

Implementation of the green solution in Polish Cities – challenges and possibilities

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POLISH CITIES IN NUMBERS

Total number: 954 cities

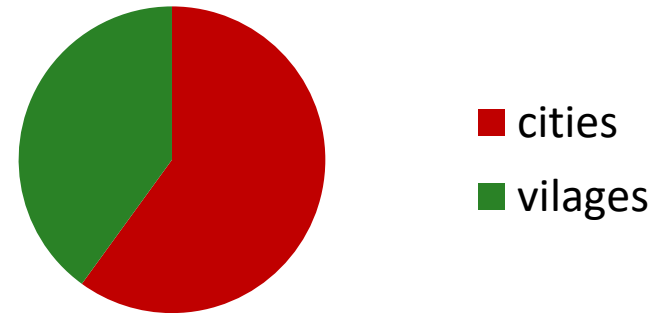
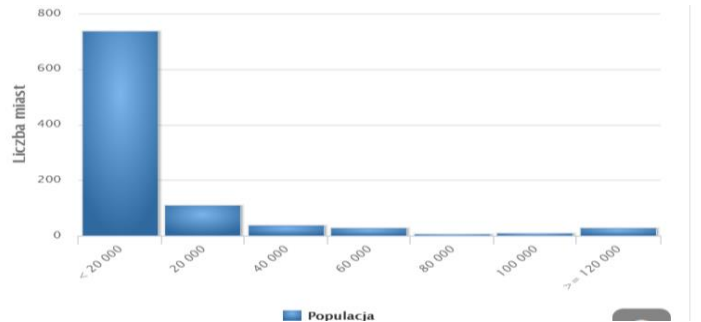
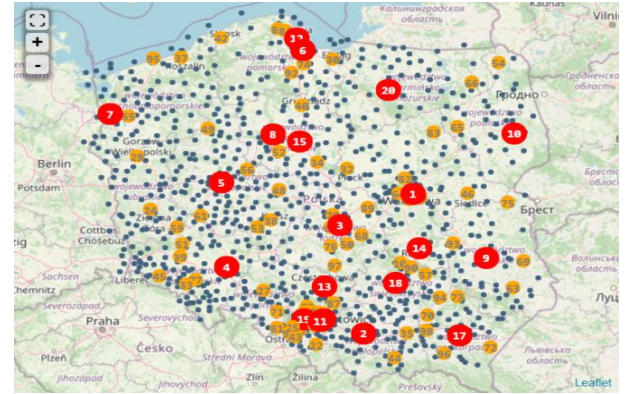
1 city with over 1 million inhabitants

4 cities with a population of 500 K to 999 999 inhabitants

33 cities with a population of 100 K to 499 K inhabitants

469 cities with a population of 20 K to 99 K inhabitants

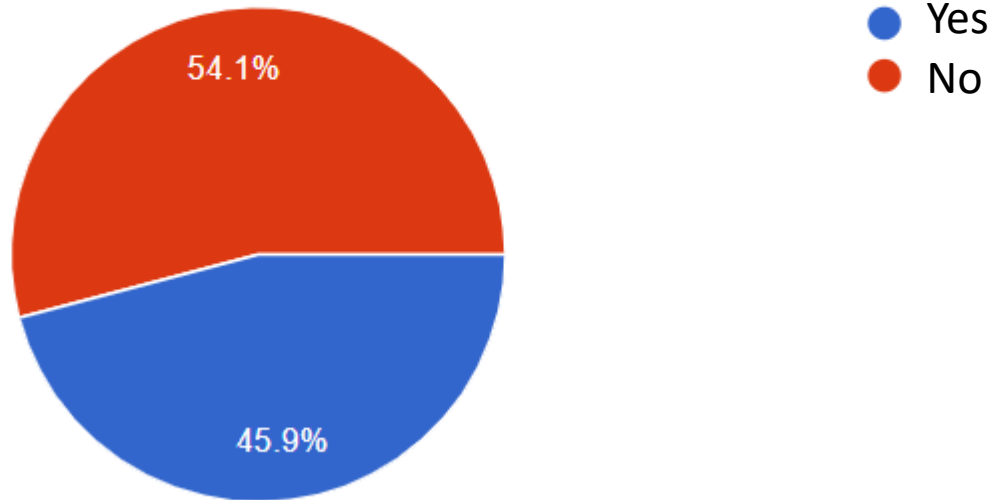
736 cities with a population not exceeding 20K inhabitants



based on data from the Central Statistical Office (GUS)

RESULTS OF A SURVEY CONDUCTED IN 2022 AMONG REPRESENTATIVES OF 244 POLISH CITIES

Are there activities in your city that support the development of green infrastructure?



