 2016, the number of annual passes issued for local public transport in Vienna ("Wiener Linien") was over 700,000 for the first time.

Public Transport 2016

	Passengers (million)	Network length (km)	Number of lines
Underground	440.1	78.5	5
Trams (streetcars)	305.8	222.8	29
Buses	208.3	633.8	127
Total	954.2	935.1	161



Bicycle paths and lanes:
1,346 km

Open data culture

Approach

Structure

© C. Fürthner

Open (Data) means

Open licenses

every one can use, re-use and redistribute the data

Open, machine-readable formats (i.e. csv)

No discrimination

without login or other barriers to access

Pro-active & timely

Non-personal data !!!

Why Open Data?

A close-up photograph of a Raspberry Pi 4 single-board computer resting on a sheet of white graph paper. A person's hand, holding an orange pencil, is pointing at the board. Another hand is visible on the left, holding a blue cable. A metal ruler is placed horizontally across the top of the board. The background is slightly blurred, showing more of the graph paper and the person's hands.

**Making decision
transparent and
accountable.**

**Understanding complex
issues.**

Foster innovation.

Who is using open data?



Vertrauen in folgende Institutionen im Umgang mit Daten



56%



53%



37%



35%

n= 1010 Befragte

Gründe fürs Misstrauen



78%

Angst vor
Überwachung



74%

Zuständigkeits-
Wirrwar



43%

Datenverwendung
gegen
Bürgerinteressen



35%

Mangelnde
IT-Kompetenz

open by default



Search



Front page

Timetables and routes

Tickets and fares

Information

Journey Planner >



Now

Other time

Search



A Sunday service to operate on Independence Day

On Independence Day 6 December, HSL's transport services will operate a Sunday service. President's Independence Day Reception and various procession will cause diversions to tram and bus routes in downtown Helsinki. On Tuesday 5 December, a Friday service will operate.

[Read more >](#)

Transport services



BULLETINS

**1 2 3 4 5 7 24 metro 05.12.2017 - 06.12.2017**

Public transport on Independence Day 6 December and Tuesday 5 December >

**102 102T 103 103T 04.12.2017 →**

News



04.12.2017

Ticket sales on trams to end in February: Better reliability and faster services >

