Pully under the microscope 2020–2024

Five yearly review of the state of digitalization and sustainable development, measured against the international standard “U4SSC” of the International Telecommunication Union, the Swiss national standard “Cercle indicateurs” and the Pully administration’s own indicators

Cercle indicateurs

VILLE DE pully

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Disclaimer
The opinions expressed in this report do not represent the views of ITU, of the Swiss Confederation, or of other participating organizations; they reflect the personal experiences and conclusions of the authors. The indicators are subject to ongoing revision with a view to making them more representative.

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Cercle indicateurs

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City of Pully

Gil Reichen
Mayor

To be meaningful, indicators need to be systematically tracked over time.

It has been five years since the first report was produced in response to an International Telecommunication Union initiative to describe the current status on a framework of indicators chosen for the city of Pully. This is a good time to produce a follow-up and note the changes that have taken place.

The indicators are grouped by subject area along the three dimensions of sustainable development, and then further subdivided into categories that are essentially those of the 2019 report, plus two new ones: “Governance” and “Sport”. The additions reflect the city’s desire to make the measurements more granular at the local level for certain elements that fall within the municipality’s remit even though they do not necessarily lend themselves to comparison with national or international benchmarks.

The resulting survey covers a total of 164 indicators. Of these, a little more than one-half are taken directly from International Telecommunication Union’s United for Smart Sustainable Cities (U4SSC) initiative, and the rest are equally distributed between indicators defined at the national level by the initiative of “Cercle indicateurs” and those that were developed locally, for Pully.

As a result, what we have in hand today is an up-to-date image of the current state of our city. The Administration sincerely thanks the many people who contributed to this effort.

This document provides one snapshot in a time-series that can be used periodically to compare our performance with that of other administrations; a useful and interesting exercise, of course. But we believe it must do more: the challenge we have set ourselves is to make ‘Pully under the microscope’ into a powerful management tool for local political action.

Swiss Confederation

Daniel Dubas
Delegate of the Federal Council for the 2030 Agenda

At a time when the challenges of climate change, biodiversity, urbanization and social inequalities are becoming ever more pressing, cities have a crucial role to play in implementing the 2030 Agenda for Sustainable Development. A considerable effort is needed at all levels, as we are unfortunately not on track to achieve the 17 Sustainable Development Goals of the United Nations by 2030.

With the second edition of the “Pully à la loupe 2020-2024” report, the City of Pully presents a comprehensive document that provides a solid overview of developments, challenges and opportunities in terms of sustainability. This assessment undoubtedly provides an excellent basis for the Municipality to draw up its next legislative program and implement concrete measures to improve the quality of life of its residents.

Regular data collection is based in particular on the standards of the International Telecommunication Union’s “United for Smart and Sustainable Cities” initiative and the “Cercle indicateurs” initiative of the Swiss Confederation, cantons and cities, which enables to compare the development of indicators with other public authorities. Pully’s commitment to the measurement and transparent communication of data on the state of sustainable development is exemplary in this regard.

International Telecommunication Union

Seizo Onoe
Director of the ITU Telecommunication Standardization Bureau

The U4SSC Key Performance Indicators for Smart Sustainable Cities provide a comprehensive, flexible tool designed to be adaptable to different city contexts.

Pully is one of more than 200 cities that have adopted these indicators to evaluate their progress towards the UN Sustainable Development Goals.

We are supporting data-driven decision-making.

Cities are using these KPIs to evaluate where they are doing well and where they need to improve, helping city leaders to set the right priorities.

I applaud Pully for its commitment to evidence-based development decisions and I thank Pully for sharing its experience with the global International Telecommunication Union community.

These indicators continue to evolve. We are refining and expanding them based on cities’ experiences with their implementation.

This project is supported by United for Smart Sustainable Cities (U4SSC), an initiative driven by ITU together with another 18 UN partners.

We welcome you to join us.

INTRODUCTION

Context

Representing the city
A city is a living space organized to meet its inhabitants' economic, environmental and socio-cultural needs. It involves many domains: transport, waste management, security, social cohesiveness and more. The city is a complex system structured around a variety of concerns, some requiring trade offs. And the city is caught up in the major challenges of our world today, such as digitalization and climate change.

These concerns call for responses, action and policies that are coordinated, complementary and harmonized as closely as possible with the needs of the inhabitants. For this, the realities of life in the city need to be captured in a schematic model, with indicators to measure different aspects and provide an objective assessment of conditions at any given time.

To this end the municipality has put together the reports we call "Pully under the microscope".

"Pully under the microscope 2015-2019"
The first edition of "Pully under the microscope", published in 2019, is based on a global initiative of the International Telecommunication Union (ITU), called United for Smart Sustainable Cities (U4SSC). ITU, a specialized agency of the United Nations, reached out to the city of Pully with an invitation to be one of the pilot cities for testing a new methodology focused on digitalization and sustainable development.

The Sustainable Development Goals of the United Nations

The 17 Sustainable Development Goals were adopted in 2015 by all Member States of the United Nations under the Agenda 2030 framework. They have the objectives of protecting the planet, promoting prosperity and peace for everyone, and ending poverty. The goals are applied in a free and differentiated manner by the various players involved, which includes partner States and cities. U4SSC proposes a set of indicators for SDG 11, "Sustainable cities and communities".

The city of Pully receives United for Smart Sustainable Cities certification during the fourth Global Standards Symposium in Geneva on 28 February 2022. On the right, Chaesub Lee, Director of the Telecommunication Standardization Bureau of ITU; on the left, Gil Reichen, mayor of Pully.

"Pully under the microscope 2020-2024"
The city decided that an update would be issued every five years, and that new indicators would be added to capture areas of concern to cities at the national and at the local level. Thus, the current edition, "Pully under the microscope 2020-2024", includes two new sets of indicators: the first is from the Switzerland-wide Cercle indicateurs initiative and the second was developed locally by the municipal administration of the city of Pully.

The three sets of complementary indicators provide a representation of the city that:
- Allows comparison with other cities around the world (thanks to U4SSC);
- Allows comparison with other cities in Switzerland (thanks to the Cercle indicateurs initiative);
- Reflects local realities that are not amenable to comparison with those of other cities.

By taking the widest possible perspective, from global to local, "Pully under the microscope 2020-2024" is able to offer a truly exhaustive perspective on all of the city's activities.

Procedure
As a first step, Pully officially joined the Swiss initiative *W*. Next, some 30 indicators were identified and mapped by the city's different services and Departments. Finally, the vast majority of indicators were measured with 2021 as the reference year, 17 indicators have a different reference date, and 9 of them could not be filled in.

Objectives
"Pully under the microscope 2020-2024" has the following objectives:

- Incorporate the periodic report within the different political and administrative bodies of the municipality as a **management tool**;
- Provide **snapshots of the state of the city** at a given moment, T, based on standardized and recognized indicator sets;
- Make it possible to **evaluate Pully's performance** in a variety of domains;
- Produce an **operational document** that reflects the reality of the city and can be used by the different players;
- Give a **global and transverse overview** of the city;
- Produce a document for the municipality that describes the current status of the city and can be used as an input in **establishing the next municipal programme.**

Pully's 2021-2026 legislative program

Stocktaking on digitalization and sustainable development | PULLY UNDER THE MICROSCOPE

Methodology

"Pully under the microscope 2020-2024" describes the city with reference to a set of criteria: 164 key performance indicators (KPIs).

The indicators are positioned along the three dimensions of sustainable development: the environment, society/culture, and the economy. These dimensions are further subdivided into the following categories, based on the U4SCC methodology:

ENVIRONMENT

- Air quality
- Energy
- Public spaces and nature
- Environmental quality
- Waste
- Water and sanitation

SOCIETY & CULTURE

- Culture
- Sport
- Education
- Food security
- Health
- Housing
- Safety
- Social inclusion

ECONOMY

- Buildings
- Drainage
- Electricity supply
- Employment
- Governance
- ICT Infrastructure

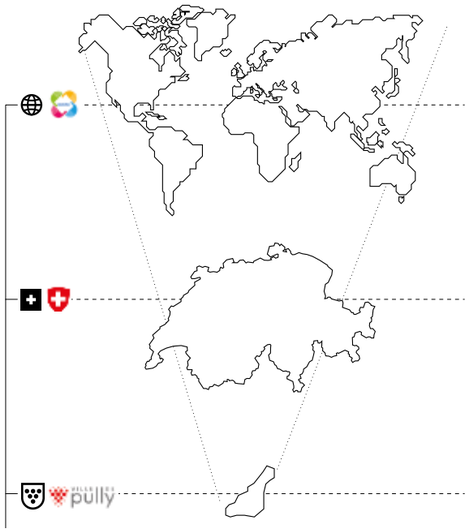
- Innovation
- Public Sector
- Transport
- Urban Planning
- Waste
- Water and sanitation

These are the same categories as those used in "Pully under the microscope 2019", with the addition of two new categories, governance and sport.

The choice and format of the indicators were decided in accordance with the following five principles:

- **Exhaustivity:** the indicators attempt to cover all aspects of a smart and sustainable city.
- **Availability:** the data must be easy to collect.
- **Simplicity:** the indicators must be simple to understand.
- **Relevance:** the indicators must be in phase with the issues of the moment for city management.
- **Transparency:** each indicator is chosen in a transparent manner, and explicitly defined in a methodological document.

The indicators
The 164 indicators that make up "Pully under the microscope 2020-2024" are drawn from the following three sets:



- U4SSC indicators

The U4SSC initiative, created by ITU and 15 other agencies of the United Nations, uses 106 indicators, two-thirds of which relate to sustainable development and one third to digitalization. This indicator set provides a basis for international comparison between cities.

More information:

- Cercle indicateurs

The Swiss national initiative Cercle indicateurs is aimed at Swiss cities and cantons. Its set of 34 indicators serves to compare Swiss cities.

More information:

- Local indicators

This indicator set was developed within our municipality, and includes 33 indicators distinct from those of the two other sets. These are specific to Pully and do not lend themselves to a comparison with other cities.

The U4SSC and Cercle indicateurs initiatives initiatives propose nine similar indicators. As a result harmonization work was carried out to avoid repetition, bringing the total number of indicators to 164, i.e. 106 U4SSC indicators + 34 Cercle indicateurs indicators + 33 local indicators - 9 similar indicators = 164 indicators

Level of calculation
Wherever possible, indicator measurement is done at the level of the city of Pully. For some indicators data may be available only at the level of the canton, or at the national level. This affects how representative the results are, and thus the precision, which is indicated by one of three logos:

- Measured at the national level (Switzerland) Low-quality resolution
- Measured at the regional level (canton of Vaud) Medium-quality resolution
- Measured at the local level (Pully municipality) High-quality resolution

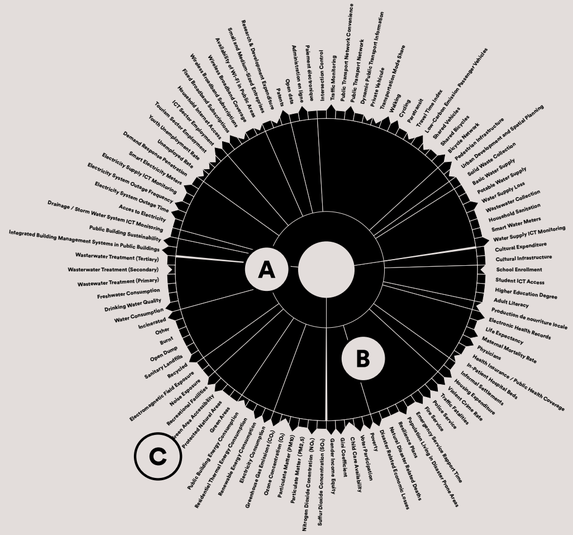
The set of indicators can provide a snapshot:
– On a particular aspect (the 164 indicators) or;
– at a particular time (in the present case, 2021).

Target values
Although the indicator sets do not specify objectives, the municipality considered it important that a target value, or at least a benchmark value, should be given for each indicator.

- A target value is available based on either the 2021-2026 municipal programme or the federal, cantonal or municipal legislation (laws, statutes and regulations).
- In the absence of a target value, a benchmark value is proposed for measuring Pully's performance against the indicator. It gives only a general indication rather than an objective to be achieved. For example, for the indicator Police service, in the absence of a target value, the Swiss average of the number of *police officers* per inhabitant has been taken, in order to look at the number of police officers operating in Pully in perspective.

Stocktaking on digitalization and sustainable development | PULLY UNDER THE MICROSCOPE

RESULTS



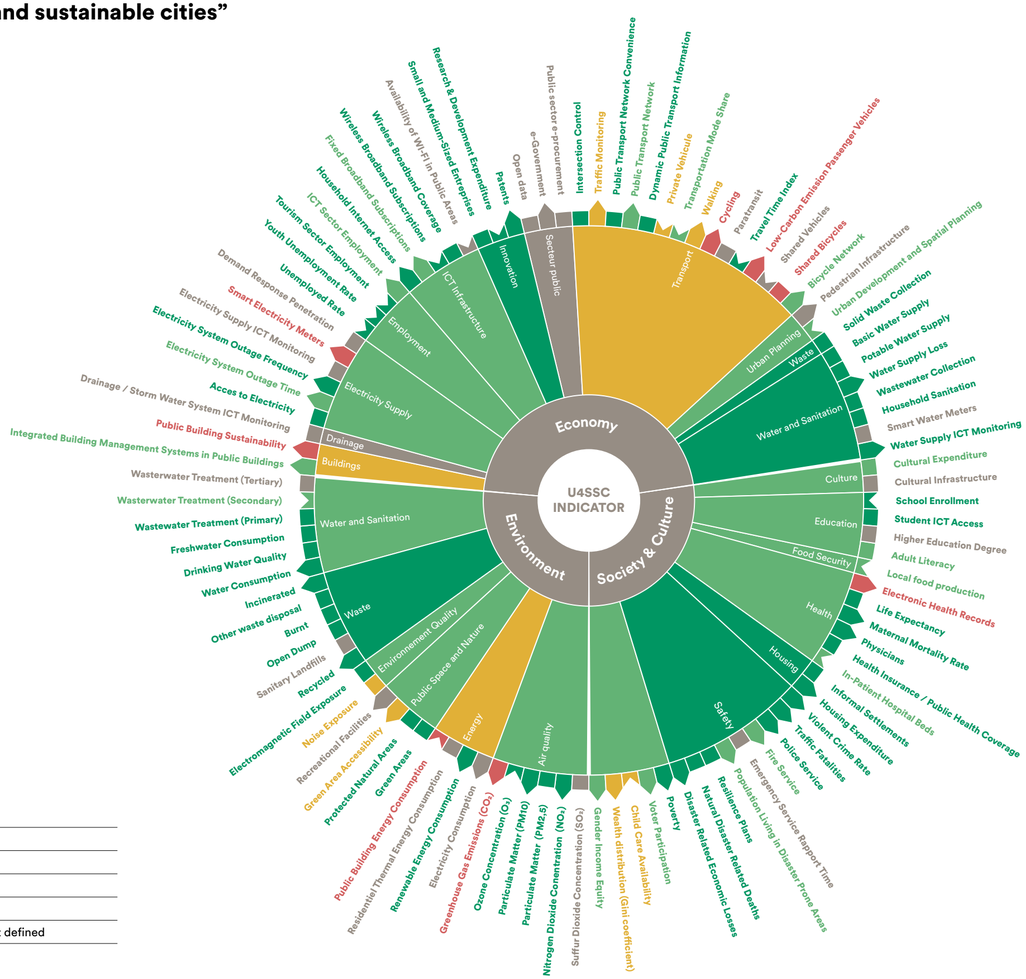
A **THE CORE**
The core categorization represents the three dimensions of sustainable development: the economy, the society and culture, and the environment.

B **THE INTERMEDIATE LEVEL**
These are the categories of indicator (e.g. quality of the environment, transport, culture, etc.)

C **THE SPOKES**
Each spoke stands for one of the indicators, and shows the degree to which the target has been met. For the U4SSC indicators, it also indicates the trend for each indicator.

GLOBAL RESULTS

Measurement and trend of "United 4 smart and sustainable cities" indicators



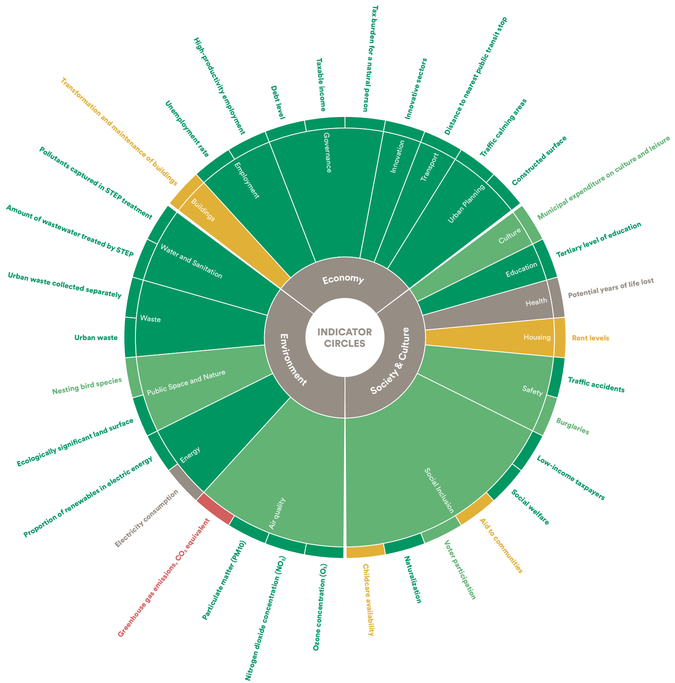
Performance against targets

●	95 to 100 %
●	66 to 95 %
●	33 to 66 %
●	Less than 33 %
●	Data not available or target not defined

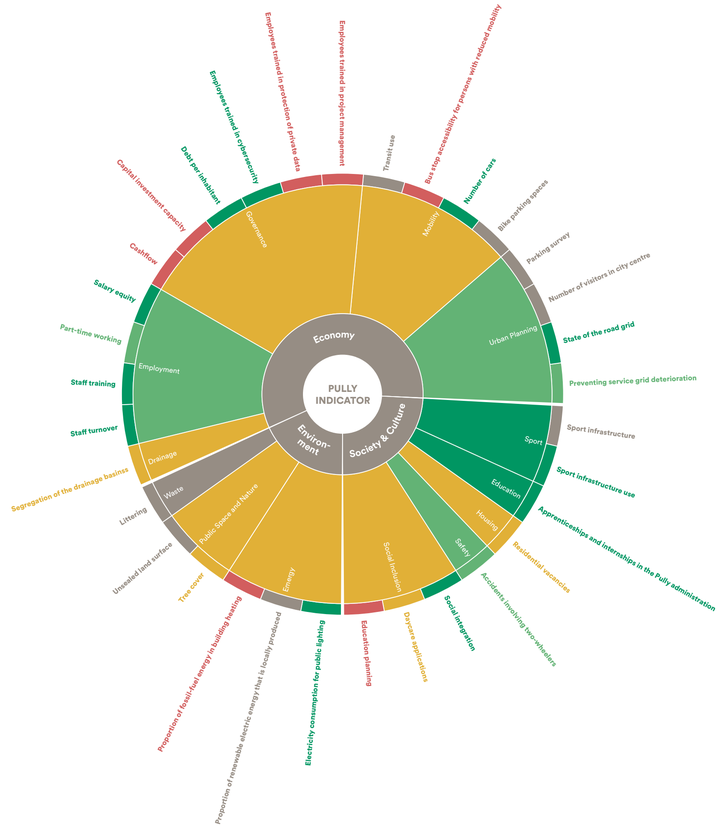
Trend for indicator

▲	Improving
■	Stable
▼	Deteriorating

Measurement of «Cercle indicateurs» indicators



Measurement of Pully administration indicators



DETAILED RESULTS

This chapter is the heart of the report: it presents the results obtained for the indicators and compares them to the target values for Pully, presenting the outcome in as clear and informative a manner as possible.