Various types of green and blue infrastructure supported by municipalities in Poland

revitalization of urban greenery



green roofs and walls



increasing the area of urban greenery



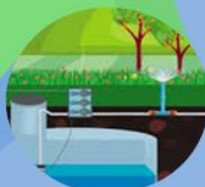
greenery on the balcony

planting trees and other plants



allotment gardens & community gardens

composting



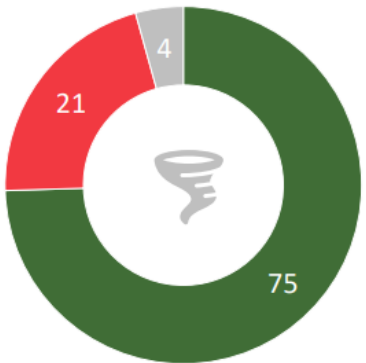
urban agriculture

rainwater retention

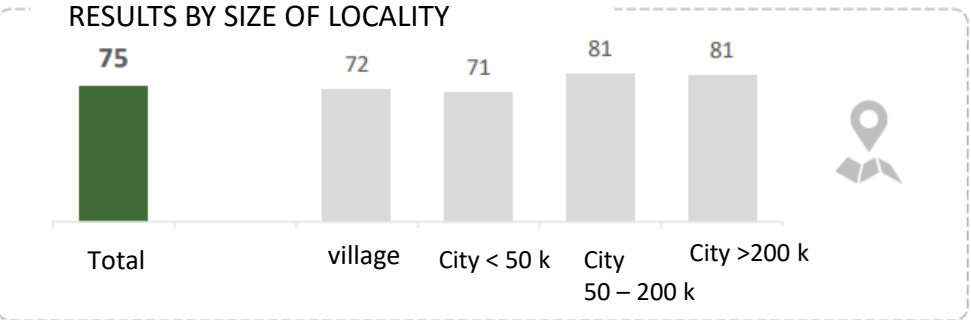
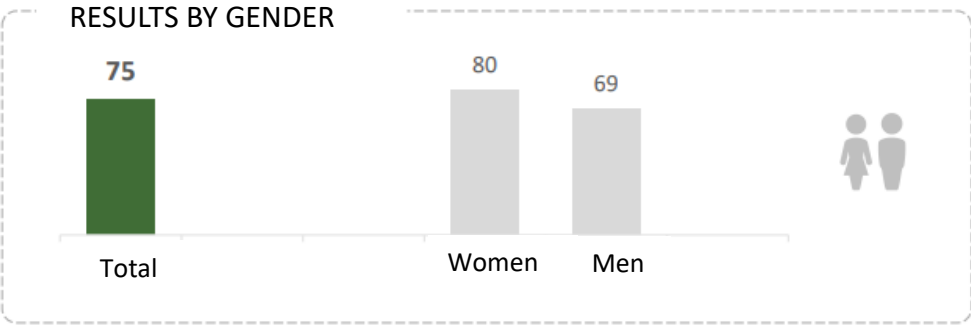
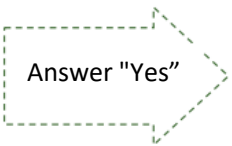


Do you think extreme weather events are more common now?

(single-choice question)



- Yes
- No
- Hard to say



Odpowiadający: wszyscy badani, n=1004. Ze względu na płeć: kobieta: n=519, mężczyzna: n=485. Ze względu na wielkość miejscowości: wieś: n=311, miasto do 50 tys.: n=222, miasto powyżej 50 do 200 tys.: n=172, miasto powyżej 200 tys.: n=286.

Dane w %

Where have you noticed a higher incidence of extreme weather events?