29.11.2017

The old Journey Planner to be closed on 30 November 2017 >

27.11.2017

HSL and Tallink enter into cooperation >

21.11.2017

Passengers satisfied with ferry services to Suomenlinna >



BUS



WALK



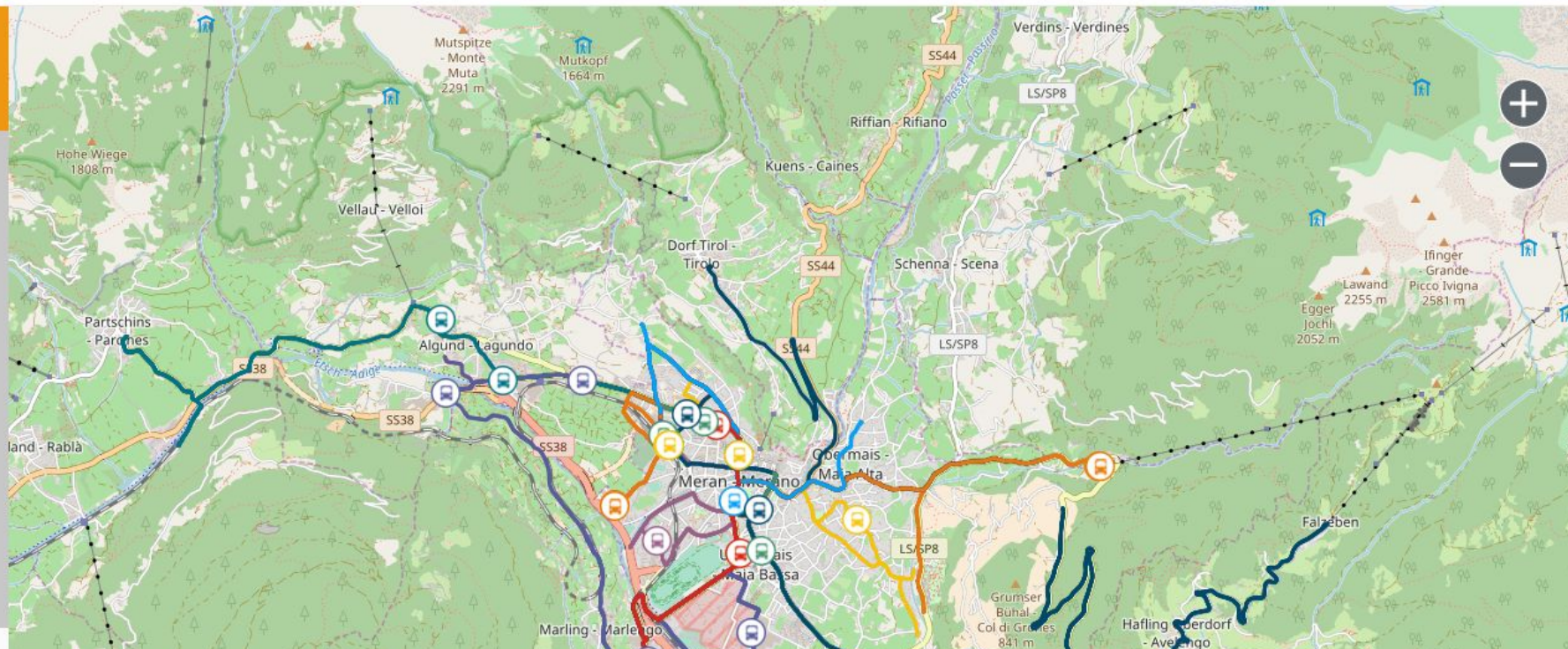
SHARE



RENT



CHARGE

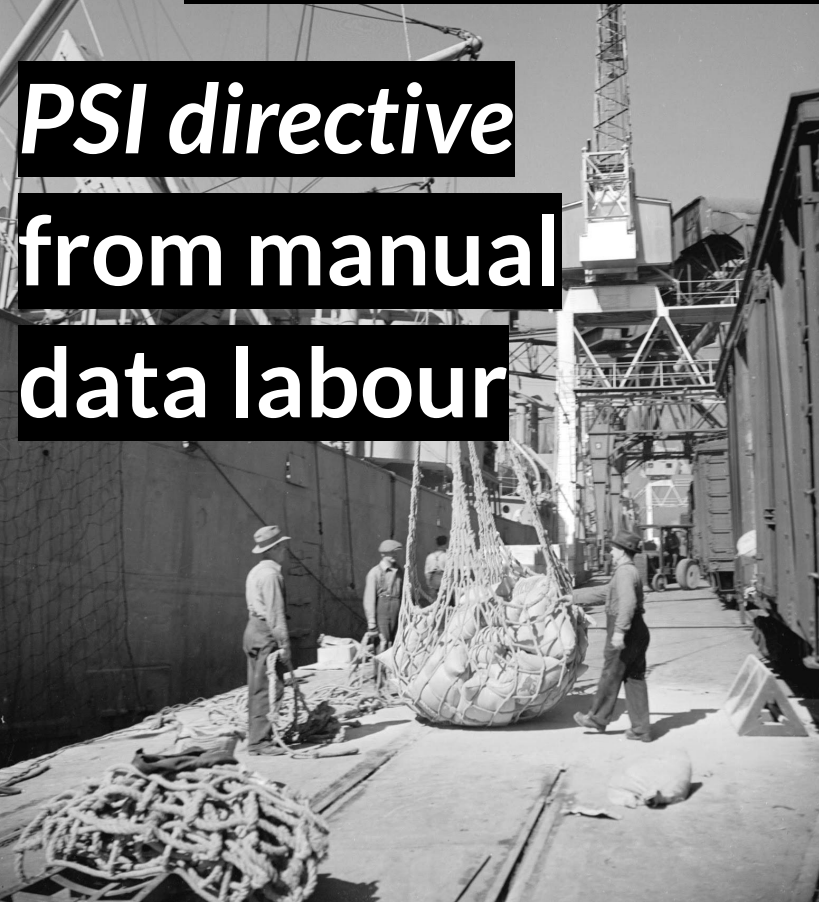


-> **bus.meran.eu** for 15.000 €



European data infrastructure

PSI directive
from manual
data labour

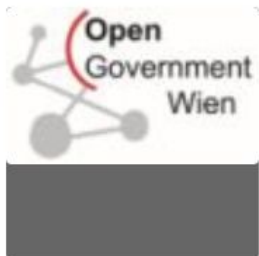


Open data directive 2019
to scalabe open data & s
for Europe



call to action





35. OPEN GOVERNMENT PLATTFORM WIEN

BLOG, EVENTS, OGD

Die Stadt Wien lädt alle Interessierten, Stakeholder aus Wirtschaft und Forschung, sowie Personen und Organisationen, die offene Daten nutzen – und die, die es noch vorhaben – zu den öffentlichen Plattformtreffen ein! Hier werden Neuigkeiten und Erfahrungen zu Open Government [Data] (OGD) ausgetauscht, Sie können Anwendungen mit den offenen Daten kennenlernen und wir entwickeln gemeinsam Ideen für den weiteren Ausbau.