1 NOMENCLATURE
The name of the category follows the structure used in the U4SSC methodology.

2 PICTOGRAM
A pictogram illustrates the category that the indicator falls under.

3 CATEGORY EVALUATION
The overall category evaluation is determined by taking the mean of the scores for all of the indicators it includes (see 9 **Calculation of indicator score**).

4 SITUATION OVERVIEW
A summary of the situation in Pully for the indicator category in question.

5 ACTIONS OF THE MUNICIPALITY
The actions taken by the municipality for the indicator category in question, including planned, ongoing, completed or permanent measures.

6 INFOBOX
An illustrative case of a specific project in Pully relevant to the indicator.

7 INDICATOR

8 NOMENCLATURE
The name of the indicator.

9 CALCULATION OF INDICATOR SCORE
Each indicator is scored with one of the following:

surpasses target (score of at least 95.1% of target)

meets target (66% to 95% of target)

partly meets target (score is between 33% and 66% of target)

does not meet target (score is between 0 and 33% of target)

10 SCORE
The score for that indicator and the date of measurement. The 2021 scores for Pully were obtained over a population of 19 000 residents, versus 18 000 for the 2016 values in the previous report.

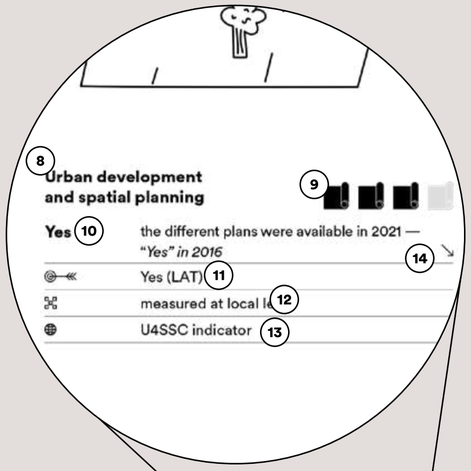
11 TARGET VALUE
- the target as defined in a law or standard or in the municipal programme
- benchmark for a comparison with statistics or estimates

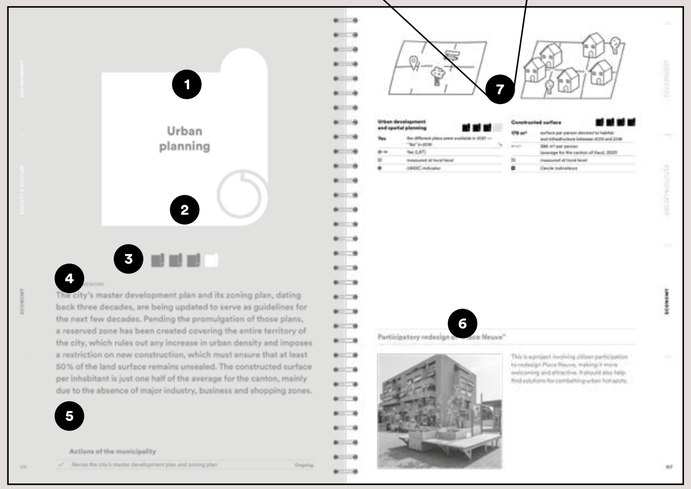
Sources are indicated in parentheses. A lexicon is provided at the end.

12 INDICATOR LEVEL
- national (Switzerland)
- regional (canton of Vaud)
- local (Pully)

13 INDICATOR SET
- U4SSC set
- Cercle indicateurs set
- Pully set

14 TREND
The trend is based on the change in the score between 2016 and 2021, without any subjective evaluation.





ENVIRONNEMENT

Air quality
22

Environmental quality
34

Energy
24

Waste
36

Public space and nature
30

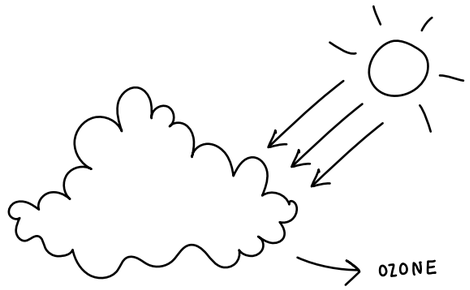
Water and sanitation
40

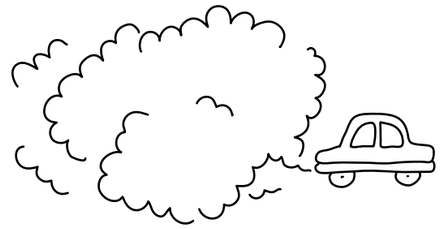
Air quality

Air quality complies to the targets. However, this is based on regional (Lausanne) or cantonal measurements, so it may not be fully representative for Pully. Significant efforts will have to be made if direct emissions of greenhouse gases (GHG) are to be reduced by nearly one half to meet the target of no more than three tonnes per person by 2030. It is important to note furthermore that taking into account indirect GHG emissions (those generated outside the country in the fabrication of products for use in Switzerland) increases the figure for 2019 from 5.7 tonnes per person to 15.2.

Actions of the municipality

✓	In 2022 the city once again was awarded the “Cités de l’énergie” label, part of a programme that indirectly contributes to improving air quality. Thus the city’s Ecowatt programme supported installing 50 photovoltaic installations, renovating 15 buildings for energy efficiency, and acquiring 950 electric bicycles. *www.pully.ch/ecowatt*	**Completed**



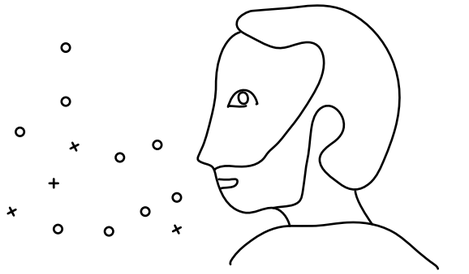


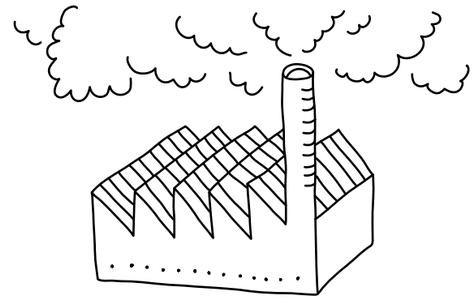
Ozone concentration (O_3)

53.4 µg/m³	in 2021 — *47.3 µg in 2016* ↗
	< 100 µg/m³ (OPair)
	Measured at regional level
	U4SSC and Cercle indicateurs indicator

Nitrogen dioxide concentration (NO_2)

20.4 µg/m³	in 2021 — *21.3 µg in 2016* ↘
	30 µg/m³ (OPair)
	Measured at regional level
	U4SSC and Cercle indicateurs indicator



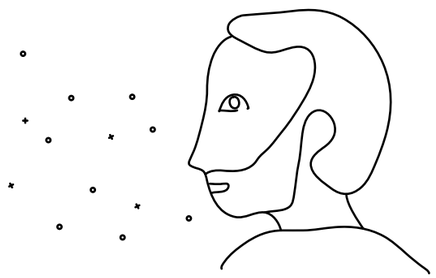


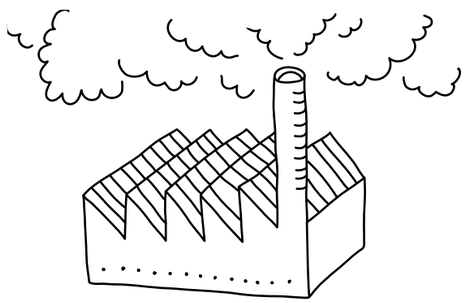
Particulate matter (PM10)

13 µg/m³	in 2021 — *15.8 µg in 2016* ↘
	20 µg/m³ (OPair)
	Measured at regional level
	U4SSC and Cercle indicateurs indicator

Direct greenhouse gas emissions (GHG)

5.2 t	GES per inhabitant per year in 2021 — *6.63 t in 2015* ↘
	3 t in 2030 GHG per inhabitant per year (CO_2 law, COP21 climate agreement)
	Measured at regional level
	U4SSC and Cercle indicateurs indicator





Particulate matter (PM2.5)

8.7 µg/m³	in 20
	10 µg/m³ (OPair)
	Measured at regional level
	U4SSC indicator

Sulphur dioxide concentration (SO_2)

—	Score not available for this indicator1
—	Target figure not available
—	Not measured
	U4SSC indicator

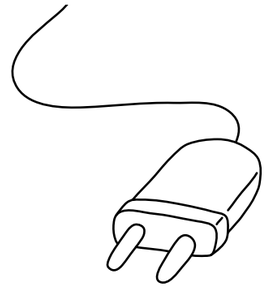
Energy

ELECTRICITY CONSUMPTION

In recent years Pully has made significant efforts to reduce the amount of energy used for public lighting. All lighting systems have been replaced with LED lamps; some lights have been removed, while others have been upgraded. The amount of electric energy consumed per inhabitant has decreased by 11% between 2016 and 2021.

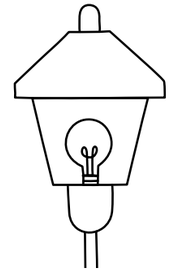
Actions of the municipality

✓	All public lighting systems upgraded to very low-energy lamps	**Completed**
✓	Replace 80% of power meters by smart meters by 2027	**Ongoing**
✓	Installation of reactive public lighting in some areas (e.g. chemin du Liaudoz, access to the “Teintureries” neighbourhood at avenue Général-Guisan 85 and chemin des Graminées)	**Ongoing**



Electricity consumption

2524 kWh	per inhabitant per year in 2021 ↘ *— 2838 kWh in 2016*
—	Target figure not available
	Measured at local level
	U4SSC and Cercle indicateurs indicator



Electricity consumption for public lighting

8.3 MWh	per km in 2021
	12.8 MWh per km (“Cités de l’énergie”)
	Measured at local level
	Local indicator

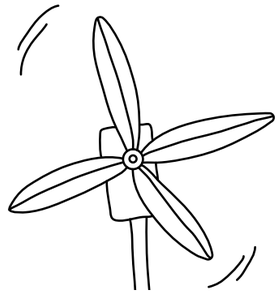
Energy

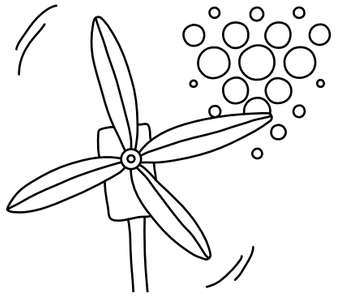
RENEWABLE ENERGY

The proportion of renewables in the electric energy distributed in Pully increased greatly between 2016 and 2021, reaching nearly 100 %. The portion of renewable energy produced locally is relatively minor. However, there is a noteworthy potential for local production of solar energy. The city's municipal programme foresees a district heating project, which will lead to a higher proportion of energy produced locally.

Actions of the municipality

✓	Study for the deployment of a district heating grid in the southern part of the city	**Ongoing**





Proportion of renewables in electric energy

98.7 %	in 2021 — *59.8 % in 2017*	↗
	100 % (Vaud Legislature Program 2022-2027)	
	Measured at local level	
	U4SSC and Cercle indicateurs indicator	

Proportion of locally produced renewables in electric energy

3.56 %	locally produced in 2021
—	Target figure not available
	Measured at local level
	Local indicator

"The transition towards carbon-neutral heating of buildings remains a big challenge. The district heating project can make an important contribution to meeting this challenge."

Marc Zolliker
City Councillor in charge of the Directorate of Technical Office and Industrial Services

Producing hydropower locally using the public water network

Pully participated in a pilot project that involves positioning a turbine in the public water network to generate electricity. The system also steps down the water pressure, extending the lifetime of piping.

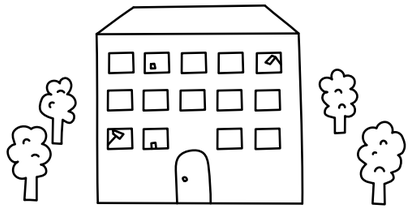
Energy

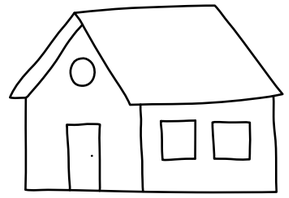
ENERGY CONSUMPTION OF BUILDINGS

Public buildings have a strong potential for energy savings, but little progress has been made. Consumption remains well above the Swiss SIA standard, which is the target value. The very high proportion of fossil fuels used to heat buildings offers significant potential for reducing the city's carbon footprint. Due to the lack of data, the heating consumption value for residential buildings is currently unavailable.

Actions of the municipality

✓	Participating in a carbon-reduction partnership across the French-speaking regions of the country	**Ongoing**
✓	Participating in the pilot project "Ma commune et moi" with Romande Energie to reduce the carbon footprint of households by offering three months of personalized consultancy	**Ongoing**



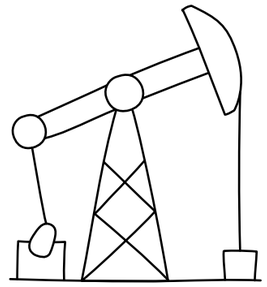


Public building energy consumption

124.9 kWh	per m²/year in 2021 — *120.4 kWh in 2015-2016* ↗
◎—«	43 kWh/m² (SIA standard 380/1)
	Measured at local level
	U4SSC indicator

Energy consumed for residential heating

—	Score not available for this indicator
—	Target figure not available
—	Not measured
	U4SSC indicator



Proportion of fossil-fuel energy in building heating

94 %	in 2020
◎—«	27 % (territorial energy planning, objective for 2035)
	Measured at local level
	Local indicator

"Building energy use is a crucial issue, and a master plan for renovation is being developed. It will give us a budget estimate and provide a basis for planning works to ensure that our buildings meet the environmental norms of today."

Lydia Masmejan
City councillor in charge of the directorate of estates, property management and sports

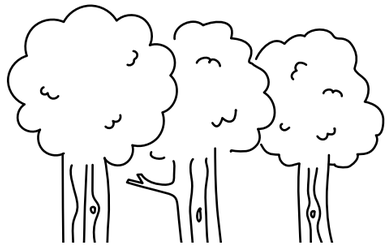
Public space and nature

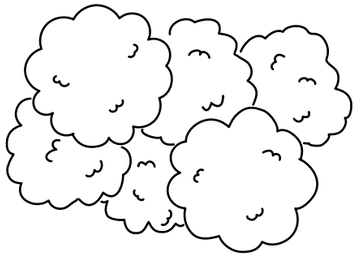
GREEN AREAS

Nesting bird species are an excellent indicator for biodiversity, as they depend on the presence of trees, water bodies and insects. Pully scores lower than the mean of the cities in the Cercle indicateurs on this point, indicating only a moderate degree of biodiversity. It is not possible to compare this with the data from 2016 directly, because the method of calculating scores for the indicators Green areas, Protected natural areas and Green area accessibility has changed. Nonetheless, it is estimated that the score for these indicators has not changed significantly between 2016 and 2021

Actions of the municipality

✓	Create a subsidy programme to give financial support to plantations aimed at an ecological improvement on the private green areas situated within the municipality	**Ongoing**
✓	Adapt park maintenance and management practice to promote biodiversity	**Permanent**



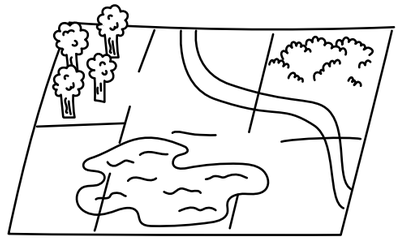


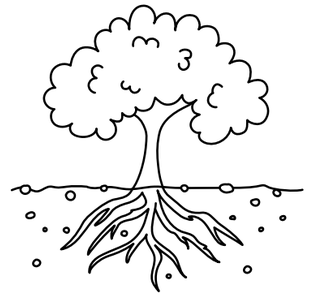
Green areas

425.6 ha	equivalent for 19 000 inhabitants of Pully in 2021
=	2 245 ha per 100 000 inhabitants (U4SSC figure)
⟵〰	45 ha for 19 000 inhabitants (OFS)
⁘	Measured at local level
⊕	U4SSC indicator

Tree cover

17 %	of urban area in 2021
⟵〰	30 % (City of Lausanne's 2030 canopy objective)
⁘	Measured at local level
⛉	Local indicator



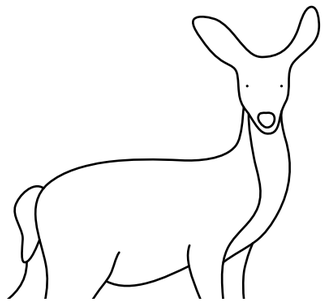


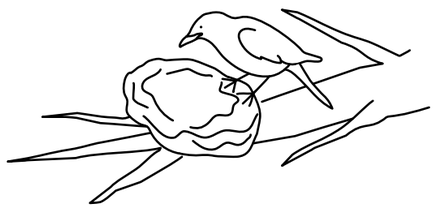
Ecologically significant land surface

17.89 %	of the city's land surface in 2021
⟵〰	12.1 % (average for cities participating in Cercle indicateurs)
⁘	Measured at local level
◘	Cercle indicateurs

Unsealed land surface

53 %	of urban zone in 2021
—	Target figure not available
⁘	Measured at local level
⛉	Local indicator





Protected natural areas

43 %	of the surface area of Pully (including forest) in 2021
◎⟵«	30 % (Convention on Biological Diversity (CBD), objective "30 by 30")
⁘	Measured at local level
⊕	U4SSC indicator

Nesting bird species

64	bird species nesting in Switzerland and found in the built-up areas of the municipality in 2021 (0 = weak diversity; 100 = high)
⟵〰	79 (average for cities participating in Cercle indicateurs)
⁘	Measured at local level
◘	Cercle indicateurs

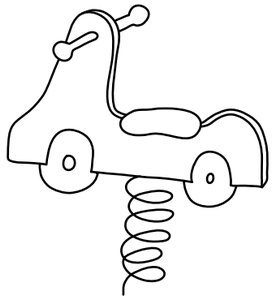
Public space and nature

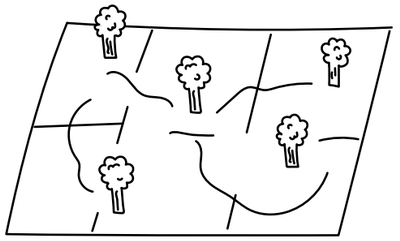
ACCESS, MAINTENANCE, BIODIVERSITY

Most of the population lives within 300 metres of a green area of 0.5 ha or more. The city of Pully has made a long-term effort to develop recreational facilities, including the creation of shaded public spaces with benches and drinking water fountains. However, these are not counted in the indicator for green area accessibility, which only covers spaces with a surface area greater than 5000 m². Another goal of the initiative is to encourage pedestrian traffic inside the city and improve mobility.

Les actions de la Municipalité

✓	Rewilding of the parking lot of the chemin de la Plage	**Completed**
✓	Transformation of the eastern entrance to the Collège de Mallieu	**Completed**
✓	Improvement and renovation of recreational land such as the playground at the Pully port	**Ongoing**
✓	Creation of shaded areas, with benches and drinking water fountains	**Ongoing**





Recreational land

1184 923 m² for 19 000 inhabitants of Pully in 2021
— 1184 822 m² in 2016 ↗

≡	6 582 346 m² per 100 000 inhabitants (U4SSC figure)
—	Target figure not available
	Measured at local level
	U4SSC indicator

Green area accessibility

64 % of inhabitants resided no more than 300 m from a green space measuring at least 0.5 ha, in 2021

⟵〰	100 % (SDG 11.7, for 2020)
	Measured at local level
	U4SSC indicator

“Considerable work is being put into improving playgrounds. We are involving the inhabitants to ensure these spaces meet the needs of the individual neighbourhoods. The idea goes beyond the simple playground : we want to provide multifunctional meeting places where people of all ages can feel at home.”