(single-choice question)



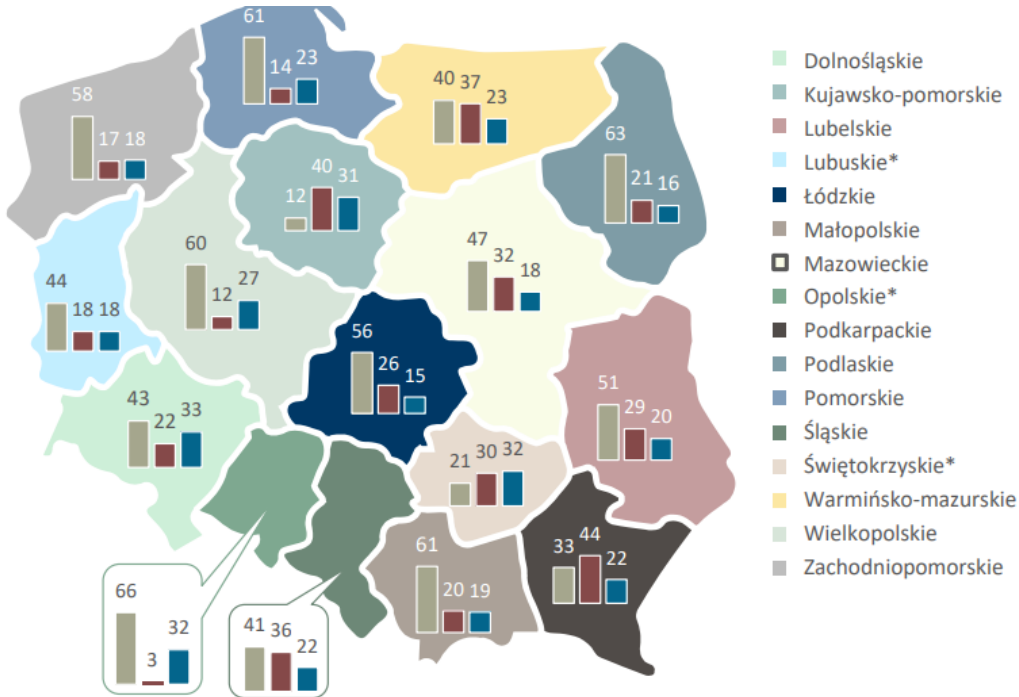
worldwide



in Poland



in my neighborhood



* mała liczebność - wyniki mają charakter jakościowy

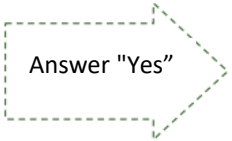
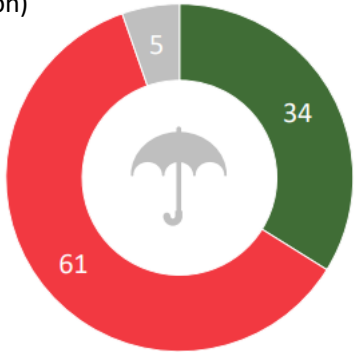
Odpowiadający: : badani, którzy uważają, że ekstremalne zjawiska pogodowe występują częściej n=762. Ze względu na województwo: dolnośląskie: n=58, kujawsko-pomorskie: n=35, lubelskie: n=37, **lubuskie: n=16**, łódzkie: n=38, małopolskie: n=60, mazowieckie: n=144, **opolskie: n=10**, podkarpackie: n=30, podlaskie: n=25, pomorskie: n=67, śląskie: n=82, **świętokrzyskie: n=19**, warmińsko-mazurskie: n=47, wielkopolskie: n=66, zachodniopomorskie: n=28.