27. Juni 2019, 16:00 – 17:55 im Wiener Rathaus, Steinsaal II (Zugang Feststiege II)

Wir freuen uns, dass dieses Plattformtreffen im Rahmen der **e-Government Konferenz** im Wiener Rathaus stattfindet!

Programm:

- Neuigkeiten zu OGD Wien und Open Data in Österreich
- Offene Daten der Oesterreichischen Nationalbank
- Open Data Outdoor Studying – ein Projekt der Berufsschule für Verwaltungsberufe
- Open Data und Barrierefreiheit
- basemap.at Vektor
- Vorstellung von Anwendungen: energy ahead
- Ihre Fragen und Anregungen

NEUESTE BEITRÄGE

City of Vienna adopts Open Data Charter

320.000 Euro für Digitalen Humanismus

Fundtiere in der GrätzIMap

35. Open Government Plattform Wien

4,5 Millionen Euro zusätzlich für Digitalisierungsprojekte

KATEGORIEN

Anwendungen (4)

Blog (75)

- Blockchain (3)

- DigitalCity.Wien (12)

- Digitale Agenda (2)

- Digitalisierung (11)

- DigitalMondayBlog (10)

- Mein Wien (4)

- OGD (37)

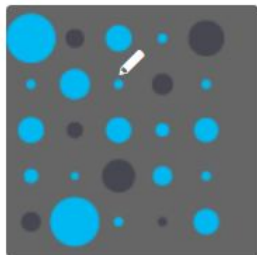
- Partizipation (5)

- Statistische Daten (1)

Events (5)

Mitmachen (4)

community of practice



CITY OF VIENNA ADOPTS OPEN DATA CHARTER

OGD, UNKATEGORISIERT

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Daten stellen den stabilen und langlebigen Kern des Informationsmanagements in der Stadt Wien dar, der digitale IQ der Stadt wird durch die Daten erhöht. Sie bilden die Grundlage für Information und Wissen und sind ein wesentlicher Produktionsfaktor für eine „intelligente, intelligente und digitale“ Stadt.

Voraussetzung dafür ist die **Data Excellence Strategie** – eine Datenstrategie, die alle notwendigen Maßnahmen zur zeitnahen Bereitstellung zuverlässiger Daten in der geforderten Qualität beinhaltet, mit der Vision, dass die Stadt Wien zu einer „Data excellent“ Data Capital City wird.

Für den Zugang zu öffentlichen Daten der Stadt Wien ist der Leitsatz „Open by Default“ unerlässlich: Die Stadtverwaltung öffnet öffentlich zugängliche Daten, Dokumente und Dienstleistungen in maschinenlesbarer Form und kostenlos.

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Events (5)

Mitmachen (4)



Declaration

01.

Universal and equal access to the Internet, and digital literacy

02.

Privacy, data protection and security

03.

Transparency, accountability, and non-discrimination of data, content and algorithms

04.

Participatory Democracy, diversity and inclusion

05.

Open and ethical digital service standards



Go to top

Declaration of Cities Coalition for Digital Rights

We, the undersigned cities, formally come together to form the Cities Coalition for Digital Rights, to protect and uphold human rights on the internet at the local and global level.

The **internet** has become inseparable from our daily lives. Yet, every day, there are new cases of digital rights abuse, misuse and misinformation and concentration of power around the world: **freedom of expression** being censored; personal information, including our movements and communications, monitored, being shared and sold without consent; 'black box' algorithms being used to make unaccountable decisions; social media being used as a tool of harassment and hate speech; and **democratic processes** and public opinion being undermined.

As cities, the closest democratic institutions to the people, we are committed to eliminating impediments to harnessing technological opportunities that improve the lives of our constituents, and to providing trustworthy and secure digital services and infrastructures that support our communities. We strongly believe that **human rights principles such as privacy, freedom of expression, and democracy** must be incorporated by design into digital platforms starting with locally-controlled digital infrastructures and services.