Lucas Girardet
City Councillor in charge of the Directorate of Urban Planning and the Environment

Rewilding the parking lot of the chemin de la Plage

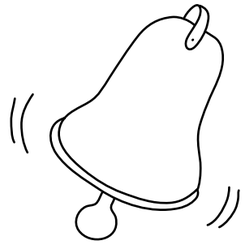
Re-planting is an important element in the urban restoration programme of Pully. It is included in the work already being done by the city to adapt to climate change: improving shading and the absorption of rainwater and by promoting pedestrian traffic with the provision of benches and drinking-water fountains. The parking lot of the chemin de la Plage was transformed by allowing natural vegetation to return to an area that had previously been sealed.

Environmental quality

The indicator for noise exposure was not recalculated for 2021, which is why the 2016 score remains unchanged. In the meantime, however, the Swiss railway operator CFF has installed noise barriers along railways as required by regulations. Pully has moved to reduce road noise with the use of low-noise road surfacing and windows. Telephone antennas in Switzerland are all in compliance with the EMF exposure thresholds. Note that authorizations for such antennas are issued by the national government, not the city.

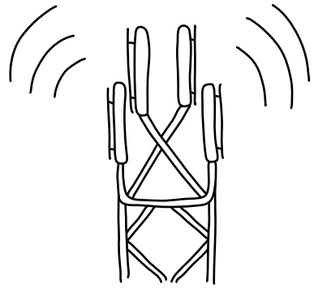
Actions of the municipality

✓	Installation of low-noise road surfacing and windows	**Permanent**



Noise exposure

37.4 %	of inhabitants were exposed to excessive noise in 2016
	0 % (OPB)
	Measured at local level
	U4SSC indicator



EMF exposure

100 %	of antennas complied with limits under the Swiss radiation law ORNI in 2021 *— 100 % in 2016* →
	100 % (ORNI)
	Measured nationally
	U4SSC indicator

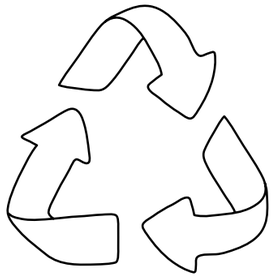
Waste

WASTE AND RECYCLING

The portion of waste that was recycled remained largely unchanged in 2019, close to the target of 60 %. Recycling appears to have reached a ceiling in recent years. Non-recycled wastes are incinerated in Lausanne by Tridel, an enterprise that uses the energy generated by incineration to produce electricity and provide urban heating. Compared to the average for cities participating in Cercle indicateurs, Pully produces slightly less urban waste, and has a higher proportion of waste collected separately.

Actions of the municipality

✓	Increase the number of containers for door-to-door organic waste collection	**Ongoing**
✓	Environmental awareness for schoolchildren	**Permanent**
✓	Checks on quality of waste sorting	**Permanent**
✓	Construction of “Ecopoint” waste sorting/collection points at the boulevard de la Forêt and chemin des Vignes	**Completed**

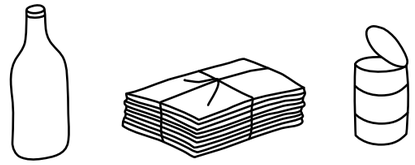


Recycled

58.7 %	of wastes were recycled in 2021 *— 58 % in 2016* ↗
	60 % (waste management plan of the canton of Vaud)
	Measured at local level
	U4SSC indicator

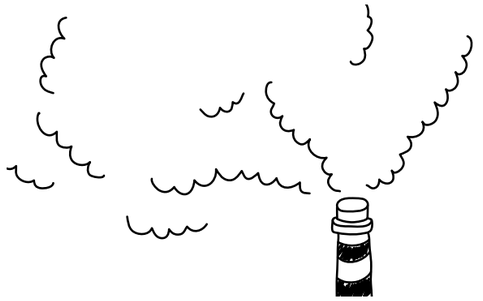
Urban waste

264.8 kg	of urban waste per person was incinerated and collected separately in 2021
	273.4 kg per inhabitant (average for cities participating in Cercle indicateurs, OFS, 2019)
	Measured at local level
	Cercle indicateurs



Urban waste collected separately

44.9 %	of used materials were collected separately, out of the total for urban waste in 2021
	38.6 % (average for cities participating in Cercle indicateurs, OFS, 2019)
	Measured at local level
	Cercle indicateurs



Incinerated

41.3 %	of waste was incinerated in 2021 *— 42 % in 2016* ↘
	40 % (waste management plan of the canton of Vaud)
	Measured at local level
	U4SSC indicator

Waste

WASTE TREATMENT

Burnt

0 % of wastes were burned in 2021 — *0 % in 2016* →

	0 % (LPE)
	Measured at local level
	U4SSC indicator

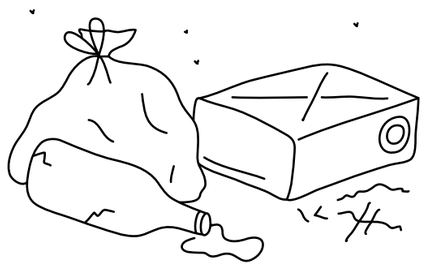
Sanitary landfills

—	Score not available for this indicator
—	Target figure not available
—	Not measured
	U4SSC indicator

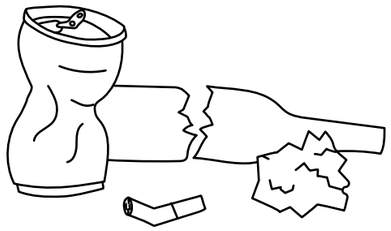
Open dump

0 % of wastes were deposited in open dumps in 2021 — *0 % in 2016* →

	0 % (OLED)
	Measured at local level
	U4SSC indicator



Littering

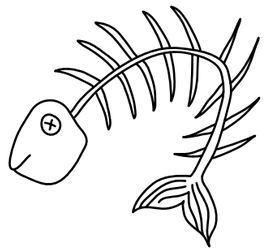


—	Score not available for this indicator
—	Target figure not available
—	Not measured
	Local indicator

Other waste disposal

0 % of wastes were disposed of in some other fashion in 2021 — *0 % in 2016* →

	0 % (OLED)
	Measured at local level
	U4SSC indicator



Burning of waste and open dumping are banned in Switzerland.

Actions of the municipality

✓	Examine the possibility of signing on to the “No-Littering” initiative	**Ongoing**

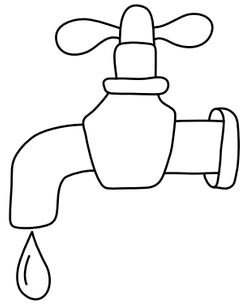
Water and sanitation

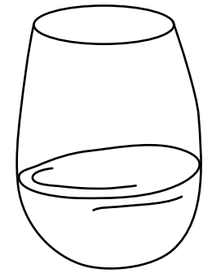
WATER

Drinking water use fell by 4 % between 2016 and 2021. Annual use is now less than 25 % of the total precipitation recorded for the territory of the city. Pully also draws on abundant drinking water from Montpreveyres and Lake Geneva. The standards established for the quality of the drinking water are rigorously complied with. Concerns arose in 2021 when excessive amounts of chlorothalonil, a fungicide, turned up in some samples. Several contaminated sources were taken out of operation as a public health measure.

Actions of the municipality

✓	Protect the quality of drinking water and conduct public information campaigns to reduce individual consumption	**Permanent**



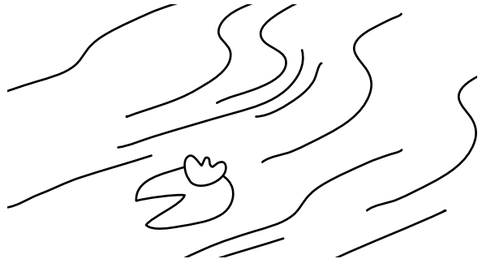


Water quality

100 %	100 % of samples met quality standards in 2021 — *100 % in 2016* →
	100 % (LDAI)
	Measured at local level
	U4SSC indicator

Drinking water use

209 l	per day and per inhabitant on average in 2021 — *217 in 2016* ↘
	287 l (Swiss average, OFEV, 2021)
	Measured at local level
	U4SSC indicator



Freshwater consumption

21 %	of available freshwater was withdrawn in 2021 — *21 % in 2016* →
	25 % (estimate)
	Measured at local level
	U4SSC indicator

“House of water”

With the wastewater treatment plant at Pully being rehabilitated, educational measures are being studied to improve awareness among young people of the issues surrounding wastewater treatment. An educational “House of water” has been proposed to familiarize them with the theory and practice of water cycle management and sustainability. The objective is to improve awareness among young people and the population at large, as well as within business and in the professional world, about the science involved, with a view to increasing the efficiency of our use of water resources.

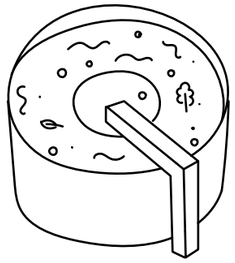
Water and sanitation

WATER TREATMENT

All wastewater arriving at the wastewater treatment plant (STEP) undergoes primary treatment removing of solids, fats and grease and 92 % then undergoes secondary treatment by decomposition of organic matter. There is no tertiary treatment at present, as the law only requires it for STEP facilities that handle wastewater for more than 24 000 inhabitants. Nonetheless, the planned renovation of Pully's STEP should include a tertiary treatment stage.

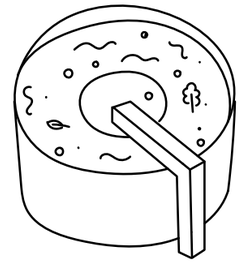
Actions of the municipality

✓	Continue planning work to rehabilitate the STEP facility of Pully	**Ongoing**
✓	Continue planning work to set up a "House of water" as an educational resource on the water cycle and sustainability	**Ongoing**



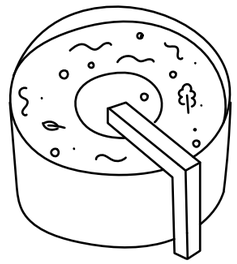
Wastewater treatment (primary)

100 %	of wastewater underwent primary treatment as of 2021 — *100 % in 2016* →
	100 % (LEaux)
	Measured at local level
	U4SSC indicator



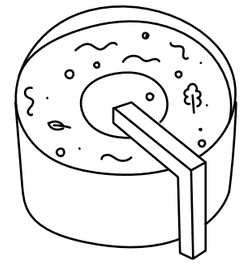
Wastewater treatment (secondary)

92.1 %	of wastewater underwent secondary treatment as of 2021 — *93 % in 2016* ↘
	100 % (LEaux)
	Measured at local level
	U4SSC indicator



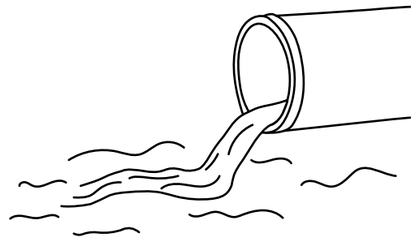
Wastewater treatment (tertiary)

0 %	of wastewater underwent tertiary treatment as of 2021 — *0 % in 2016* →
	100 % (LEaux) for cities of more than 24 000 inhabitants
	Measured at local level
	U4SSC indicator



Amount of wastewater treated by STEP

96.04 m³	volume of wastewater per person, measured at the STEP treatment collection point in 2021
	136.3 m³ per person (average for cities participating in Cercle indicateurs, 2017-2019)
	Measured at local level
	Cercle indicateurs



Pollutants captured in STEP treatment

235.15	load units per person — pollutant emissions captured in STEP treatment facilities in 2021
	232.3 load units per person (average for cities participating in Cercle indicateurs, 2019)
	Measured at local level
	Cercle indicateurs

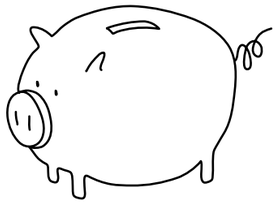
SOCIETY AND CULTURE

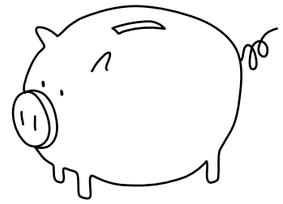
Culture

Only physical facilities were counted as cultural infrastructure: two theatres, two museums, one library and one cinema. A new museum-type facility, called La Muette – espaces littéraires, was not counted, having been opened only in 2023. Pully supports a number of local and regional organizations and festivals (dance company Linga, Week-end musical de Pully, Lavaux Classic, the Cully Jazz Festival, and others). The COVID pandemic had a major impact on culture, with reduced attendance and cancellations. The indicator for cultural expenditure is therefore based on the year 2022 in order to reduce the impact of those effects.

Actions of the municipality

✓	Launch of the “Pully Culture!” label to defend and strengthen culture in Pully. For further information, visit *www.pully.ch/culture*	**Realised**
✓	Engagement with the programme “Culture inclusive”, which has the goal of increasing the involvement of persons with disabilities in museum life	**Permanent**



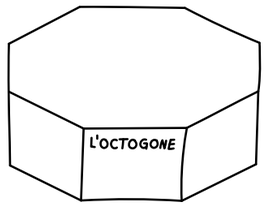


Cultural expenditure

2.7%	of the municipal budget in 2022 *— 2.7% in 2018* →
⟵	3.7% (Swiss average, 2021)
	Measured at local level
	U4SSC indicator

Municipal expenditure on culture and leisure

575 CHF	per person in 2020
⟵	690 CHF per person (average for cities participating in Cercle indicateurs, 2018)
	Measured at local level
	Cercle indicateurs



Cultural infrastructure

6	for 19 000 inhabitants in Pully in 2021 *— 6 in 2018* →
≡	32 per 100 000 inhabitants
	Target figure not available
	Measured at local level
	U4SSC indicator

“Regarding culture, the political will is there to keep offering a rich and varied programme. This cultural diversity is perceived as a core element of the city’s collective identity and its attractiveness.”

Gil Reichen
Mayor in charge of the directorate of General Administration, Finance and Cultural Affairs

La Muette – espaces littéraires

La Muette – espaces littéraires (“literary spaces”), devoted to the author Charles Ferdinand Ramuz, is the latest addition to the cultural landscape of Pully, opening in 2023. This is part of the larger renovation project for La Muette, a house in the centre of Pully where Ramuz lived from 1930 to 1947. This facility occupies only one portion of the house.

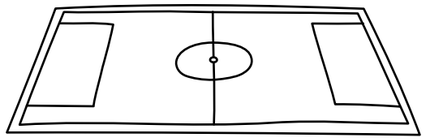
More information on lamuette.ch

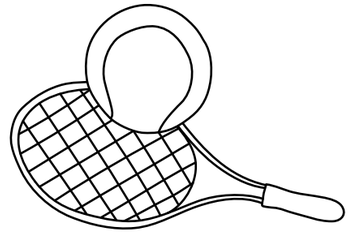
Sport

Sport infrastructure includes facilities such as swimming pools, football fields, tennis courts, school sports arenas, and public outdoor sporting facilities such as an urban fitness area. High attendance indicates that the facilities are being used at full capacity.

Les actions de la Municipalité

✓	Construction of an outdoor public 3 on 3 basketball court	**Completed**
✓	Construction of a public urban fitness area, a beach volleyball space and pétanque courses at the quai Milliquet	**Completed**





Sport infrastructure

31	facilities, for 19 000 inhabitants in Pully in 2021
≡	163 per 100 000 inhabitants
—	Target figure not available
	Measured at local level
	Local indicator

Sport infrastructure use

3677	registered members of clubs using the sport facilities in Pully in 2022
	3700 spaces available (estimate)
	Measured at local level
	Local indicator

“Pully offers a wide variety of sports facilities, and it is encouraging to see that they are being used to the full extent. This shows how important sports are to the inhabitants. However, it also indicates that the facilities are overstretched, with waiting lists for some activities. So it is becoming urgent to think about creating new facilities to meet the growing demand.”

Lydia Masmejan
City councillor in charge of the directorate of estates, property management and sports

Urban fitness area

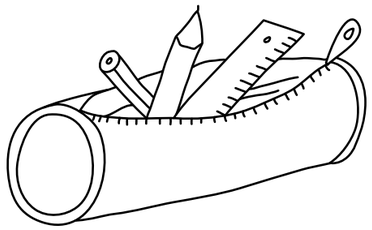
A new sport and leisure park adjacent to the Pully port was inaugurated in June 2021. It houses a number of facilities such as an equipped fitness area open to the public, a beach volleyball court with sand, and a slackline. The park also has rest areas and space for picnicking.

Education

Because access to education is a legal obligation, school enrolment is excellent, with nearly 100 % of children in mandatory education. The proportion of the inhabitants of Pully over 15 years of age with at least a tertiary-level higher education (college, vocational diploma or certificate, baccalaureate (maturité gymnasiale, maturité professionnelle, maturité spécialisée) or other general education programme) is 80 %. More than two-thirds of the population had a diploma for successful completion of a tertiary education programme, which is above the Swiss average. Against that fact, it should be noted that the national figure for illiteracy is at approximately 10 % of the adult population.

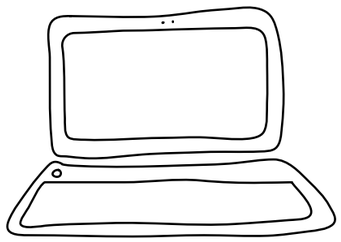
Actions of the municipality

✓	Equip classrooms with digital whiteboards, including television touchscreens	**Ongoing**
✓	Provision of French language classes for migrants	**Permanent**



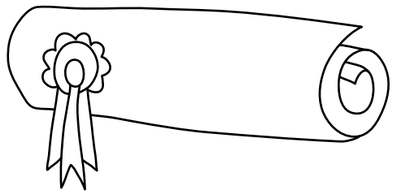
School enrolment

99.47 %	of children attended school in 2021 *— 99.96 % in 2016* ↘
	100 % (LEO)
	Measured at local level
	U4SSC indicator



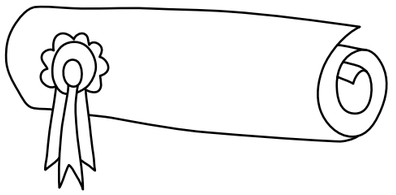
Student ICT access

100 %	of children had access to ICTs in 2021 *— 100 % in 2016* →
	100 % (SDG, target 4.4 for 2030)
	Measured at local level
	U4SSC indicator



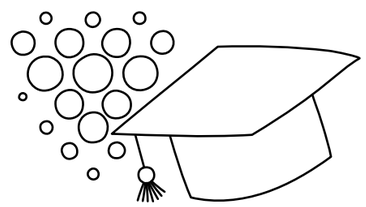
Higher education degrees

83.30 %	of the population aged 15 years or more had a higher education degree as of 2021
—	Target figure not available
	Measured at local level
	U4SSC indicator



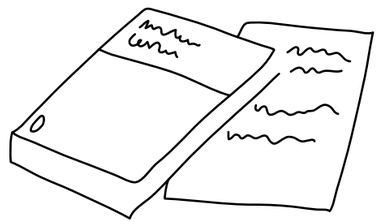
Tertiary level of education

67.87 %	of the population aged 25 to 64 years had a tertiary level of education as of 2021
	45 % (Swiss average, OFS, 2021)
	Measured at local level
	Cercle indicateurs



Apprenticeships and internships in the Pully administration

14.7 %	of young people undergoing vocational training were employed by the Pully municipality as of 2021
	4.3 % (Swiss average, OFS, 2021)
	Measured at local level
	Local indicator



Adult literacy

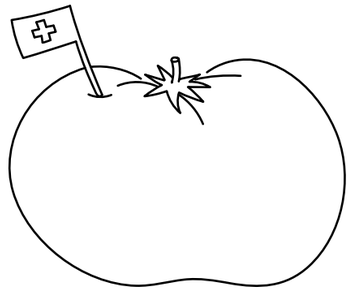
90 %	of the adult population was literate as of 2016
	100 % (SDG, objectif 4.6 pour 2030)
	Measured nationally
	U4SSC indicator

Food security

Nationally, 52 % of consumed foodstuffs are of Swiss production. This proportion has fallen slightly in recent years, away from the 60 % threshold considered a minimum value. There are several reasons for this: on the one hand, population growth, and on the other, a slight decrease in food production.