Dane w %

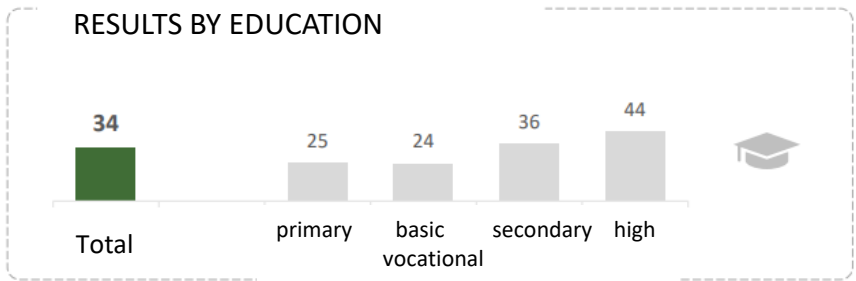
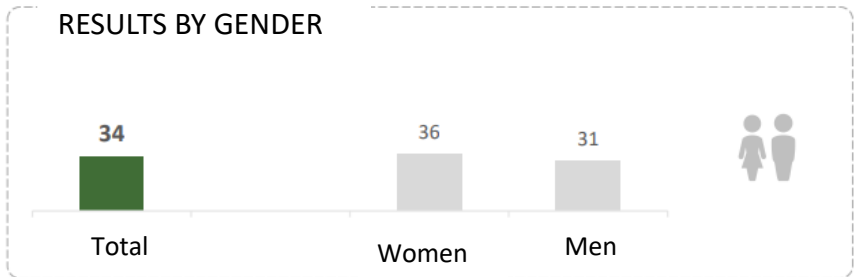
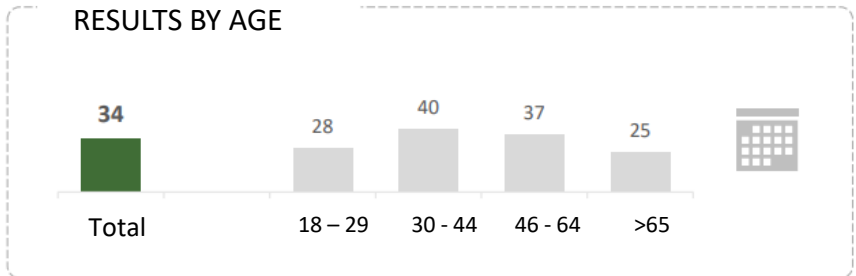


Whether you have personally taken any measures to reduce the effects of extreme weather events in the last 6 months

(single-choice question)



- Yes
- No
- don't know, hard to say

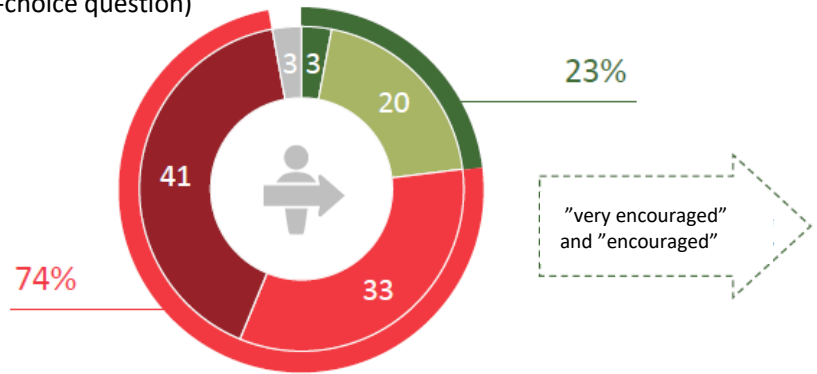


Odpowiadający: wszyscy badani, n=1004. Ze względu na wiek: 18-29 lat: n=188, 30-44 lat: n=283, 45-64 lat: n=317, 65 lat i więcej: n=210. Ze względu na płeć: kobieta: n=519, mężczyzna: n=485. Ze względu na wykształcenie: podstawowe, gimnazjalne: n=33, zasadnicze zawodowe: n=101, średnie: n=403, wyższe: n=465.