As a coalition, and with the support of the United Nations Human Settlements Program ([UN-Habitat](#)), we will share best practices, learn from each other's challenges and successes, and coordinate

Manifesto for technological sovereignty and digital rights for cities

Manifesto in favor of technological sovereignty and digital rights for cities.

Metadata

Title	Manifesto for technological sovereignty and digital rights for cities
Version	0.2
Authors	Francesca Bria (Chair), Malcolm Bain (coordinator)
Contributors	Richard Stallman, Javier Ruiz, Roberto Di Cosmo, Mitchell Baker, Renata Ávila, Marleen Stikker, Paolo Vecchi, Sergio Amadeu
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Forking and contributing

VIENNA'S RESPONSE

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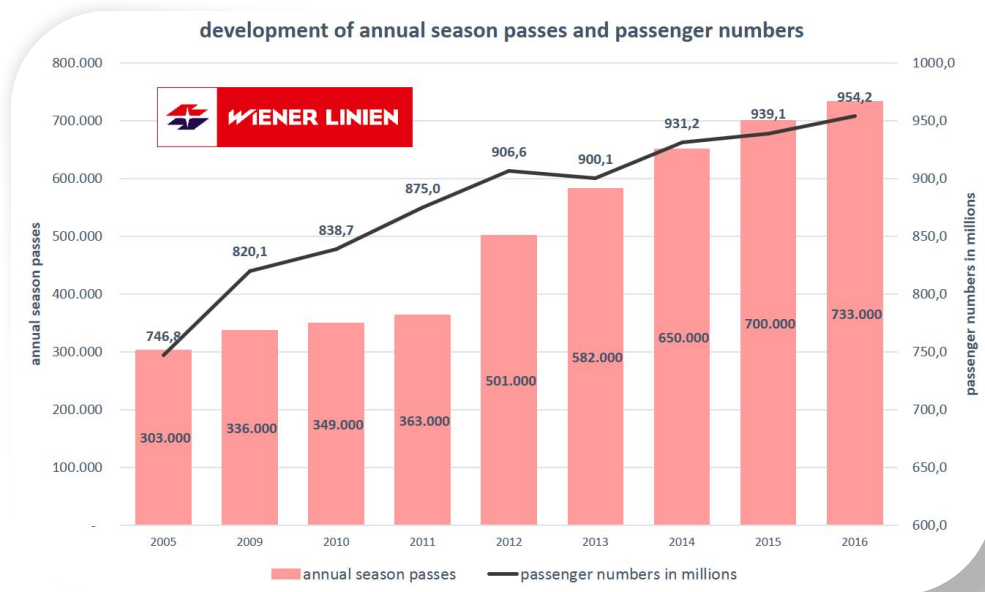
read, copy & paste, adopt

Vienna Public Transport System

Smart Mobility Backbone



1 EURO per day Annual Ticket
New autonomous subway line U5
Regeneration of Metro Brake Energy
E-Bus-Services in Downtown Area
Autonomous Driving Research



upcoming Vienna's response



Sag's Wien

Issue Management Tool

- smartphone application
- direct communication with citizens
- 30.000 reports since launch
- 97% of complaints resolved
- embedded in eGovernment services eco-system