Les actions de la Municipalité

✓	Make available land for permaculture and family garden plots	**Permanent**



Local food production

51.95 %	of food was produced in Switzerland as of 2021 — *56.2 % in 2016* ↘
⇜〰	60 % (estimate)
☐	Measured nationally
⊕	U4SSC indicator

“We want to give children the experience of being connected to the earth so that they understand where fruit and vegetables come from and how they grow from a seed. This is a vital part of making the new generations aware of the importance of nature and agriculture, and encouraging them to take an active part in these processes from a young age.”

Lucas Girardet
City Councillor in charge of the Directorate of Urban Planning and the Environment

Urban farm Les Boverattes

In 2023 the Boverattes nursery was transformed into an urban farm operated by an association of citizen groups called Pully Pousse. The purpose of the transformation was to provide a space for experimentation and education in urban agriculture, offering organic seedlings and fruit and vegetables produced in permaculture. The urban farm also hosts meetings for people of all ages on subjects related to food and agriculture, and runs a skills centre in soil improvement and experimentation for persons preparing to re-enter the jobs market.

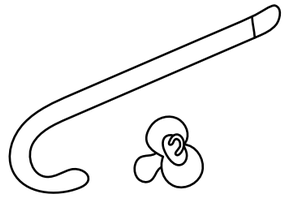
Health

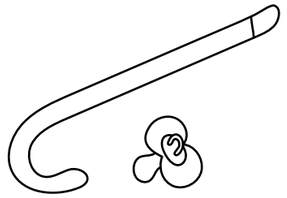
DEMOGRAPHIC ASPECTS

Health is the responsibility not of the municipality but of the canton and the confederation. Life expectancy, at 83 years, is stable and comparable to the Swiss average. The maternal mortality rate at 4.6 deaths per 100 000 live births is far below the worldwide rate as measured by the United Nations. It has further decreased, slightly, since the 2016 report.

Actions of the municipality

✓	Construction of 35 new residences in the new Boverattes neighbourhood, specially equipped and set up for older persons and persons with reduced mobility	**Completed**





Life expectancy

83 ans	in 2021 — *83 years in 2016*	→
⟷	83.65 years (Swiss average, 2021)	
☐	Measured nationally	
⊕	U4SSC indicator	

Potential years of life lost

—	Not available
⟷	2 849 years for 100 000 persons (average for the canton of Vaud, 2021)
⁘	Measured at local level
✚	Cercle indicateurs

Maternal mortality rate

0.7	deaths for 19 000 live births in 2021 *— 0.9 in 2016*	↘
≡	4.6 per 100 000 live births	
⟷	13.3 per 19 000 live births (UN, SDG 3)	
☐	Measured nationally	
⊕	U4SSC indicator	

Neighbourhood policing, assistance to the needy

Social welfare interventions are part of the work of the police of the eastern Lausanne region. Thus, the police in this region are the third most likely to be called upon in the case of a fall at home or in the street, most commonly involving an elderly person. In 2021 the police was called upon to act in 72 such cases.

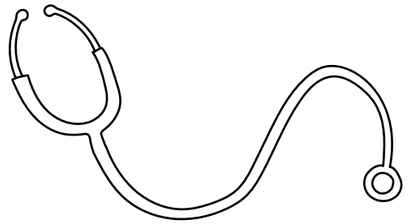
Health

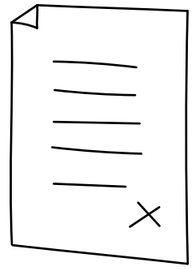
HEALTH SERVICES

The number of physicians is higher than the national average. The number of hospital beds has decreased, and is now below the nationwide mean. With health insurance mandatory in Switzerland, access to health-care is guaranteed for everyone. Electronic storage of medical data is not in widespread use.

Actions of the municipality

✓	Commitment to the Commune en santé (“Healthy town”) initiative	**Completed**



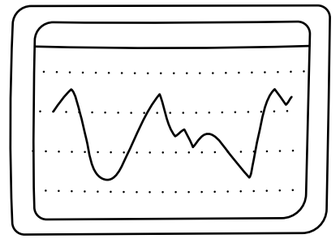


Physicians

92	physicians for 19 000 inhabitants in Pully in 2021 — *91 in 2016* ↗
≡	485 physicians per 100 000 inhabitants
⟷	86 for 19 000 inhabitants (average for the canton, Stat VD, 2021)
	Measured at regional level
	U4SSC indicator

Health insurance / public health coverage

100 %	of inhabitants were insured in 2021 — *100 % in 2016* →
	100 % (LaMal)
	Measured at local level
	U4SSC indicator



In-patient hospital beds

75	for 19 000 inhabitants in Pully in 2021 — *80 in 2016* ↘
≡	396 per 100 000 inhabitants
⟷	81 for 19 000 inhabitants (Swiss average, OFS, 2021)
	Measured at regional level
	U4SSC indicator

Electronic health records

0.3 %	of inhabitants had an electronic patient file in 2021
	100 % (LDEP)
	Measured at regional level
	U4SSC indicator

“Although health policy is primarily the responsibility of the federal and cantonal levels of government, it would be useful to monitor the medical services that are available in the community in order to assess how well they meet the needs of the population.”

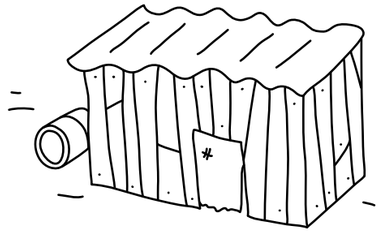
Jean-Marc Chevallaz
City Councillor in charge of the Directorate of Youth, Social Affairs and Public Safety

Housing

Pully does not have any informal settlements. Rents are at the upper end of the scale for cities in Switzerland. The residential vacancy rate is very low; under cantonal rules, a residential vacancy rate below 1.5 % is the threshold for declaring a housing shortage.

Actions of the municipality

✓	A study entitled “Objectif logement 2020-2030” (“Objective: housing, 2020-2030”) to define targets for the decade for new housing in Pully	**Ongoing**

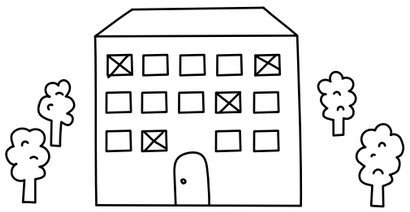


Informal settlements (slums, shantytowns)

0 %	of the population lived in an informal home in 2021 — *0 % in 2016* →
⟵	0 % (SDG 11, objectif 11.1 pour 2030)
	Measured at local level
	U4SSC indicator

Housing expenditure

15.80 %	of household revenue was spent on housing in 2020 — *19 % in 2016* ↘
⟵	25 % (budget-conseil suisse)
	Measured at regional level
	U4SSC indicator



Rent levels

284 CHF/m²	average annual cost of rent in 2021
⟵	246 CHF (average for cities participating in Cercle indicateurs in 2021)
	Measured at local level
	Cercle indicateurs

Residential vacancies

0.57 %	vacancies in 2021
	1.5 % (LPPPL)
	Measured at local level
	Local indicator

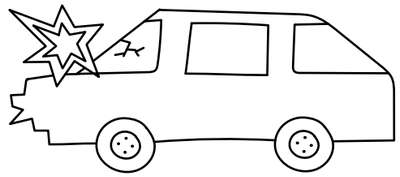
Safety

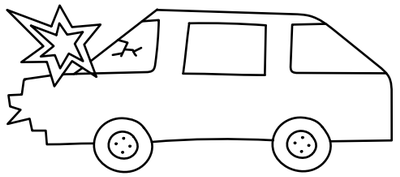
TRAFFIC ACCIDENTS

Traffic accidents and traffic fatalities are low by comparison with national figures. However, the rate of accidents involving two-wheelers is some 15 % above that for the canton as a whole.

Actions of the municipality

✓	Redesign of road intersections to improve safety, e.g. conversion of the Rochettaz intersection to a traffic circle	**Completed**



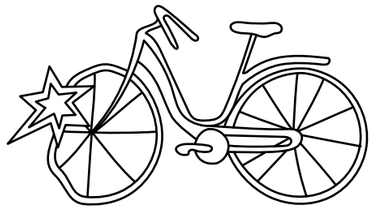


Traffic accidents

29	for 19 000 inhabitants in Pully in 2021
≡	153 per 100 000 inhabitants (U4SSC)
⟵〰	38 per 19 000 inhabitants (Swiss average, OFS, 2021)
⁘	Measured at local level
✚	Cercle indicateurs

Traffic fatalities

0	for 19 000 inhabitants in Pully in 2021 ↘ *— 0.2 in 2016*
≡	0 per 100 000 inhabitants (U4SSC)
⟵〰	0.4 per 19 000 inhabitants (Swiss average, OFS, 2021)
⁘	Measured at local level
⊕	U4SSC indicator



Accidents involving two-wheelers

10	for 19 000 inhabitants in Pully in 2021
≡	53 per 100 000 inhabitants (U4SSC)
⟵〰	8.5 per 19 000 inhabitants (average for the canton of Vaud, 2021)
⁘	Measured at local level
⛨	Local indicator

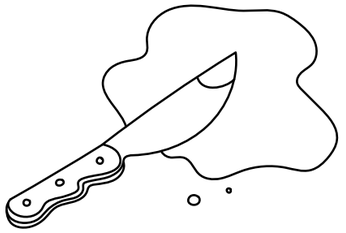
Traffic safety education in schools

The east Lausanne police conduct prevention campaigns with presentations in schools. In 2021 such awareness-raising presentations were made in 92 classes, reaching some 1870 pupils.

Safety

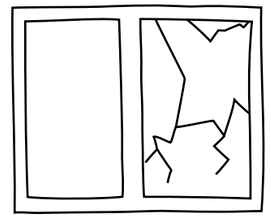
CRIME AND RESCUE

Police and firefighting service are provided by a grouping of municipalities. Firefighting relies heavily on a system of part-time firefighters. The number of police officers per 100 000 inhabitants is slightly lower than the Swiss average. While the violent crime rate is considerably lower than the national average, the rate of burglaries, at 22 %, is higher.



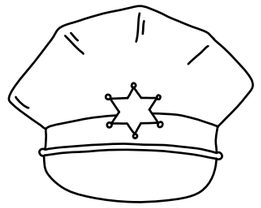
Violent crime rate

0	for 19 000 inhabitants in Pully in 2021 — *1.2 in 2016* ↘
≡	0 per 100 000 inhabitants (U4SSC)
⟷	19.1 for 19 000 inhabitants (Swiss average, OFS, 2021)
	Measured at local level
	U4SSC indicator



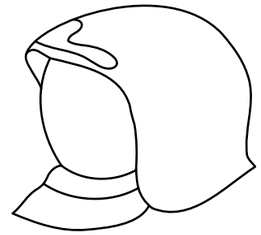
Burglaries

61	burglaries in detached houses and rental properties recorded by the police for Pully in 2021, for 19 000 inhabitants
≡	322 per 100 000 inhabitants (U4SSC)
⟷	50 for 19 000 inhabitants (Swiss average, OFS, 2021)
	Measured at local level
	Cercle indicateurs



Police service

36	police officers for 19 000 inhabitants in Pully in 2021 — *35 in 2016* ↗
≡	216 per 100 000 inhabitants (U4SSC)
⟷	41 for 19 000 inhabitants (Swiss average, Eurostat, 2021)
	Measured at local level
	U4SSC indicator



Fire service

88	firefighters for 19 000 inhabitants in Pully in 2021 — *69 in 2016* ↗
≡	464 per 100 000 inhabitants (U4SSC)
⟷	112 for 19 000 inhabitants (Feukos, Canton de Vaud, 2021)
	Measured at local level
	U4SSC indicator

“Community policing falls within the responsibilities of the police force of the eastern Lausanne region. Local engagement puts the police in a better position to diagnose potentially risky situations and take action earlier, before a situation deteriorates or escalates; this is often the case for violence in a school, or an elderly person in difficulty.”

Jean-Marc Chevallaz
City Councillor in charge of the Directorate of Youth, Social Affairs and Public Safety

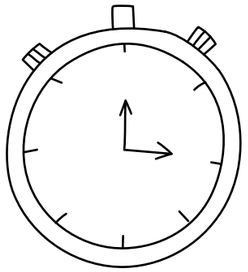
Safety

NATURAL HAZARDS AND DISASTER RESPONSE

Pully is exposed to low-intensity natural hazards including flooding and landslides. Emergency services provide disaster monitoring under a variety of disaster response plans.

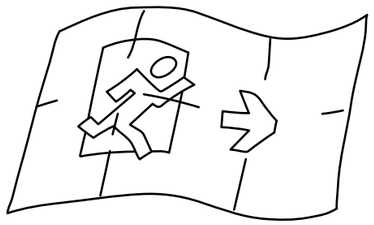
Actions of the municipality

✓	Maintain an up-to-date inventory of hazards and adapt construction rules accordingly	**Permanent**
✓	Design of the Clim-Expo exhibition, which aims to make the public aware of the impact of climate change on our way of life every day	**Completed**



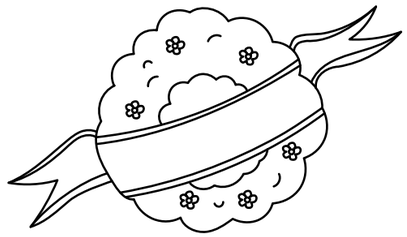
Emergency service response time

—	Score not available for 2021 — 5 min (estimate) in 2016
	15 min (Pully municipality)
	Measured at local level
	U4SSC indicator



Resilience plans

Yes	in 2021 — *Yes in 2016* →
	Yes (LAT)
	Measured at local level
	U4SSC indicator



Deaths related to natural disasters

0	for 19 000 inhabitants in Pully in 2021 — *0 in 2016* →
	0 per 100 000 inhabitants (U4SSC)
	0.06 per 100 000 inhabitants (Swiss average, OFS, 2021)
	Measured at local level
	U4SSC indicator

Population living in disaster-prone areas

11.59 %	of the population lived in a disaster-prone area in 2021 — *16 % in 2016* ↘
	0 % (estimate)
	Measured at local level
	U4SSC indicator

Disaster-related economic losses

0.004 %	of the budget was devoted to natural disaster response in 2021 — < *0.06 % in 2016* ↘
	0.061% (Swiss average, OFEV, 2021)
	Measured at local level
	U4SSC indicator

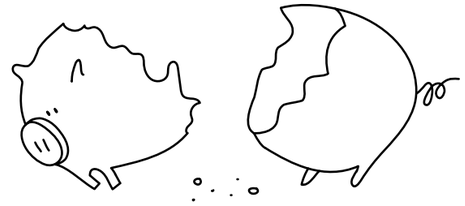
Social inclusion

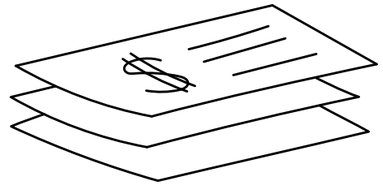
STANDARD OF LIVING

At regional level, the medium salary earned by women, compared to men, is improving. It is now at 94 %, versus 81% in 2016, and thus getting closer to what is mandated by law. The prevalence of poverty in Pully is lower than the national average. The proportion of low-income taxpayers is relatively close to the average for cities in the Cercle indicateurs. Wealth distribution is not as good as the national average, however; although it is slightly better than it was in 2016.

Actions of the municipality

✓	Make modest-rent apartments available in the Boverattes neighbourhood	**Completed**



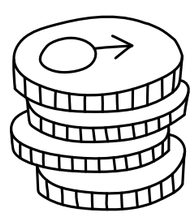


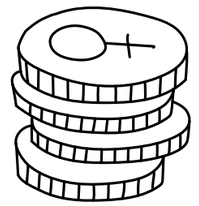
Poverty

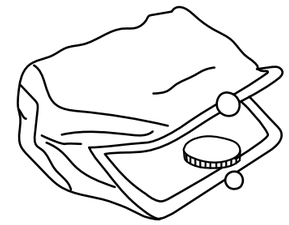
2.9 %	of inhabitants were living below the poverty level in 2021 — *3% in 2016* ↘
	8.7 % (Swiss average, OFS, 2021)
	Measured at local level
	U4SSC indicator

Wealth distribution (Gini coefficient)

0.47	a Gini coefficient of 0 indicates that income is divided equally between all inhabitants in 2021 — *0.51 in 2016* ↘
	0.31 (Swiss average, OFS, 2021)
	Measured at local level
	U4SSC indicator







Gender income equity

94 %	salary earned by a woman relative to that of a man doing the same work in 2021 — *81% in 2016* ↗
	100 % (LEg)
	Measured at regional level
	U4SSC indicator

Low-income taxpayers

9.7 %	of all taxpayers had a taxable annual income below CHF 30 000 in 2019
	12.6 % (average for cities participating in Cercle indicateurs, 2017)
	Measured at regional level
	Cercle indicateurs

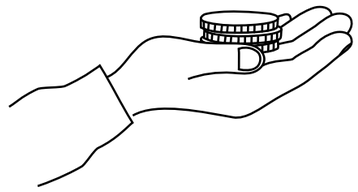
Social inclusion

ENGAGEMENT

Voter participation in referendums increased between 2016 and 2021 and is close to the target level now. However, this is due to some extent to the nature of the issues that were submitted to referendum in 2021. Pully has been working for several years to help the unemployed re enter the job market, working with specialized bodies to achieve this. In Pully, the rate of naturalization is higher than the Swiss average.

Actions of the municipality

✓	Working together with the following organizations: Nouvelle Planète, Biovision, la Fédération vaudoise de coopération, la Fondation Jan & Oscar and Solidarit'eau	**Ongoing**



Social welfare

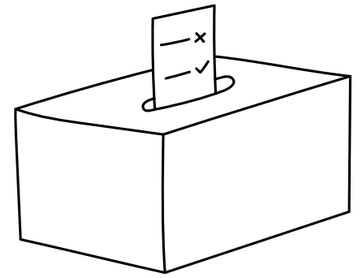
1.90 %	proportion of the population receiving social welfare in 2021
⟷	9.3 % (Swiss average, OFS, 2021)
	Measured at local level
	Cercle indicateurs

Social integration

3.45 %	proportion of Pully municipal staff dedicated to social integration in 2021
⟷	3% (Pully HR estimate)
	Measured at local level
	Local indicator

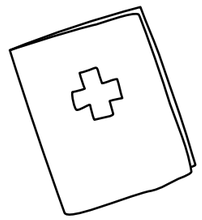
Aid to communities

0.4 %	proportion of total expenditure that was devoted to aid to communities elsewhere in Switzerland or in other countries, in 2020
⟷	0.98 % (Swiss average, OFS, 2021)
	Measured at local level
	Cercle indicateurs



Voter participation

61 %	voter participation in 2021 *— 46 % in 2016* ↗
⟷	70 % (Statistique Vaud)
	Measured at local level
	U4SSC and Cercle indicateurs indicator



Naturalization

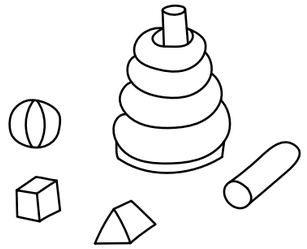
33.17	approved applications for naturalization per 1000 eligible persons, in 2021
⟷	18 (Swiss average, OFS, 2021)
	Measured at local level
	Cercle indicateurs

Social inclusion

Pully is committed to offering more options for childcare. Notwithstanding all efforts, however, the indicator is showing a negative trend. This is due primarily to the closure of two private establishments and an increase in demand due to the growing population. The municipality plans to address this by constructing new facilities. Planning for education support foresees continued strong demand in the coming years (see also “Building” p.74).