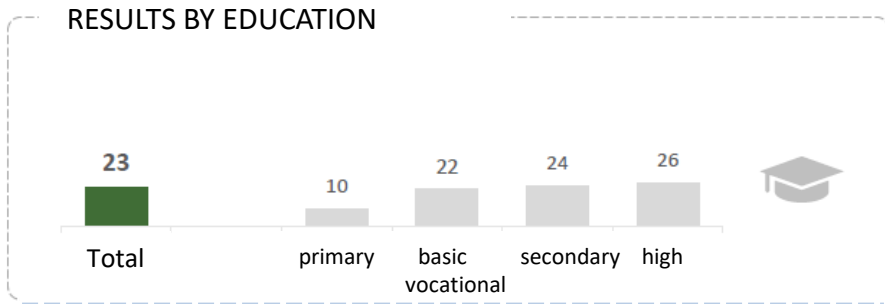
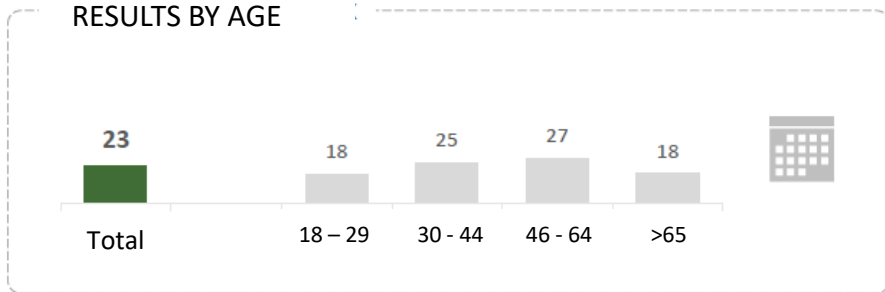
Dane w %

To what extent have you been encouraged by the municipality to join efforts to prevent the effects of climate change?

(single-choice question)



- very encouraged
- encouraged
- not encouraged
- not encouraged at all
- don't know, hard to say

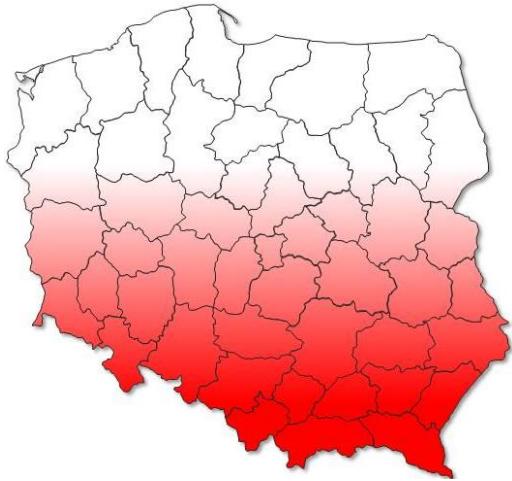


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Dane w %

Polish levels of support for building greening processes

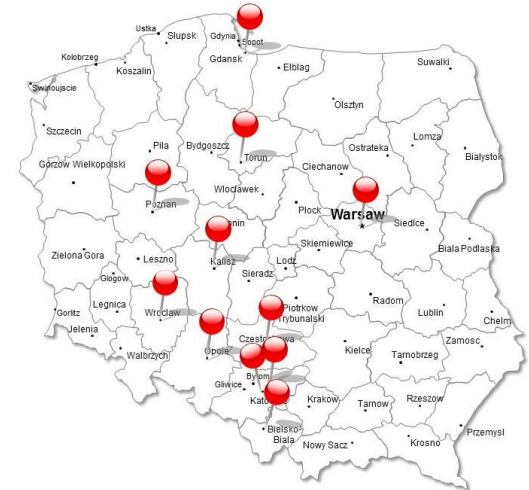
National



Regional



Cities



GREEN ROOFS - NATIONWIDE FORMS OF SUPPORT

Moja woda (my water)

1 July 2020 - opening of the call for proposals

December 2020 - PSDZ petition

Budżet programu to **100 000 000 zł**

Wsparcie **do 5000 zł** dla właścicieli budynków jednorodzinnych

Dotacje na instalacje do gromadzenia i retencjonowania wód opadowych i roztopowych

Wnioski należy składać do wojewódzkich funduszy ochrony środowiska i gospodarki wodnej (WFOŚiGW) **przed zakończeniem przedsięwzięcia**



Warunki dofinansowania:

- minimalny koszt kwalifikowany - **2000 zł**
- minimalna sumaryczna pojemność zbiornika/zbiorników - **2m³**
- maksymalny czas wypłaty dofinansowania - **do 12 miesięcy** od podjęcia decyzji przez WFOŚiGW

Korzyści z założenia zbiornika wodnego:

- **dostępność wody** w okresach suszy
- **ograniczenie podtopień** przy deszczach nawalnych
- **źródło dobrej wody** dla roślin
- **zmniejszenie opłat** za wodę i ścieki