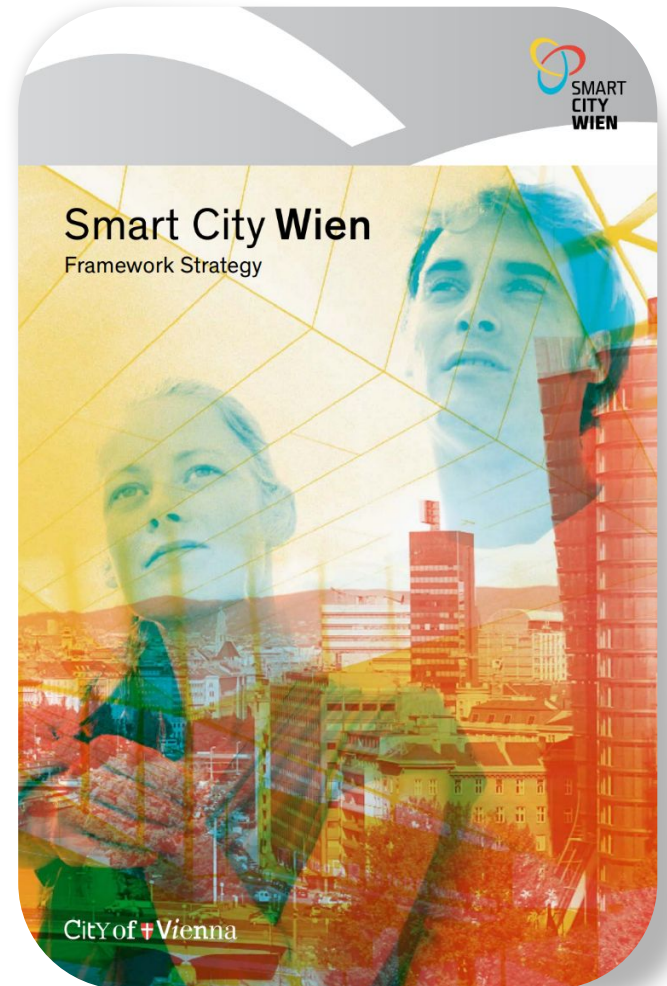
A screenshot of the Sag's Wien mobile application interface. At the top, a red header bar contains a back arrow, the text "Neue Meldung", and a red "j" logo. Below the header is a photo of a street scene in Vienna, with a red "X" icon in the top left corner of the photo area. Below the photo are two circular icons: a camera and a gallery. Underneath is a text input field labeled "Beschreibung (optional)". Below that is a section with a red location pin icon and the text "Straßenschild", followed by a red arrow pointing right. Below that is another section with the text "Standort ermittelt" and "Friedrich-Schmidt-Platz 3", followed by a red arrow pointing right. At the bottom is a red button labeled "Absenden".

Smart City Vienna

1 Key Objective

By 2050, Smart City Vienna offers the greatest possible **QUALITY OF LIFE** to all of its citizens in line with maximum **RESOURCE PRESERVATION** through **INNOVATION!**

- 35% CO₂ by 2030
- 85% CO₂ by 2050
- +85% eco-friendly mobility by 2030



Digital Agenda

Vienna's Participatory Approach keeps people involved!



- Guiding Principles
- Digital.City Wien
- Open Government Data
- Participation Platform
- E-Government Services
- IoT Strategy
- Big Data Strategy



Smart City Framework Strategy

3 Pillars



Quality of Life

Participation
Health
Environment

Resources

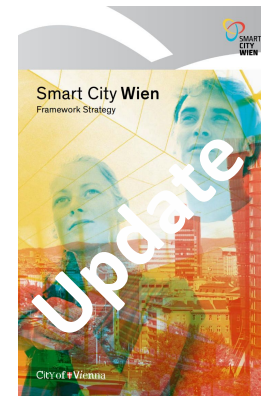
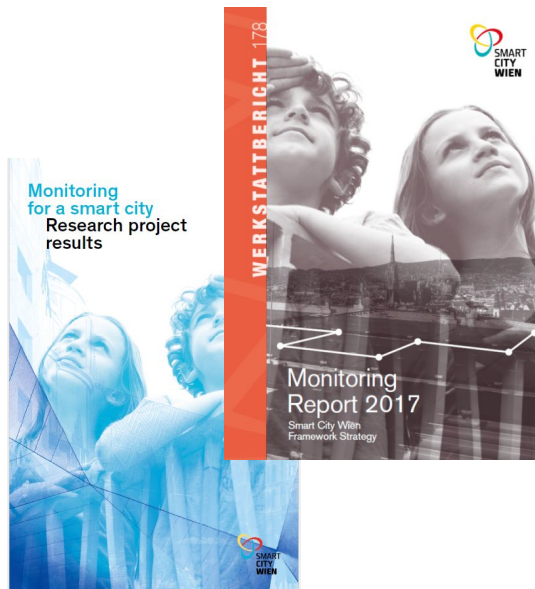
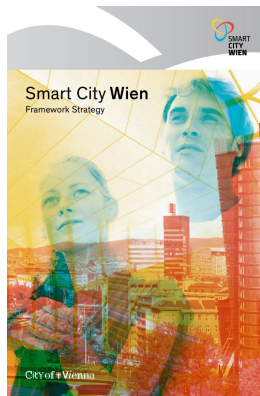
Energy
Mobility
Infrastructure
Buildings

Innovation

Education
Economy
Research, Technology, Innovation (RTI)



SCW FS Monitoring Overview



2014

2016

2017

2019



BUILT BY PEOPLE FOR PEOPLE

© Alexandra Kramus



“Take over control again.”
Political design making technology
useful to human beings.

© Christian Fürthner

A nighttime photograph of a city square, likely in Vienna, featuring historic buildings with warm lighting, modern blue armchairs, and a staircase in the foreground. The text is overlaid on the image.