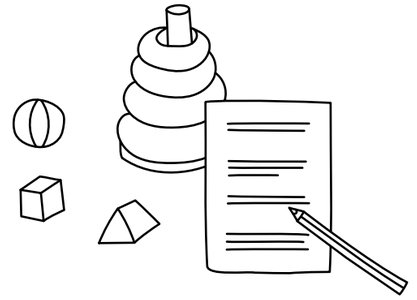
Actions of the municipality

✓	Continue work on the construction of two new childcare facilities	Ongoing
✓	Develop a pedagogical framework to integrate in-home daycare within the childhood education system with a view to improving the quality of care	Ongoing



Childcare availability

23.4 %	of preschool children had access to care in 2022 — *29 % in 2016* ↘
	37 % (Pully municipality)
	Measured at local level
	U4SSC and Cercle indicateurs indicator



Daycare applications

37.4 %	of preschool children were waiting for access to daycare in 2022
	0 % (Pully municipality)
	Measured at local level
	Local indicator

Education support

4.4 %	of children were in temporary education facilities in 2021
	0 % (Pully municipality)
	Measured at local level
	Local indicator

“In recent years daycare facilities have depended on the availability of suitable building space. With a larger population, there is a need for long-term planning to meet the growing demand.”

Jean-Marc Chevallaz
City Councillor in charge of the Directorate of Youth, Social Affairs and Public Safety

ECONOMY

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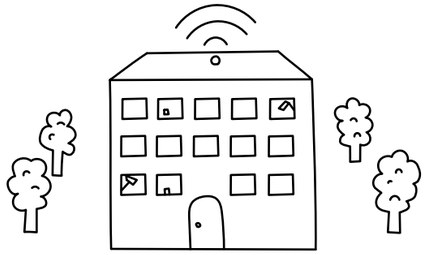
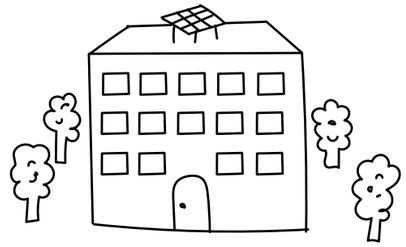
Buildings

In Pully most buildings are equipped with a digital surveillance system, primarily for detecting fires and regulating heating. To date, only two buildings have been certified under a recognized sustainable development standard. Regarding the proportion of public and private investments in expansion, transformation and maintenance out of all construction expenditure, it is 43 % lower than the average for the Swiss cities participating in Cercle indicateurs initiative. 2024 marked the inauguration of the extension to the Chantemerle middle school and the approval of a loan to extend the Principal middle school.

Actions of the municipality

✓	Construction of extension to Chantemerle middle school	**Realised**
✓	Renovation and extension work at Collège Principal	**Ongoing**
✓	Study for the expansion of the Arnold Reymond secondary school	**Ongoing**
✓	Targeted actions within the Cité de l'énergie framework	**Permanent**



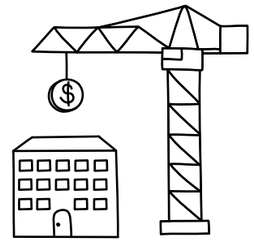


Integrated building management systems in public buildings

68 %	of public buildings (by surface area) had a BMS as of 2021 — *64.5 % in 2016* ↗
⟷	100 % (Cité de l'énergie)
	Measured at local level
	U4SSC indicator

Public building sustainability

1.6 %	of public buildings (by surface area) were certified under a recognized standard, e.g. Minergie, in 2021 — 0 % in 2016 ↗
⟷	100 % (directive of the Conseil d'État for sustainable and bioclimatic construction, 2022)
	Measured at local level
	U4SSC indicator



Transformation and maintenance of buildings

21.79 %	the proportion of capital spending (public and private) devoted to building enlargement, transformation and maintenance, out of all construction expenditure in 2020
⟷	38.2 % (Swiss average, OFS, 2021)
	Measured at local level
	Cercle indicateurs

Renovation and upgrade for compliance: the Home École at Les Mosses

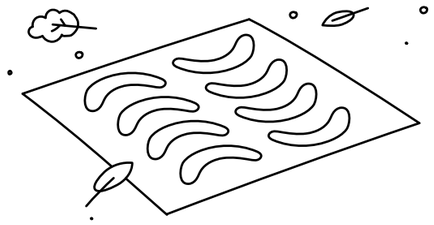
The Home École at Les Mosses in Pully hosts children's summer/holiday camps. The design for renovation of the building was done following the Minergie renovation standard so as to achieve rational and economic energy use. The project was also an opportunity to bring the facility into compliance with the directives regarding young people's welfare as regards safety, fire prevention, public health, and accessibility.

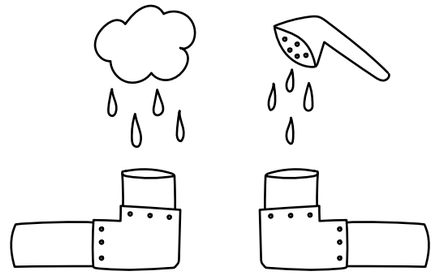
Drainage

To limit the pollution caused by wastewater discharging into waterways and the lake while keeping the operating costs of the STEP treatment facility down, considerable efforts were made to keep the runoff and wastewater networks separate. This segregation is achieved during the transformation work done on the public areas, and in the course of a multi-year campaign to bring urban drainage into compliance. Given the modest size of the drainage network, ICT monitoring using sensors is not required. A flowmeter is fitted at the collection point for the STEP treatment facility.

Actions of the municipality

✓	Monitoring compliance of runoff from non-public land	**Permanent**





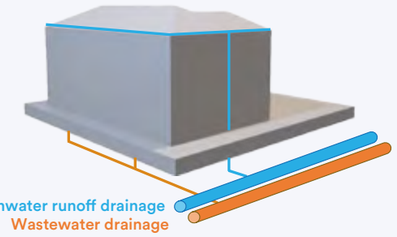
Drainage/storm water system ICT monitoring

0 %	of the drainage system was fitted for ICT monitoring in 2021 — *0 % in 2016* →
—	Target figure not available
	Measured at local level
	U4SSC indicator

Segregation of the drainage basins

58 %	of drainage basin surface was covered by dedicated collection networks in 2021
	100 % (Pully municipality)
	Measured at local level
	Local indicator

Separating the runoff network from the wastewater network



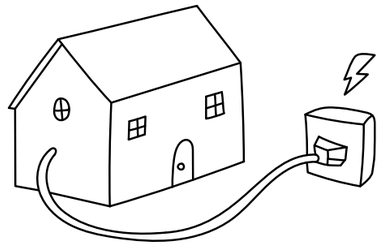
This project meets a legal requirement to segregate the drainage networks for domestic and industrial wastewater and for rainwater runoff. The purpose is to improve the effectiveness of wastewater treatment, reduce the operating costs for the STEP facility, and prevent pollution of waterways and of the lake, by ensuring that only wastewater enters the STEP, with runoff drained directly into the environment or otherwise handled separately.

Electricity supply

Access to electricity is guaranteed throughout the city. The rate of occurrence and the duration of outages is slightly lower than it was in 2016. Under the law on energy and the electricity supply (OApEl), 80 % of electricity meters are to be replaced by smart meters by 2027.

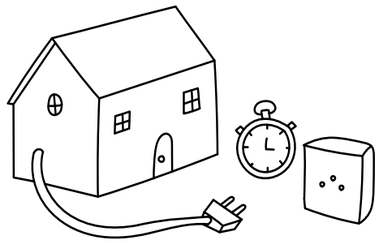
Actions of the municipality

✓	Implement the new energy law (LEne) under the energy transition programme "Énergie 2050"	Ongoing



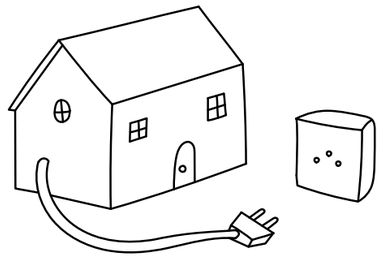
Access to electricity

100 %	of households had access to electricity in 2021 — *100 % in 2016* →
	100 % (LApEL)
	Measured at local level
	U4SSC indicator



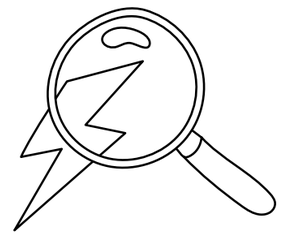
Electricity system outage time

74 min	average annual duration of outages per affected customer, total for 2021 — *76 min in 2016* ↘
	61 min (Swiss average, Elcom, 2021)
	Measured at local level
	U4SSC indicator



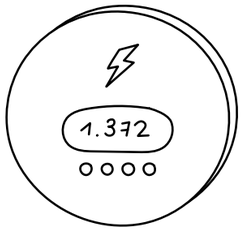
Electricity system outage frequency

5 %	of customers experienced an outage during 2021 — *6 % in 2016* ↘
	28 % (Swiss average, Elcom, 2021)
	Measured at local level
	U4SSC indicator



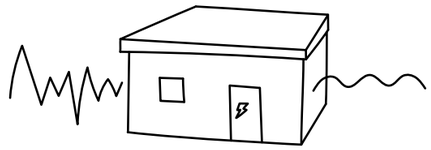
Electricity supply ICT monitoring

0 %	of electricity supply was monitored by ICT in 2021 — *0 % in 2016* →
—	Target figure not available
	Measured at local level
	U4SSC indicator



Smart electricity meters

1 %	of meters were smart meters in 2021 — *0 % in 2016* ↗
	80 % in 2027 (OApEl)
	Measured at local level
	U4SSC indicator

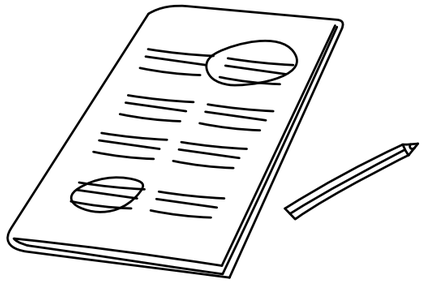


Demand response penetration

0 %	of the grid used real-time demand response in 2021 — *0 % in 2016* →
—	Target figure not available
	Measured at local level
	U4SSC indicator

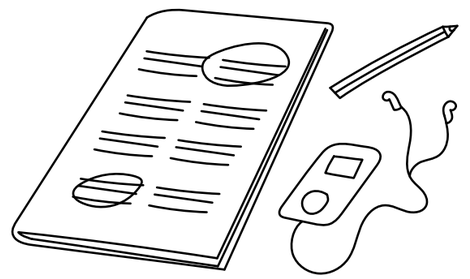
Employment

The COVID pandemic had an impact on employment in 2021. The global rate of unemployment overall and among young people increased, while employment in the tourism sector diminished. The only domain where employment rose in 2021 was ICTs, but it remained below the Swiss average. The proportion of Pully's workforce that is employed in high productivity sectors is significantly greater than the average for Cercle indicateurs cities.



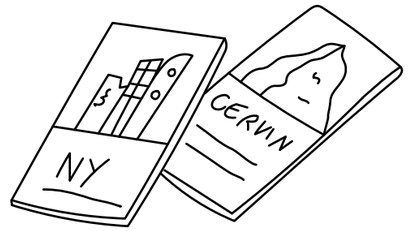
Unemployment rate

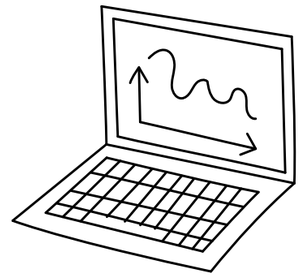
3.9 %	unemployment rate in 2021 ↗ *— 3.52 % in 2016*
	5.1% (Swiss average, OFS, 2021)
	Measured at local level
	U4SSC and Cercle indicateurs indicator



Youth unemployment rate

2.92 %	unemployed among those aged 15-24 years in 2021 ↗ *— 2.6 % in 2016*
	8.8 % (Swiss average, OFS, 2021)
	Measured at local level
	U4SSC indicator



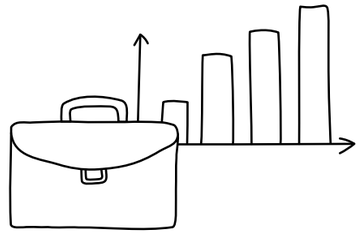


Tourism sector employment

3.8 %	of jobs were in the tourism sector in 2021 ↘ *— 4.2 % in 2016*
	4 % (moyenne cantonale vaudoise, 2021)
	Measured at local level
	U4SSC indicator

ICT sector employment

3.2 %	of jobs were in the ICT sector in 2021 ↗ *— 2.7 % in 2016*
	4.3 % (Swiss average, OFS, 2020)
	Measured at local level
	U4SSC indicator



High-productivity employment

41.16 %	of all jobs were in sectors where labour productivity is above the Swiss average in 2019
	27.9 % (average for cities participating in Cercle indicateurs, 2017)
	Measured at local level
	Cercle indicateurs

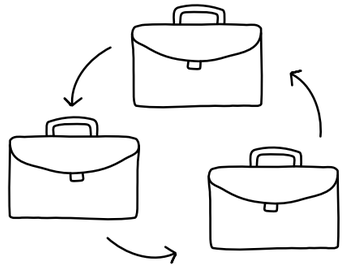
Employment

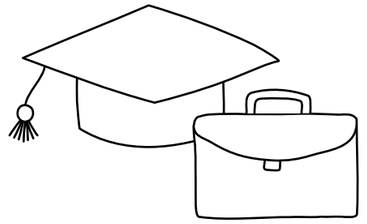
PULLY AS AN EMPLOYER

As an employer, the city of Pully is characterized by a fairly stable workforce. Salary equity is confirmed by the minimal divergence between the salaries of men and women, below the acceptability threshold of 5 %. Requests for part-time working among men have increased in recent years.

Actions of the municipality

✓	Audit of salary equity using the Swiss national tool (Logib)	**Completed**
✓	Contribution to the project to evaluate team performance, with participation of different teams in the test phases	**Ongoing**
✓	Training offered to members of the administration workforce	**Permanent**



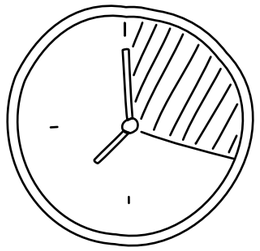


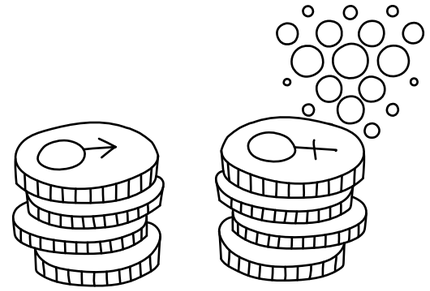
Staff turnover

8.1 %	for the Pully municipality in 2021
⟷	15.5 % (Swiss average, OFS, 2021)
	Measured at local level
	Local indicator

Staff training

0.97 %	of the workforce was dedicated to staff training in 2021
⟷	1% (estimate)
	Measured at local level
	Local indicator





Part-time working

31.3 %	part-time in 2021
⟷	37.1 % (Swiss average, OFS, 2021)
	Measured at local level
	Local indicator

Salary equity

95 %	women's salary by comparison with that paid to men doing the same work in 2021
⟷	100 % (LEg)
	Measured at local level
	Local indicator

Project for inclusion, diversity and promotion of women within the administration

This project includes a number of strategies and activities to promote the position of women within the administration. The first strategy is to facilitate the entrance of young women in professions traditionally viewed as male when choosing a career. The second is to promote the assignment of women to positions of responsibility and positions traditionally viewed as male.

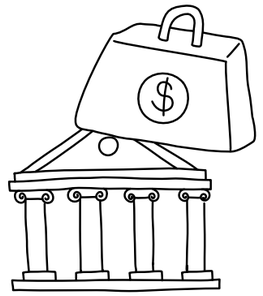
Governance

FINANCIAL ASPECTS

Although the level of taxable revenue in Pully is 46 % higher than the average for the municipalities in the canton of Vaud that are participating in the Cercle indicateurs, and debt levels per inhabitant are lower than the cantonal average, the city's cashflow margin is only one quarter the average for the canton. Accordingly, its capacity for capital investment is significantly below the cantonal average.

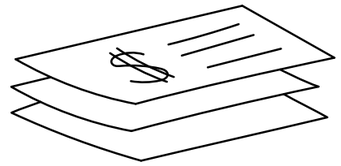
Actions of the municipality

✓	Referendum proposal to increase the tax rate by two points. Did not pass	**Completed**
✓	Support to "SOS Communes"	**Completed**
✓	Filing of an appeal before the federal tribunal against the final equalization statements for 2019, 2020 and 2021	**Completed**



Debt level

60.36 %	proportion of debt with respect to fiscal revenue in 2021
⟷	< 150 % (Pully municipality)
	Measured at local level
	Cercle indicateurs

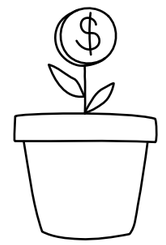


Taxable income

116 423 CHF	average taxable income for natural persons, per taxpayer, in 2019
⟷	82 961 CHF (average for cities participating in Cercle indicateurs, 2017)
	Measured at local level
	Cercle indicateurs

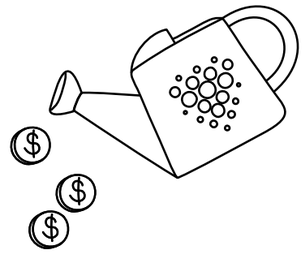
Tax burden for a natural person

2219 CHF	the tax burden for a natural person subject to municipal and cantonal tax (based on a standard profile) in 2021
⟷	2 296 CHF average for Vaud cities in the Cercle indicateurs)
	Measured at local level
	Cercle indicateurs



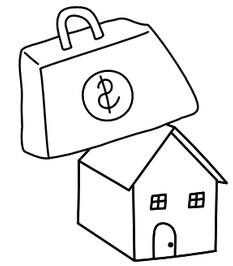
Cashflow

3.6 mio CHF	cashflow in 2021
⟷	14.5 mio CHF par 19 000 inhabitants (average for Vaud cities, 2021)
	Measured at local level
	Local indicator



Capital investment capacity

22.3 %	capital investment capacity in 2021
⟷	103.9 % (average for Vaud cities, 2021)
	Measured at local level
	Local indicator



Debt per inhabitant

7093 CHF	effective debt per inhabitant in 2021
⟷	7 894 CHF per inhabitant (average for Vaud cities, 2021)
	Measured at local level
	Local indicator

Governance

STAFF TRAINING

In 2022 the municipality started work on a new Competence centre for project management with the intention of harmonizing practice across the entire administration and proposing indicators for measuring progress on the objectives of the municipal programme. All employees took part in cybersecurity training. To hone their vigilance, the IT service routinely carries out mock hacks/cyberat-tacks. Where employee competence remains inadequate is in the protection of private data.