Szczegóły naboru

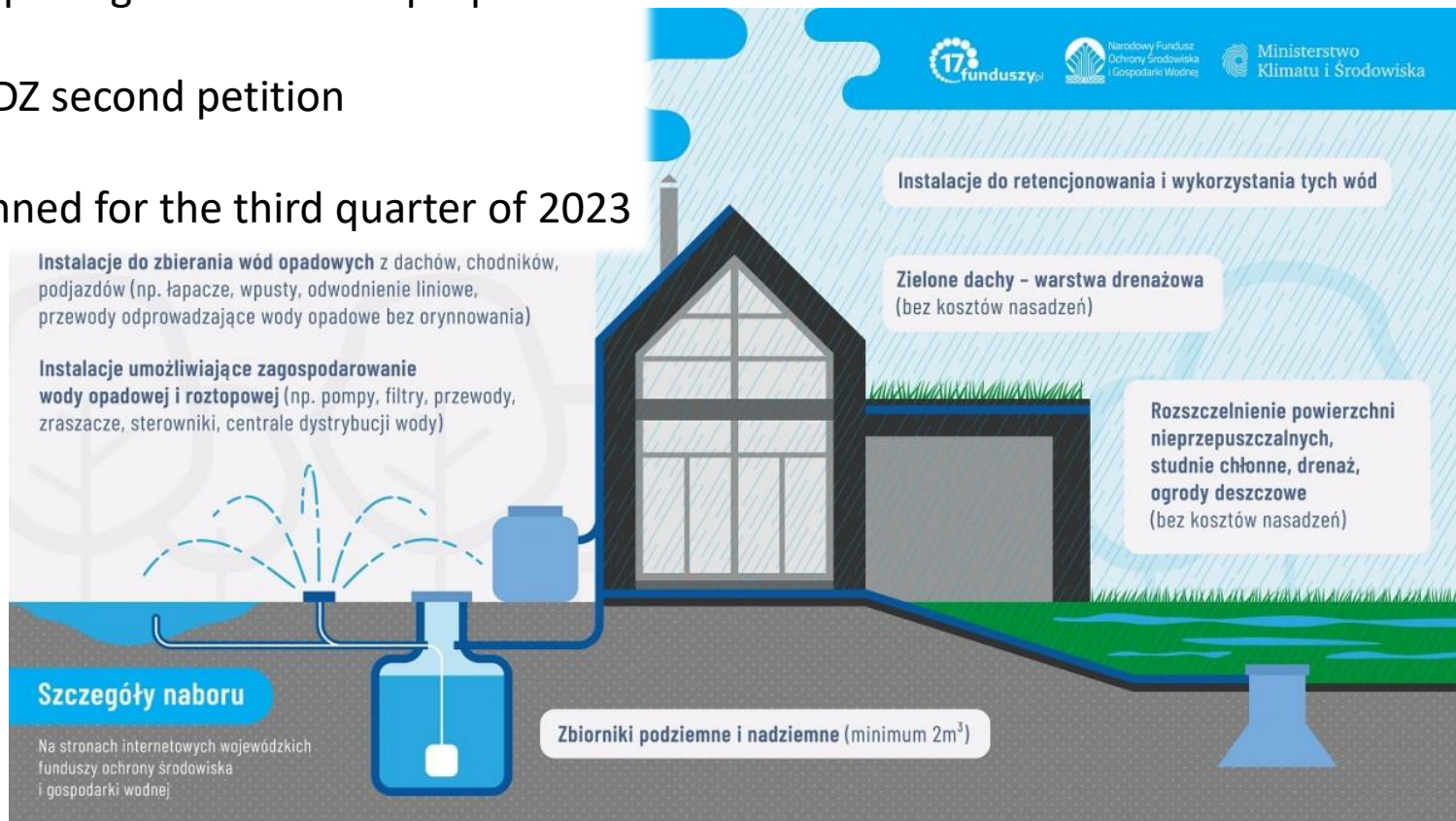
Na stronach internetowych wojewódzkich funduszy ochrony środowiska i gospodarki wodnej

Moja woda (my water) – second edition

22 March 2021 - opening of the call for proposals

January 2023 - PSDZ second petition

third edition - planned for the third quarter of 2023



Development of green infrastructure through support of allotment gardens (2022 – 2029)