THANK YOU!

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@vavoida

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smartcitywien@urbaninnovation.at

<https://smartcity.wien.gv.at/site/en>



Vienna ranks No 1 in several ratings/rankings



High Standard of Living / Quality of Life*

Cultural Center

Regional Economic Hub in CEE

Transeuropean-Transport-Network Hub

Educational Centre of DACH region

200k students



*Mercer: Quality of Living City Ranking 2011-2019



SMART CITY VIENNA

© Christian Stember



SMART CITY VIENNA

© Christian Stember

SC PROJECT SAMPLE

© Christian Stemper

Strategy Implementation

2014-2050



Reduction of Motor Traffic

Renovation of Building Stock

Decoupling Growth (Economy, Population)

Resolving of Budgetary Constraints

Management of Target Conflicts,

Interdependencies & Long-Investment-

Cycles

Call-2-Action (Stakeholders & Adopters)



asperm Die Seestadt Wiens

Sustainable Greenfield Development



- > 20.000 Inhabitants
- City of Short Distances
- 80% Eco-Friendly-Mobility
- 50% High Quality Public Space
- Neighbourhood-Management
- Participatory Planning Approach
- Urban Lab of Smart City Vienna



Co-Creation: Science, Business + People

- 1/5 future mobility labs in Austria
- Focus on **Active Mobility**

Walking, Biking, Scootering

40% Local Source Traffic

- Multiple Projects:

Walk&Feel, LARAShare,

AALmobi cargo, VR-AR-Planning,

Mobility-as-a-S



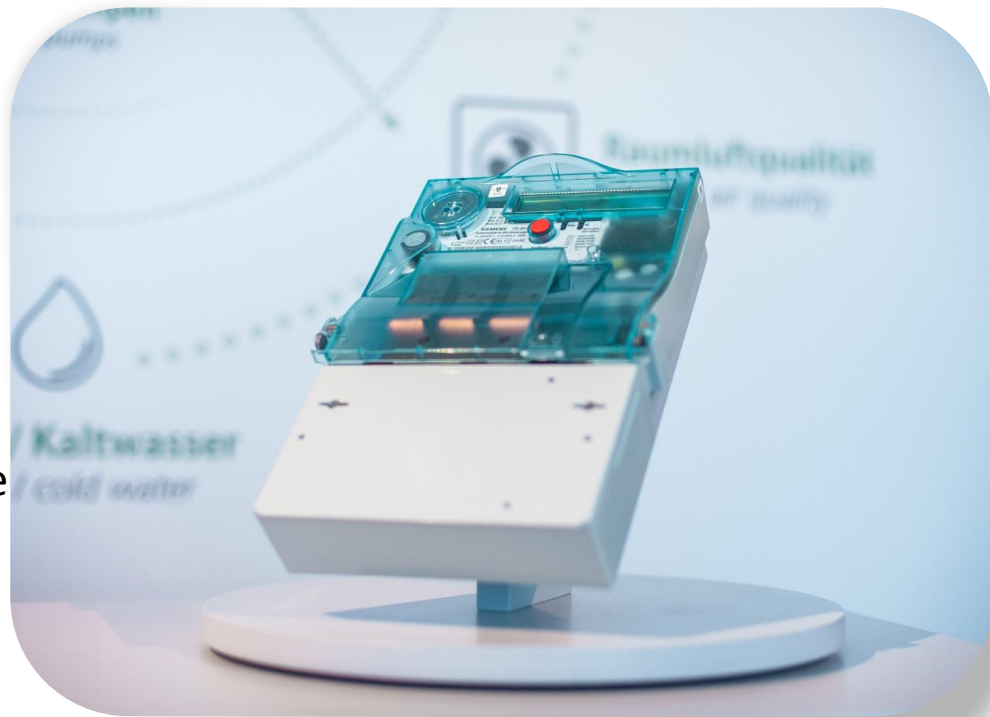
Aspern Smart City Research

Future Energy Solutions



- joint venture
- 2013-2018-2023
- citizen involvement
- energy data analytics
at household-, building- and grid-level

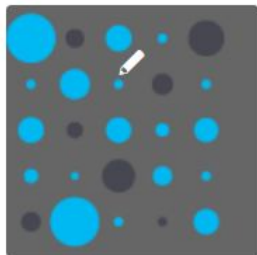
- **Smart User**
- Smart Grids
- Smart Building (efficiency, renewables)
- Smart IT





SMART CITY VIENNA

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