Actions of the municipality

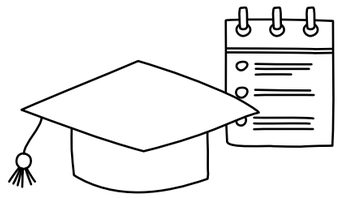
✓	Offer training to staff	**Permanent**
✓	Continue work on a new Competence Centre for Project Management	**Ongoing**
✓	Train employees in cybersecurity	**Permanent**
✓	Train employees in the protection of private data	**Planned**

Employees trained in cybersecurity

100 %	of employees were trained in cybersecurity in 2023
	100 % (Pully municipality)
	Measured at local level
	Local indicator

Employees trained in protection of private data

2 %	of employees were trained in protection of private data in 2023
	100 % (Pully municipality)
	Measured at local level
	Local indicator



Employees with project management competences

24 %	of project leadership has been trained in project management methods and applied it to an actual project in 2023
	92 %
	Measured at local level
	Local indicator

Competence centre for project management

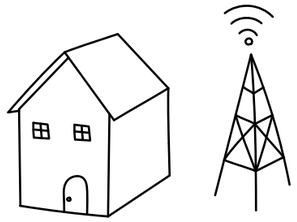
The new Competence centre for project management will have the objective of harmonizing PM practice within the municipality of Pully. The increasing demand for transverse working in projects makes it necessary to mainstream those skills across the administration. Project management methods can be used to support employees, services, departments and the municipality in managing their projects, within a clear framework and with well-defined responsibilities. It is intended to lead to optimized management of financial and human resources, better control of timeline compliance and quality assurance.

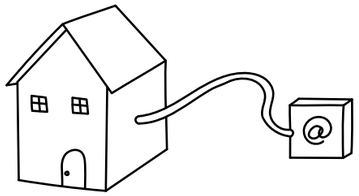
ICT infrastructure

In addition to the wireless Internet coverage in 3G and 4G, by 2023 5G coverage was near universal. Pully has excellent high-speed wireless Internet, so, not being a popular tourist destination, it no longer has public Wi-Fi access, for lack of demand. In 2021 the FTTS (fibre to the street) network was fully deployed, and two projects to extend the fibre optic network to the home (FTTH, fibre to the home) are in progress. Total coverage of the city with FTTH is expected to be achieved in 2027-2028.

Actions of the municipality

✓	Oversee the deployment of two FTTH networks (Pully4net et Swisscom)	**Ongoing**
✓	Wind down public Wi-Fi	**Completed**



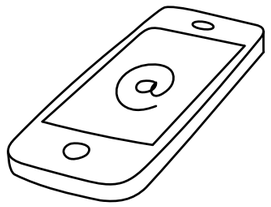


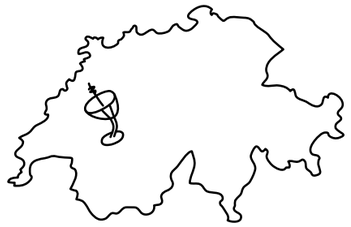
Household Internet access

96.2 %	of households had an Internet connection in 2021 — *91% in 2016* ↗
⟃	100 % (LTC)
☐	Measured nationally
⊕	U4SSC indicator

Fixed broadband subscriptions

83.8 %	of households had a fixed broadband connection in 2021 — *44.8 % in 2016* ↗
⟃	100 % (DETEC)
☐	Measured nationally
⊕	U4SSC indicator



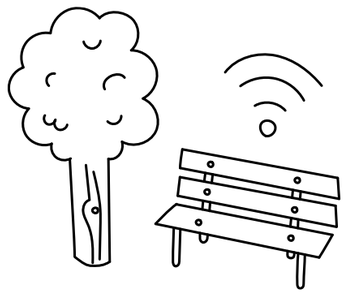


Wireless broadband subscriptions

18 927	subscriptions for 19 000 inhabitants in Pully in 2021 — *18 216 in 2016* ↘
≡	99 900 per 100 000 inhabitants
⟃	19 000 for 19 000 inhabitants (LTC)
☐	Measured nationally
⊕	U4SSC indicator

Wireless broadband coverage

100 %	of the territory covered by the wireless (cellular) network in 2021 — *100 % in 2016* →
⟃	99 % (Swiss average, OFS, 2021)
⁘	Measured at local level
⊕	U4SSC indicator



Availability of Wi-Fi in public areas

0 zone	without Wi-Fi in public areas in 2021 — *5 zones in 2016* ↘
⟃	0 zone (Pully municipality)
⁘	Measured at local level
⊕	U4SSC indicator

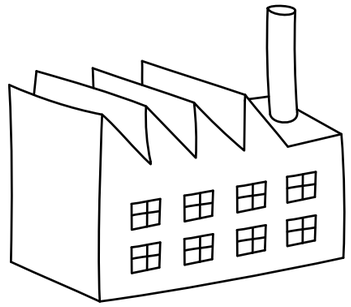
Innovation

BUSINESS

Pully is primarily a residential community. The proportion of small and medium-sized enterprises (SMEs) is within the Swiss average. However, information about the business community is scarce. The share of jobs in innovative sectors is slightly higher than for other cities participating in Cercle indicateurs.

Actions of the municipality

✓	Study on the economic development of the city of Pully	**Ongoing**



SMEs

99 %	of all companies in 2021 were SMEs *— 99 % in 2016* →
⟷	99 % (Swiss average, OFS, STATENT)
	Measured at local level
	U4SSC indicator

Innovation

39.21 %	of jobs in the secondary and tertiary sector in 2020 were in innovative sectors
⟷	30.2 % (average for cities participating in Cercle indicateurs, 2017)
	Measured at local level
	Cercle indicateurs

“A study was recently conducted of the economic development of our city, with the objective of increasing local economic attractiveness. A summary report is currently being prepared for distribution to real-estate promoters and businesses. It will highlight the advantages and the potential of Pully’s downtown as a home for business.”

Gil Reichen
Mayor in charge of the directorate of General Administration, Finance and Cultural Affairs

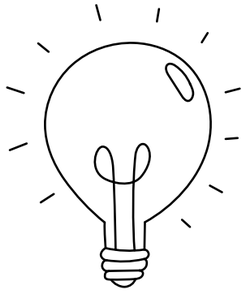
Innovation

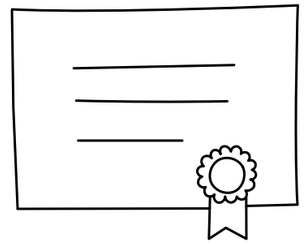
RESEARCH

In international comparison, Switzerland invests a slightly higher than average fraction of its GDP in research and development. It is also slightly ahead of the averages for the European Union and the United States in terms of number of patents held, although this figure is receding slightly. The city's proximity to major universities makes it attractive for technology and innovation-intensive partnerships.

Actions of the municipality

✓	Continue participation in the project of the Lausanne university EPFL to redesign the space around a local school, by analysing the issues relating to mobility using drones and artificial intelligence	**Ongoing**





Research and development expenditure

3.19 %	of GDP was devoted to la R&D in 2021 — *3.53 % in 2016* ↘
⟿	3 % (EU, strategic plan 2020-2024)
☐	Measured nationally
⊕	U4SSC indicator

Patents

8.49	patents for 19 000 inhabitants of Pully in 2021 — *8 in 2016* ↗
≡	44.6 patents per 100 000 inhabitants
⟿	8.3 (EPO)
☐	Measured nationally
⊕	U4SSC indicator

Research project with EPFL on mobility

Pully is participating in a mobility study being conducted by the École polytechnique fédérale de Lausanne (EPFL). As part of the study, zones are being surveyed using one or more drones that film movements over several hours. The imagery is then analysed using artificial intelligence. The goal is to extract mobility-relevant behaviours in the vicinity of a school, including traffic flows, and study safety issues in the interaction between vehicles and pedestrians. Subsequently this information can inform a better organization of the vicinity surrounding the school. Private data remains protected because of the low resolution of the imagery and the filming angle (vertical), making it impossible to recognize faces or licence plates.

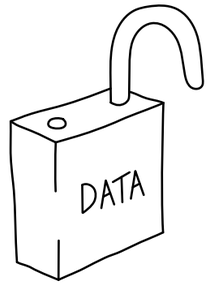
Public sector

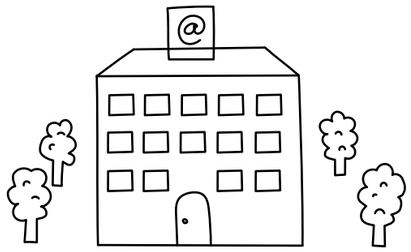
Pully has some experience in digitalization of services and benefits (Smart City initiative). The city takes a pragmatic approach and grows its digital government in response to actual demand from citizens and from within the administration. During the period 2016-2021 the number of e services on offer increased from 9 to 13, reflecting the firm commitment of the city to continue in this direction. The city does not provide data that have been standardized under an open data structure, but its geographical portal *www.sigip.ch* includes 500 content layers allowing access to a vast catalogue of geographic information.

More information on *smart.pully.ch*

Actions of the municipality

✓	Continue deploying e services in accordance with demand	**Permanent**



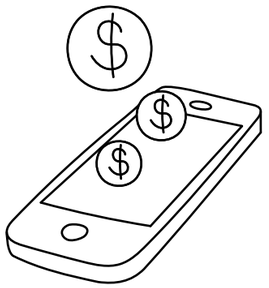


Open data

0 %	data in Pully went public in 2021 — *0 % in 2016*	→
—	Target figure not available	
⊞	Measured at local level	
⊕	U4SSC indicator	

e-Government

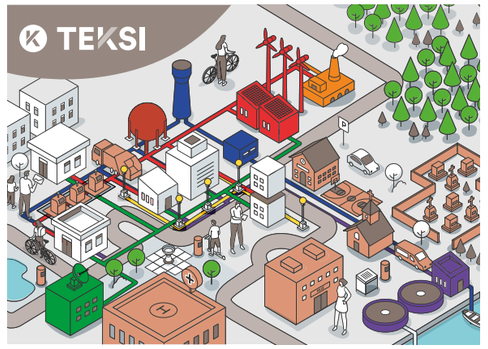
13	services were online in 2021 — *9 in 2016*	↗
—	Target figure not available	
⊞	Measured at local level	
⊕	U4SSC indicator	



Public sector e-procurement

—	Score not available for this indicator
—	Target figure not available
—	Not measured
⊕	U4SSC indicator

TEKSI: open source for public infrastructure



TEKSI is a non-profit that develops decision-support software for public infrastructure management. The open-source project was started by the city of Pully, and development is proceeding in collaboration with the cities of Lausanne and Morges and the inter-municipal management service (Service intercommunal de gestion, SIGE) of the Vevey-Montreux region. TEKSI has 41 members, and works to build a community that contributes to the project, help set up public-private partnerships, share practical know-how across the country and pool their financial potential.

More information on *teksi.ch*

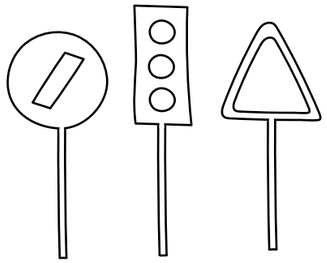
Transport

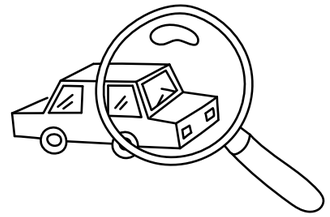
TRAFFIC MONITORING

Pully's digital Mobility Observatory deploys a variety of technologies to address real problems such as transport/mobility in the vicinity of schools, the management of parking space, and how to make the city centre attractive. Traffic lights are now centralized to ensure prioritization and harmonization of traffic. Traffic volume and speed are monitored by sensors.

Actions of the municipality

✓	Measuring the attractiveness of central Pully	**Ongoing**
✓	Mobility study for vicinity of schools (see also page 91)	**Ongoing**





Intersection control

100 %	of traffic lights at intersections adapt to traffic conditions and priorities as of 2021 — *100 % in 2016* →
⟵〰	100 % (estimate)
	Measured at local level
	U4SSC indicator

Traffic monitoring

50 %	of main traffic routes are monitored in 2021 — *0 % in 2016* ↗
⟵〰	100 % (estimate)
	Measured at local level
	U4SSC indicator

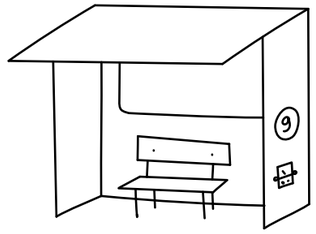
Transport

PUBLIC TRANSPORT

Most inhabitants have a bus stop or a station nearby. Dynamic information displays are fitted to the major stops only, but smartphone applications provide comprehensive route/timetable information for all stops. The total road length of the public transport network was optimized by having lines 47 and 48 run along the rue du Tirage in both directions, instead of doing a loop via Poste Reymondin. Pully is lagging with respect to adapting its bus stops for persons with reduced mobility.

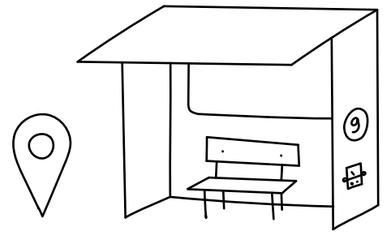
Actions of the municipality

✓	Study of the redevelopment of av. de Lavaux with a strong urban public transport axis by transforming the current TL line 9 into a “high level of service bus”.	**Ongoing**
✓	Subsidized or free bus passes for young trainees	**Permanent**
✓	Continue to upgrade bus stops to improve accessibility and convenience, especially for people with reduced mobility.	**Ongoing**



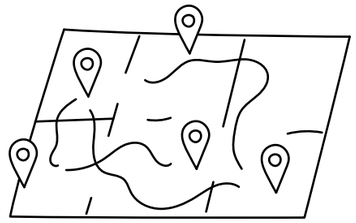
Public transport network convenience

99.98 %	of inhabitants lived within 500 m or less of a station or stop in 2021 — *99.9 % in 2016* →
⟿	100 % (estimate)
⁘	Measured at local level
⊕	U4SSC indicator



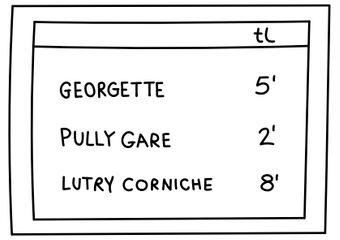
Distance to nearest transit stop

129 m	mean direct-line distance between residence and nearest transit stop in 2021
⟿	150.4m (average for cities participating in Cercle indicateurs, 2019)
⁘	Measured at local level
✚	Cercle indicateurs



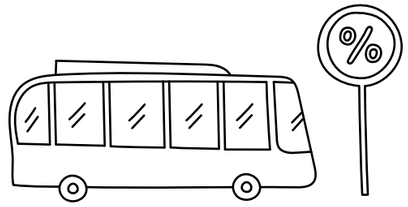
Public transport network

21 km	transit lines, for 19 000 inhabitants of Pully in 2021 — *24 km in 2016* ↘
≡	112.58 km per 100 000 inhabitants
⟿	26 km for 19 000 inhabitants (Pully municipality)
⁘	Measured at local level
⊕	U4SSC indicator



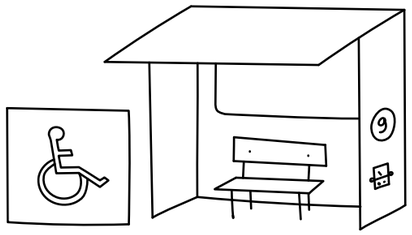
Dynamic public transport information

100 %	of stops and stations had a dynamic information system in 2021 — *100 % in 2016* →
⟿	100 % (estimate)
⁘	Measured at local level
⊕	U4SSC indicator



Transit use

24 612	mean daily number of passengers embarking/ disembarking in 2022
—	Target figure not available
⁘	Measured at local level
⛉	Local indicator



Bus stop accessibility for persons with reduced mobility

11.24 %	of bus stops were accessible for persons with reduced mobility in 2021
◎⟪	100 % (LHand)
⁘	Measured at local level
⛉	Local indicator

Transport

MODE OF TRANSPORT

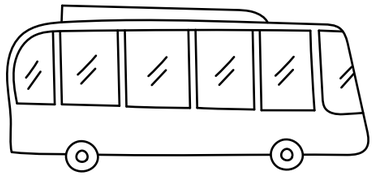
Compared with the rest of the country, the modal share of private motor vehicles is high. It actually increased in 2021, while that of public transport decreased. Several studies point to the effects of COVID as the explanation for this temporary jump in the propensity to use individual motor transport. The modal share of walking and cycling also went up, but remained significantly below the national average. There are no data on the share of paratransit.

Actions of the municipality

✓	Promote walking by building sidewalks	**Ongoing**
✓	In-road renovation projects, use a multimodal approach: facilitate people's recourse to buses, to cycling and to walking.	**Ongoing**

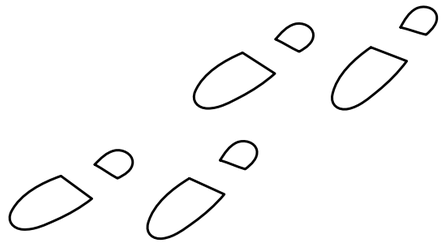
Private vehicle

73.5 %	of distance travelled in 2021 was by private vehicle — *69 % in 2016* ↗
⇜⇝	55 % (Swiss average, OFS, 2021)
	Measured at regional level
	U4SSC indicator



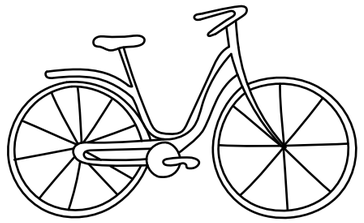
Public transport

18 %	of distance travelled in 2021 was by public transport — *24 % in 2016* ↘
⇜⇝	27 % (Swiss average, OFS, 2021)
	Measured at regional level
	U4SSC indicator



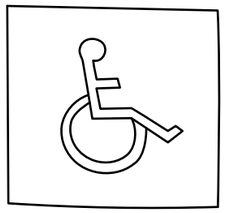
Walking

5 %	of distance travelled in 2021 was on foot — *2 % in 2016* ↗
⇜⇝	9 % (Swiss average, OFS, 2021)
	Measured at regional level
	U4SSC indicator



Cycling

2.5 %	of distance travelled in 2021 was by bicycle — *1 % in 2016* ↗
⇜⇝	9 % (Swiss average, OFS, 2021)
	Measured at regional level
	U4SSC indicator



Paratransit

—	Score not available for this indicator
—	Target figure not available
—	Not measured
	U4SSC indicator

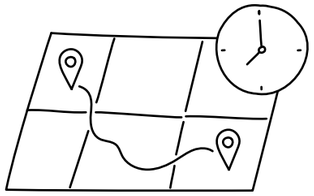
Transport

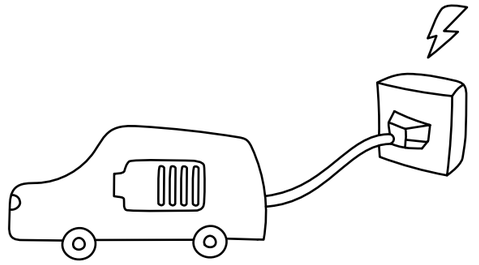
TRAFFIC FLOW, MOBILITY SHARING, LOW-CARBON MOBILITY

The travel time index for Pully shows that traffic is generally uncongested. The number of cars for the population is slightly below the average for the canton. The proportion of low carbon emission passenger vehicles (fully electric and rechargeable hybrid) is progressing greatly. In absolute terms, however, vehicles with high carbon emissions continue to dominate. The availability of vehicle sharing is stable, but well below the threshold value.

Actions of the municipality

✓	Subsidization of 83 private charging stations under the “Ecowatt” programme	**Completed**
✓	Subsidization of 32 private electric vehicles under the “Ecowatt” programme	**Completed**
✓	Subsidization of 46 Mobility memberships under the “Ecowatt” programme	**Completed**
✓	Acquisition of 14 electric vehicles for the municipality	**Completed**



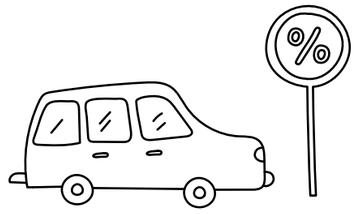


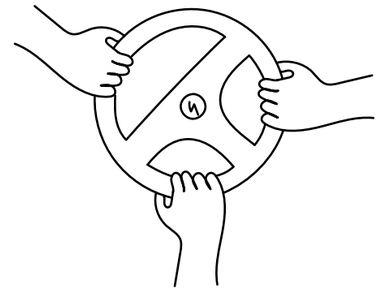
Travel time index

1.41	ratio of travel time during peak period to travel time in free flow, in 2021 — *1.14 in 2016* ↗
1.5	1.5 (< 1.5 = good; between 1.5 and 2.5 = acceptable; > 2.5 = less desirable) (UIT)
	Measured at local level
	U4SSC indicator

Low carbon emission passenger vehicles

3.45 %	percentage of registered passenger vehicles with low carbon emission performance in 2021 — *0.2 % in 2016* ↗
	100 % (estimate)
	Measured at local level
	U4SSC indicator





Number of cars

480	passenger vehicles registered in Pully per 1000 inhabitants in 2021 (OFS)
	520 (average for the canton of Vaud, 2021)
	Measured at local level
	Local indicator

Shared vehicles

8	shared vehicles for 19 000 inhabitants of Pully in 2021 — *9 in 2016* ↘
	42 shared vehicles per 100 000 inhabitants
—	Target figure not available
	Measured at local level
	U4SSC indicator

“The city is working to promote soft mobility, including walking and cycling, by improving public spaces with benches, water fountains, shading, reduced-speed zones in residential areas, bike paths, and a high-quality bus service.”

Marc Zolliker
City Councillor in charge of the Directorate of Technical Office and Industrial Services

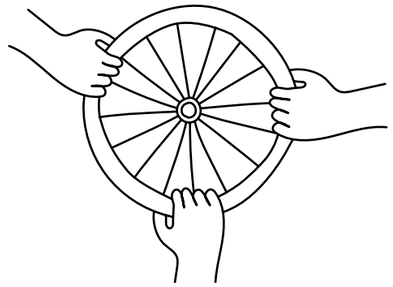
Transport

SOFT MOBILITY

An initial project to offer free bicycle use was set up in 2023. Cycling infrastructure has doubled in Pully since 2016. It consists essentially of (contra-flow) cycle lanes, and traffic calming areas. Currently Pully does not have any dedicated bicycle routes built away from motor vehicle roads. The indicator “Bicycle path network” was therefore taken broadly as including all types of infrastructure designed for bicycles. A total of 259 bike parking spaces are available.

Actions of the municipality

✓	Construct/expand spaces for parking bikes	**Planned**
✓	Create two free bike stations	**Completed**
✓	Continue visioning exercise for soft mobility (led by SDEL)	**Ongoing**

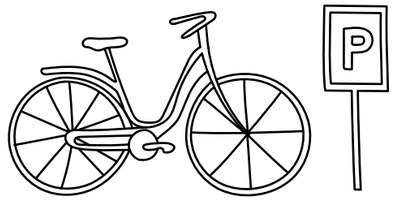


Shared bicycles

0	shared bicycles for 19 000 inhabitants in Pully in 2021 — *0 in 2016* →
≡	0 shared bicycles per 100 000 inhabitants
⟵〰	93 bicycles for the 19 000 inhabitants by 2030 (Pully municipality)
	Measured at local level
	U4SSC indicator

Bicycle path network

8.5 km	bike lanes for 19 000 inhabitants in Pully in 2021 — *4.5 km in 2016* ↗
≡	45 km of bike lanes per 100 000 inhabitants
⟵〰	9.3 km for the 19 000 inhabitants by 2030 (Pully municipality)
	Measured at local level
	U4SSC indicator



Bike parking spaces

259	bike parking spaces in 2021
—	Target figure not available
	Measured at local level
	Local indicator

Free bike service

In 2023 the stations Pully and Pully-Nord were each equipped with stations for free bikes (roughly 10 bikes each). It is planned to scale the service up in the coming years.

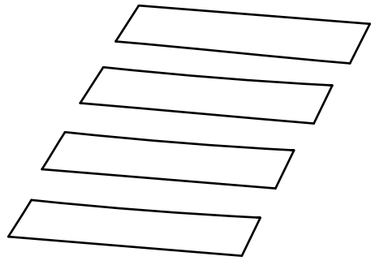
Urban planning

CONDITION

In recent years new pedestrian areas and footpaths have been constructed, particularly in connection with the reconstruction of the railway bridge at Prieuré. The proportion of traffic calming areas is slightly higher than the average for cities participating in the Cercle indicateurs. The condition of 91% of the roadway is moderate to good. The capital work approved in 2021 for buried services (water, sewage, electricity) made it possible to cover 94% of the depreciation.

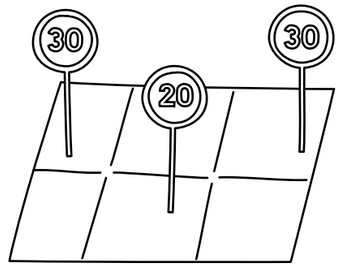
Actions of the municipality

✓	Carry out a study on private parking	**Ongoing**
✓	Replacement of the wearing course, renewal of roadways and sidewalks in poor condition	**Permanent**



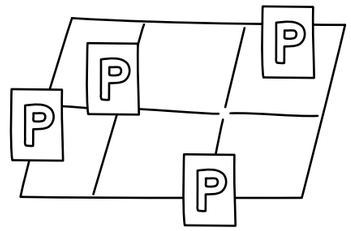
Pedestrian infrastructure

3.03%	pedestrian areas as a fraction of the city's surface area, as of 2021 — *2.9% in 2016* ↗
—	Target figure not available
	Measured at local level
	U4SSC indicator



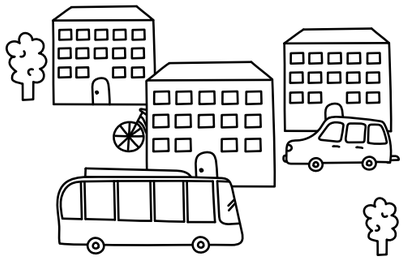
Traffic calming areas

57.4%	traffic calming areas (30 km/h speed limit, mixed pedestrian-vehicle zones, pedestrian-only zones) out of total length of city roadway in 2021
⟵〰	56.6% (average for cities participating in Cercle indicateurs, 2019)
	Measured at local level
	Cercle indicateurs



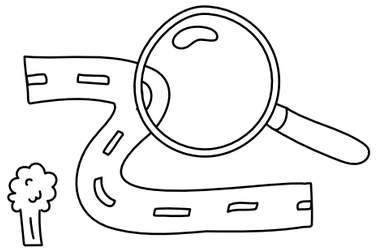
Parking survey

—	Score not available for this indicator
—	Target figure not available
	Measured at local level
	Local indicator



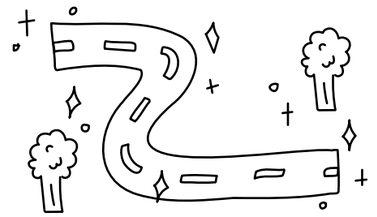
Number of visitors in city centre

8569	persons per day in 2023
—	Target figure not available
	Measured at local level
	Local indicator



State of the road grid

91%	of the road grid was in moderate to good condition in 2021
⟵◎	95% (Pully municipality)
	Measured at local level
	Local indicator



Preventing service grid deterioration

94%	of grid value was maintained during the five years up to 2021
⟵◎	100% (Pully municipality)
	Measured at local level
	Local indicator

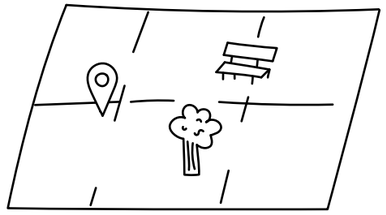
Urban planning

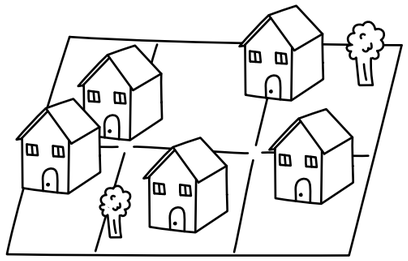
LEGAL FRAMEWORK

The city's master development plan and its zoning plan, dating back three decades, are being updated to serve as guidelines for the next few decades. Pending the promulgation of those plans, a Reserved Zone has been created covering the entire territory of the city, which rules out any increase in urban density and imposes a restriction on new construction, which must ensure that at least 50 % of the land surface remains unsealed. The constructed surface per inhabitant is just one half of the average for the canton, mainly due to the absence of major industry, business and shopping zones.

Actions of the municipality

✓	Revise the city's master development plan and zoning plan	**Ongoing**





Urban development and spatial planning

Yes	the different plans were available in 2021 — *"Yes" in 2016* ↘
◎⟵«	Yes (LAT)
⁘	Measured at local level
⊕	U4SSC indicator

Constructed surface

178 m²	surface per person devoted to habitat and infrastructure between 2013 and 2018
⟵〰	386 m² per person (average for the canton of Vaud, 2021)
⁘	Measured at local level
✪	Cercle indicateurs

"The current zoning plan dates back to 1954, and is clearly in need of a complete overhaul. Today we are facing a variety of complex issues, and urban planning must address the needs, current and future, of our population."

Lucas Girardet
City Councillor in charge of the Directorate of Urban Planning and the Environment

Participatory redesign of Place Neuve

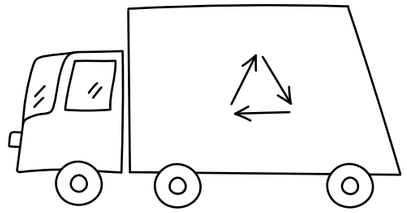
This is a project involving citizen participation to redesign Place Neuve, making it more welcoming and attractive. It should also help find solutions for combatting urban hot spots.

Waste

The city is served by a public waste collection and recycling system. Collection takes place both curb-side and via centralized waste deposit facilities (ecopoints and waste collection centres). Two ecopoints have recently been renovated, one in the chemin des Vignes, in front of Mallieu school, and one to the north of the Val-Vert traffic circle, at the bottom of the chemin des Bouvreuils. For public events, re usable dishes were introduced in 2021.

Actions of the municipality

✓	Renovation of ecopoints in the chemin des Vignes and Boulevard de la Forêt	**Completed**
✓	Deployment of electric-powered street sweepers	**Ongoing**



Solid waste collection

100 %	of households were served by waste collection in 2021 — *100 % in 2016* →
	100 % (LPE)
	Measured at local level
	U4SSC indicator

Reusable dishes for events

The municipality acquired a set of reusable dishes (glasses, jugs etc.) for events. These are being used for holiday events including the national day on 1 August, and are made available to sports clubs etc. for rental for private events. Since 2024, the use of single-use plastic tableware has been banned for all events.

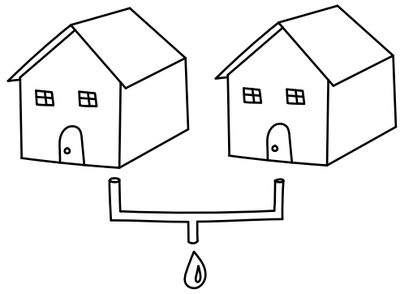
Water and sanitation

DRINKING WATER NETWORK

Every household in the city is supplied with drinking water. Ongoing capital maintenance is required to avoid depreciation of the buried piping systems: replacing aging sections of pipe, reducing water pressure, monitoring for leaks with a network of sensors. These efforts are bearing fruit: leaks in the drinking water network decreased by four percentage points between 2016 and 2021, nearly reaching the target value of 7 %.

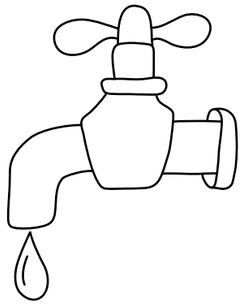
Actions of the municipality

✓	Renew buried system components to minimize leaks	**Permanent**
✓	Install fixed leak detection system	**Completed**



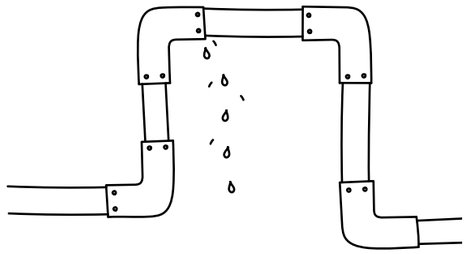
Basic water supply

100 %	of inhabitants had access to water in 2021 — *100 % in 2016* →
	100 % (LEaux)
	Measured at local level
	U4SSC indicator



Potable water supply

100 %	of inhabitants had access to drinking water in 2021 — *100 % in 2016* →
	100 % (LEaux)
	Measured at local level
	U4SSC indicator



Water supply loss

7.5 %	average loss of water in the distribution network in 2021 and 2022 — *11 % in 2016* ↘
	7 % (Pully municipality)
	Measured at local level
	U4SSC indicator

“It is encouraging to see the improvements that have been brought about as a result of the upgrading of services. Eliminating leaks in the water supply and strengthening the segregation of the drainage basins has reduced the spillover of wastewater into rivers and into the lake.”

Marc Zolliker
City Councillor in charge of the Directorate of Technical Office and Industrial Services

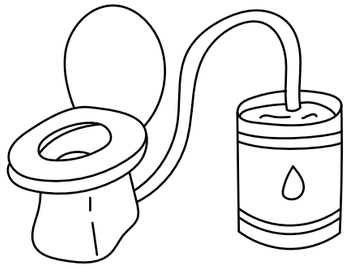
Water and sanitation

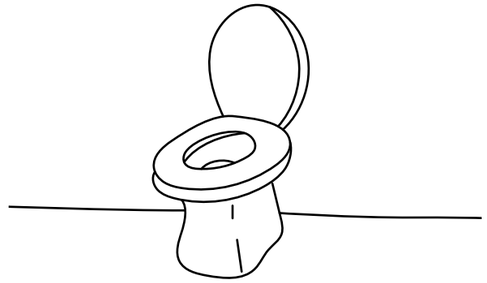
WASTEWATER EVACUATION NETWORKS

Every household in the city is connected to the wastewater evacuation network, which discharges into a wastewater treatment plant. Thanks to the segregation of the drainage systems, it is possible to evacuate wastewater separately from the runoff (effective separation of 58 % in the network).

Actions of the municipality

✓	Implementation of segregation in the drainage systems	**Ongoing**





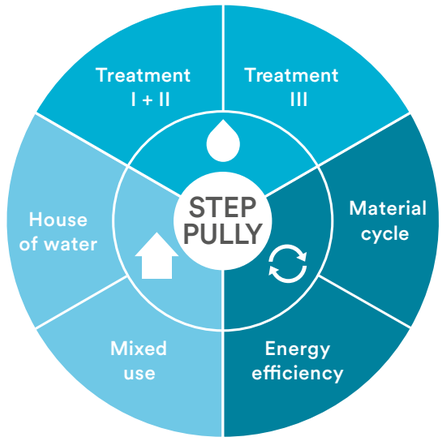
Wastewater collection

100 %	of wastewater was collected and processed in a STEP in 2021 — *100 % in 2016* →
	100 % (LEaux)
	Measured at local level
	U4SSC indicator

Household sanitation

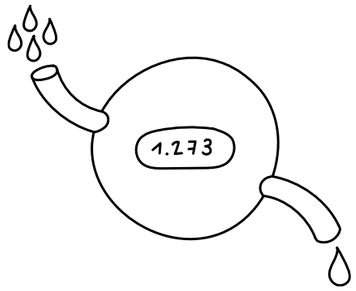
100 %	of households had sanitary facilities in 2021 — *100 % in 2016* →
	100 % (LPEP)
	Measured at local level
	U4SSC indicator

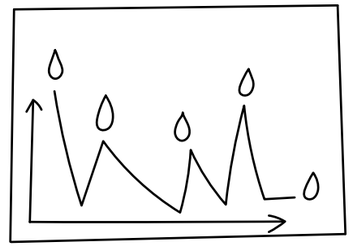
Rehabilitation of the wastewater treatment plant



The purpose of this project is to modernize and adapt the existing wastewater treatment plant so as to meet the current and future needs of the municipalities of Pully, Paudex and Belmont. Specifically, the existing treatment processes are complemented with treatments for nitrogen and micropollutants. Furthermore, there is provision for recovering some of the substances extracted from the wastewater. An important objective is energy efficiency, achieved by relying on less energy-intensive processes and using the heat and combustible gas released by the wastewater to produce energy. Finally, the new facility will be equipped with a parking lot and a “House of water” for visits and public sessions on the water cycle and sustainability.

Water and sanitation





Smart water meters

0 %	of water meters were smart meters (supporting remote reading) in 2021 — *0 % in 2016* →
—	Target figure not available
	Measured at local level
	U4SSC indicator

Water supply ICT monitoring

100 %	of water network monitored by ICT systems in 2021 — *94 % in 2016* ↗
	100 % (estimate)
	Measured at local level
	U4SSC indicator

MONITORING SYSTEM

The sensor-based leak detection system (ICT system) installed on the drinking water system now covers the entire network, and leaks have been reduced. However, households have still not been equipped with remote reading smart meters.

Actions of the municipality

✓	Study of deployment of remote reading water meters	**Ongoing**

CONCLUSION

Summary by the municipality

The municipality is gratified to see that the targets and statistical benchmarks (mean values) have been reached in more than 85 % of the categories with a performance that can be considered as good to very good. Equally important, not a single category is assessed as unsatisfactory. Comments on some of the identified trends among the 164 indicators are given below.

Strengths

- The amount of electricity used for public lighting is 35 % below the maximum value recommended by Cités de l'énergie (p. 25)
- Drinking water use is 27 % below the Swiss average (p. 41)
- Sport facilities/infrastructure are being used at full capacity (p. 49)
- The proportion of the population having a tertiary level of education (university degree or advanced vocational diploma) is more than 50 % above the Swiss average (p. 51)
- The Pully administration respects salary equity (p. 83)
- Taxable income is 39 % above the mean for cities in the Cercle indicateurs initiative (p. 85)
- Infrastructure (roads and buried services) are being maintained at 94 % of their value (p. 107)

Room for improvement

Three categories are scored as satisfactory, and call for vigilance: energy, buildings and drainage. Examples:

- Energy consumption for public buildings is nearly three times that specified in the SIA standard (p. 29)
- The total contribution of fossil energy to municipal buildings is more than three times the target that territorial energy planning has set for 2035 (p. 29)
- Only one per cent of public buildings is in compliance with a recognized energy standard, e.g. Minergie (p. 75)
- Work is required on 42 % of drainage basins to achieve compliance with the requirement to segregate wastewater from rainwater runoff (p. 77)

In addition to these three categories, here are some individual indicators that would benefit from additional efforts:

- Direct greenhouse gas emissions would need to come down by nearly 50 % to reach the objective for 2030 at the national level (p. 23)
- Residential vacancies are at less than 40 % of the recommended level (p. 59)
- The capital investment capacity of the city is only approximately one fifth of the assessed needs (p. 85)
- Bus stop accessibility for persons with reduced mobility is only approximately one tenth of the legal requirement (p. 99)
- The use of bicycles for mobility purposes is only approximately one third of the national mean (p. 101)

Changes between 2016 and 2021

The first publication of "Pully under the microscope" already used the ITU indicators, so it is possible to make comparisons between the measurements in 2016 and those in 2021. The comparison shows that performance improved for 40 % of the indicators, remained stable for 31 %, and worsened for 16 %. It was not possible to obtain data for 12 % of the indicators.

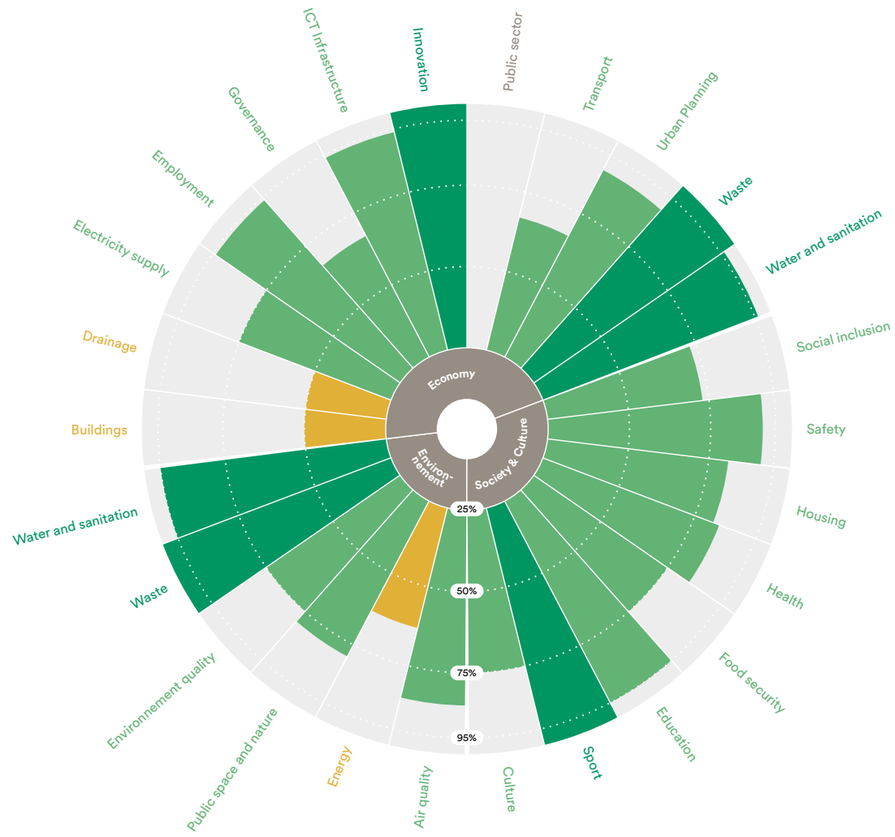
Noteworthy improvements included:

- Electricity consumption diminished by 11 % (p. 25)
- The proportion of renewables in electric energy increased from 60 % to nearly 100 % (p. 27)
- Income equity between men and women, as measured at the regional level, increased from 84 % to 94 % (median salary earned by women versus that earned by a man doing the same work) (p. 67)
- Fixed broadband subscriptions nearly doubled, reaching 83 % of connected households (p. 89)
- Four new services were added to the e-government catalogue (p. 95)
- Water supply loss (drinking water) decreased by 4 % (p. 113)

Where performance worsened, the reason is generally small variations, such as with secondary treatment of wastewater, or high-level policy decisions, as with the number of hospital beds. Some variations are essentially spurious:

- Childcare availability decreased mainly as a result of the closure of two private establishments, one of which is being taken over by the city, and the fact that the population has grown (p. 71)
- The impact of COVID led to a spike in the use of private motor vehicles and a drop in the use of public transport (p. 101)

Finally, it should be noted that, while meeting an objective in terms of infrastructure or service requires significant investment of capital, so does the subsequent phase of operating the infrastructure or service and maintaining its condition.



Achievement of targets by indicator category

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Discussion

The municipality decided to discuss the results through nine questions, as detailed below.

Question 1
Do the indicators reflect the realities of the city?

The general aim of indicators is to provide a simplified, quantifiable representation of a city's complex reality, in order to make that reality more understandable and accessible. In this way, they provide an objective and clear basis for reflection, decision-making and the implementation of public policies. These tools make it easier to identify priorities and monitor progress. The indicators produced by the U4SSC and Cercle Indicateurs initiatives have been developed using tried-and-tested methods by specialists from the UN, the Swiss Federal Statistical Office (OFS) and the Swiss Federal Office for Spatial Development (ARE). The Pully city indicators were mostly taken from the management report and the management tools used by the municipal administration and its various departments and services. So they can be considered representative. However, a city is a complex system, so the number of indicators is not set in stone. In choosing which ones to use, the municipality had to weigh off the desire to achieve results that would be truly representative for the issues that are important for the city, and the resources that could be mobilized to perform the measurements.

Question 2
What is the quality of the indicators?

As far as possible, indicator data is taken from official statistics at the national or cantonal level, and from data in management reports; these figures can be considered reliable. However, how representative an indicator is depends greatly on the level at which it is measured. There are four scenarios:

①
Data for the indicator are obtained at the level of the city of Pully, and can confidently be considered as representative. This is the case for 81% of the indicators.

②
For some indicators, it makes more sense to use canton-level data rather than city-level. This is the case for the number of in-patient hospital beds, for example, which is treated at the cantonal level. These indicators can therefore be considered as representative as well.

③
For a few indicators, although it would be preferable to obtain data at the city level, this is not possible, for one reason or another. In those cases, data is sourced from regional or national-level statistics:
- regional level: this is the case for the indicator for *Housing expenditure;*
- national level: this is the case for the indicator for *Direct greenhouse gas emissions.*

At the city level, this gives only an approximation; but it accurately reflects the situation at the higher level. When the source is regional-level data, which is the case for 9% of the indicators, it can be considered to be moderately representative; when the source is national-level data, which is the case for 6%, it is only weakly representative.

④
Indicator data are not available at all. This is the case for 4% of the indicators, including, for example, Sulphur dioxide concentration (SO_2).

Question 3
What is the significance of the targets?

The indicators of U4SSC and the Cercle indicateurs do not recommend a target value. They are like a medical thermometer, which provides useful information — the body temperature — without specifying that 37 degrees Celsius is necessary for good health.

The city of Pully has therefore reviewed the targets, based on laws, statutes and regulations. Failing a target, a benchmark is defined that reflects relevant statistics or estimates.

Question 4
Does the U4SSC initiative take account of local, regional and national characteristics?

The U4SSC initiative provides a set of indicators that were designed to be applied to a great variety of cities, differing in terms of size, environment, politics, culture and other local, regional or national characteristics.

For an illustration, consider the indicator Availability of Wi-Fi in public areas, which is intended to give a measure of the availability of universal and affordable access to the Internet. In Pully's case, the city actually discontinued the provision of public Wi-Fi recently. This is because the excellent quality of nation-wide coverage with 4G and 5G, and the great popularity of wireless subscriptions with unlimited Internet access, has essentially eliminated the demand for public Wi-Fi. The indicator is thus of no significance for Pully; but it may remain relevant for a city that attracts tourist traffic, such as Geneva.

To ensure that the national and the local level are reflected, this issue of "Pully under the microscope" has been complemented with indicator sets drawn from the Cercle indicateurs and those created by the Pully administration.

Question 5
How should changes between 2016 and 2021 be interpreted?

For some of the indicators, the objective may be to reach 100%; for others, 0%. An example of the former is Adult literacy; the latter, Noise exposure.

So the fact that the measurement for a particular indicator increased or decreased between 2016 and 2019 cannot be interpreted automatically as being positive or negative.

The methodology includes, for each target, the desired direction of change, so that the change from 2016 to 2019 can be evaluated. For an illustration, see the wheel that presents the degree of success in reaching the targets and the trends for the U4SSC indicators (p. 15)

Question 6
Does the city really have full control over all the indicators?

No. Although the majority of the indicators concern issues that lie within the power of the city, some depend on the canton, including *In-patient hospital beds*, or the confederation, such as *Household Internet access.*

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Question 7
What insights can be drawn from an indicator for which the target value has been reached?

When the target value has been reached or surpassed for an indicator, it becomes an operational normality. However, it will continue to require resources if it is to continue being operational and performing. For example, Pully reached 100 % for Potable water supply. If that standard is to be maintained, the potable water system will require upkeep and renovation in the future; a standby service will have to be provided; and the network will have to be expanded as the population increases.

Consequently, it is important not to underestimate the cost of maintaining performance once an indicator objective has been achieved. In the words of the popular saying, “the hardest part is not reaching the summit, but remaining there.”

Question 8
Why is this report being published in 2024 when the reference year for measuring indicators is 2021?

Statistics offices typically require one or two years to collect, process and then publish official statistics after the end of the reference year. This report draws on data of which some did not become available until September 2023. To that must be added the time needed to draft and finish a publication such as this.

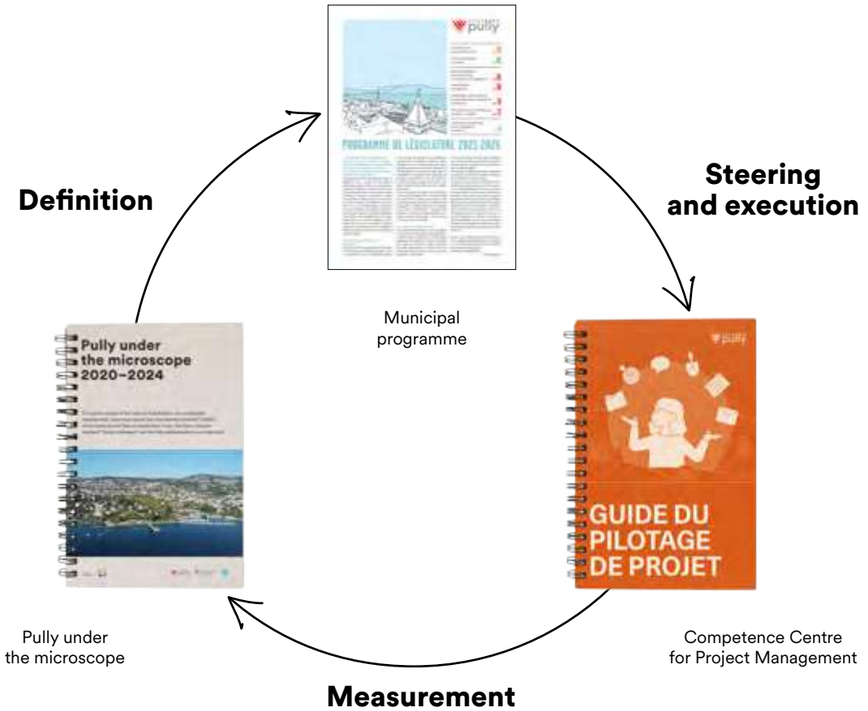
Furthermore, the figures given here concern medium- to long-term developments, which makes the delay between measurement of an indicator and its publication less critical.

Question 9
How can the publications “Pully under the microscope” be used as a management tool?

A municipal programme (programme de législature) is essentially a number of projects that are to be implemented in order to achieve certain political objectives during the five years following an election.

The municipality defines those projects for the administration, which then calls on the Competence Centre for Project Management to make project execution as effcient as possible, especially for projects that involve several different services and departements.

Each new legislative period is accompanied by an update of the indicators and a new version of the report, providing an up-to-date picture of the situation to inform the new municipal programme.



Process for execution of the municipal programme

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Conclusions

Strengths
The initiative U4SSC gives an overview of the diverse activities of a city, which is complemented by the national and local-level indicator sets, which were added to meet the municipality's need to address issues of local concern requiring short and medium-term management action. This second issue of the report also takes account of changes in the U4SSC indicators between 2016 and 2021.

Despite the addition of some 60 additional indicators, the work required to do them justice remains manageable. As a result, the report can be updated in under one year.

One of the strengths of the U4SSC initiative is that it treats ICTs, not as ends in themselves, but as tools for the achievement of the Sustainable Development Goals of the United Nations. A dialogue with some 15 UN agencies was needed to arrive at a consensus on the indicators to be incorporated so as to achieve SDG 11, "Sustainable cities and communities".

The U4SSC initiative is also part of qualification under the international standard ITU T Y.4903/L.1603. It provides a common reference for cities around the world. This method is a powerful means of exchanging ideas between cities for the purpose of identifying current best practices, pooling intellectual and financial resources, and thereby contributing to improving public services or even develop new ones.

Cercle indicateurs is led by the Swiss confederation, with active participation by cantons and municipalities to facilitate a common vision for the elaboration of the indicator set. Data collection is carried out by the Federal Office of Statistics (OFS), ensuring a high level of quality and reducing the workload on the municipalities.

The indicators contributed by Pully address current issues that are specific to the city.

This new edition allows the municipality to take a step back from its day-to-day activities and look at the big picture, and provides a management tool for its medium- and long-term actions. These indicators can be used in drawing up the next programme. Finally, for Pully this report is also a tool for communicating with the population, within the administration itself, with other cities, and with stakeholders at the cantonal, national and international levels.

Limitations and potential for improvement
First and foremost, it must be remembered that a set of indicators, like a map, is no more than a representation of the reality. In other words, for each indicator there is not only the thing that is being measured but also the bias in how it is measured. There are also elements that are not being measured, such as the percentage of residents who do not use Pully's sports facilities. It is, therefore, essential to cast a critical look at each of the indicators and to view them in the context of the city, region or country. Thus, the design of the indicator Availability of Wi-Fi in public areas suggests that the objective should be to have the greatest possible coverage by a public Wi-Fi network. But the demand for such coverage has diminished greatly in Switzerland, thanks to an excellent system of mobile phone coverage that provides fast Internet (4G and 5G). For this reason Pully has discontinued the service. As a result, the data for this indicator are misleading. That is why the indicator is no longer being used.

It is also true that the indicators do not measure the city's performance for aspects that have an impact beyond its territory. For example, the indicator Drinking water use improved considerably in recent decades, diminishing in 2021 to just 209 litres of water per inhabitant daily, significantly lower than the national average of 287 litres. In stark contrast, a report of the Confederation shows that the consumption of water by the Swiss, if one takes into account world-wide impact (i.e. external factors such as the amount of water used in the production of cotton for our imported clothes), is approximately 2000 litres per inhabitant daily.

Finally, it should be noted that none of these initiatives offer normalized target values, which creates difficulties for both comparing cities and defining the targets to be reached.

Concretely...
The publication of the present report aims to reinforce communication and exchange with the population, within the administration, with other cities, with stakeholders at the cantonal, national and international levels, and with the experts. These reflections will facilitate continual improvement in the way the indicators are measured and targets defined. This should also lead to the optimisation of the city management, the ultimate aim being to provide the inhabitants with ever more practical, efficient, user-friendly and human-scale services and benefits.

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The last word

Gil Reichen
Mayor in charge of the directorate of General Administration, Finance and Cultural Affairs

"The integration of local indicators with more global ones is a recognized method that has been crucial in turning this into an operational management tool. However, the currently unfavourable financial context remains a major challenge, with cantonal legislation restricting the city's autonomy. An important question remains: how to finance the numerous investments that will be required, in particular, how to cover them with the available revenues."

Lydia Masmejan
City councillor in charge of the directorate of estates, property management and sports

"Pully under the microscope gives an overview of the city's actions with objective information on the big picture. It gives us a clearer picture of our strengths and weaknesses, and therefore allow us to define our priorities. Past under-investment in building maintenance and renovation means that we need a significant effort to achieve compliance. The growing population also means that we will need new sports facilities to meet the increased demand."

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Lucas Girardet
City councillor in charge of the directorate of urban planning and the environment

"The indicators bring to light issues that go beyond the scope of individual Departments and Services. This gives us a broader view on subjects such as maintenance and renovation of municipal buildings, for example, and helps us address the questions in a more comprehensive and coherent manner."

Jean-Marc Chevallaz
City councillor in charge of the directorate of youth, social affairs and public safety

"Indicators provide a factual basis for assessing the situation at a specific juncture and track changes over time. Comparisons with other cities, at the national level, is a very informative exercise. 'Pully under the microscope' also shines a light on the work of the administration and ensures more transparency towards the population."

Marc Zolliker
City councillor in charge of the directorate of technical office and industrial services

"Reusing the indicator set that we had in the first edition of 'Pully under the microscope' in 2019 means that we have continuity between the reports, which makes it easier to evaluate the changes. The addition of some new indicators allows the city to engage its different departments and services in the evaluation process, and provides useful information for prioritizing projects."

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Lexicon of abbreviations and acronyms

ARE	Swiss Federal Office for Spatial Development
CCGP	Competence Center for Project Management
DAGF	Directorate of General Administration, Finance and Cultural Affairs of the City of Pully
DDGS	Directorate, of Areas, Building Agencies and Sport of the City of Pully
DETEC	Swiss Federal Department of the Environment, Transport, Energy and Communication
DJAS	Directorate of Youth, Social Affairs and Public Safety of the City of Pully
DTSI	Directorate of Industrial Services and Technical Office of the City of Pully
DUE	Directorate of Urban Planning and the Environment of the City of Pully
ElCom	Swiss Federal Electricity Commission
EPFL	Swiss Federal Institute of Technology in Lausanne
ICT	Information Communication Technologies
ISO	International Standards Organisation
ITU	International Telecommunication Union, a specialised agency of the United Nations (UN)
LaMal	Swiss Federal Health Insurance Law
LApEL	Swiss Federal Electricity Supply Law
LAT	Swiss Federal Land Use Planning Law
LDAl	Swiss Federal Law on Foodstuffs and Commodities
LEaux	Swiss Federal Water Protection Law
LEg	Swiss Federal Gender Equality Law
LEne	Swiss Federal Energy Law
LEO	Vaud Cantonal Law on Compulsory Education
LPE	Swiss Federal Environmental Protection Law
LPEP	Vaud Cantonal Law on the Protection of Waters against Pollution
LTC	Swiss Federal Telecommunications Law
OApEl	Swiss Federal Statute on Electricity Supply
OFEV	Swiss Federal Office of the Environment
OFS	Swiss Federal Office of Statistics
OFSP	Swiss Federal Office of Public Health
OLED	Swiss Federal Statute on the Limitation and Disposal of Waste
OPair	Swiss Federal Statute on Air Protection
OPB	Swiss Federal Statute on Noise Protection
ORNI	Swiss Federal Statute on the Protection Against Non-Ionising Radiation
PEL	East Lausanne Police
PDDE	Master Plan for the Distribution of Potable Water
SDGs	United Nations Sustainable Development Goals
SECO	Swiss Federal Economic Affairs Secretariat
SMEs	Small and Medium-Sized Enterprises
STATENT	Structural Business Statistics
STEP	Wastewater Treatment Plant
TEKSI	Association for the open source management of public infrastructures
U4SSC	United 4 Smart and Sustainable Cities
UNIL	University of Lausanne

ENVIRONMENT
- Air quality
- Energy
- Public space and nature
- Environmental quality
- Waste
- Water et sanitation

SOCIETY & CULTURE
- Culture
- Sport
- Education
- Food Security
- Health
- Housing
- Safety
- Social inclusion

ECONOMY
- Building
- Drainage
- Electricity supply
- Employment
- Governance
- TIC Infrastructure
- Innovation
- Public sector
- Transport
- Urban planning
- Waste
- Water et sanitation