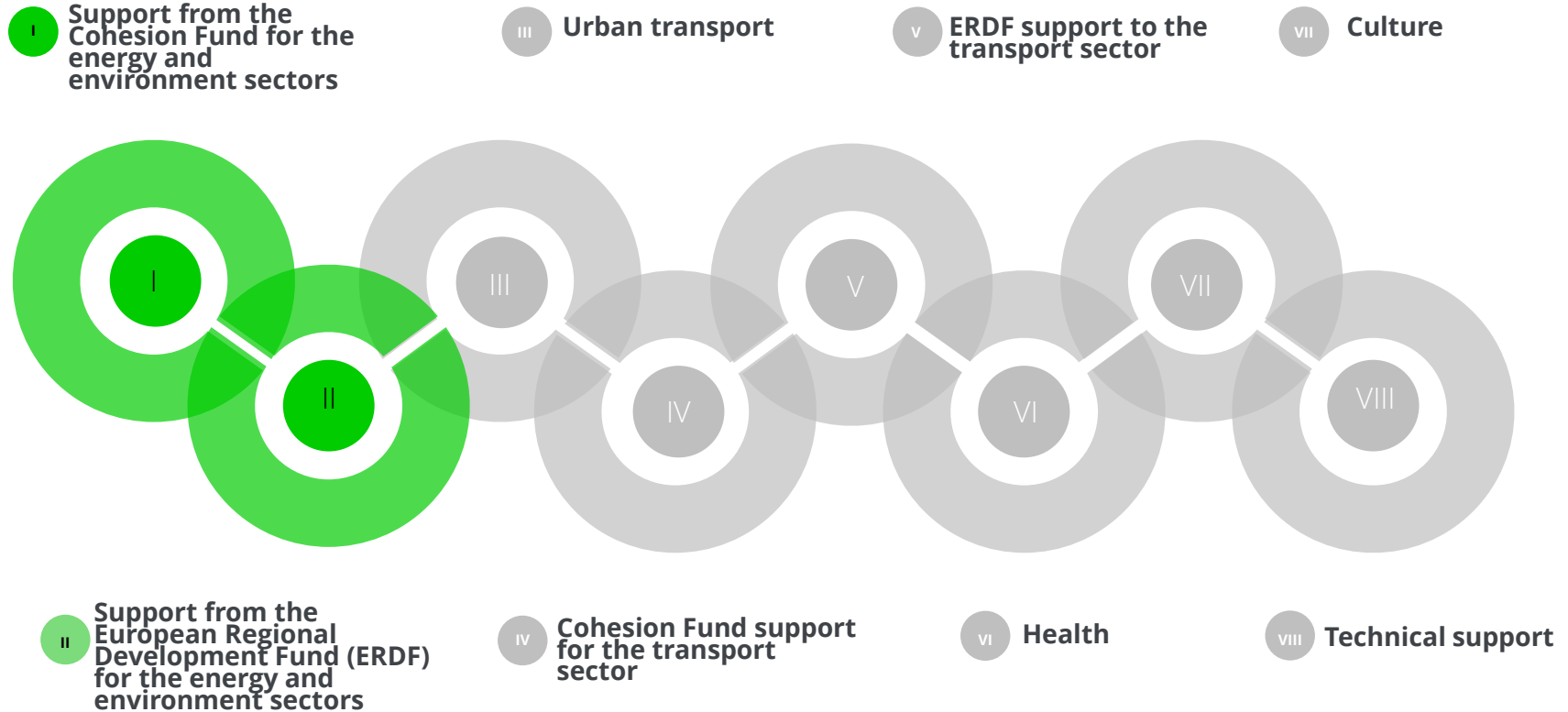


Rozwój zielonej infrastruktury poprzez wsparcie ogrodnów działkowych



source: https://stimeo-domki.pl/blog/15_rodzinne-ogrodki-dzialkowe-dla-poczatkujacych.html

FENIKS: low-carbon economy, environmental protection, climate change mitigation and adaptation, transportation investments, health and cultural heritage protection



Iceland
Liechtenstein
Norway grants

edition 2021:

- over 90 applications submitted
- funding for 19 applications
- all PSDZ applications accepted



+



Miasto Piastów

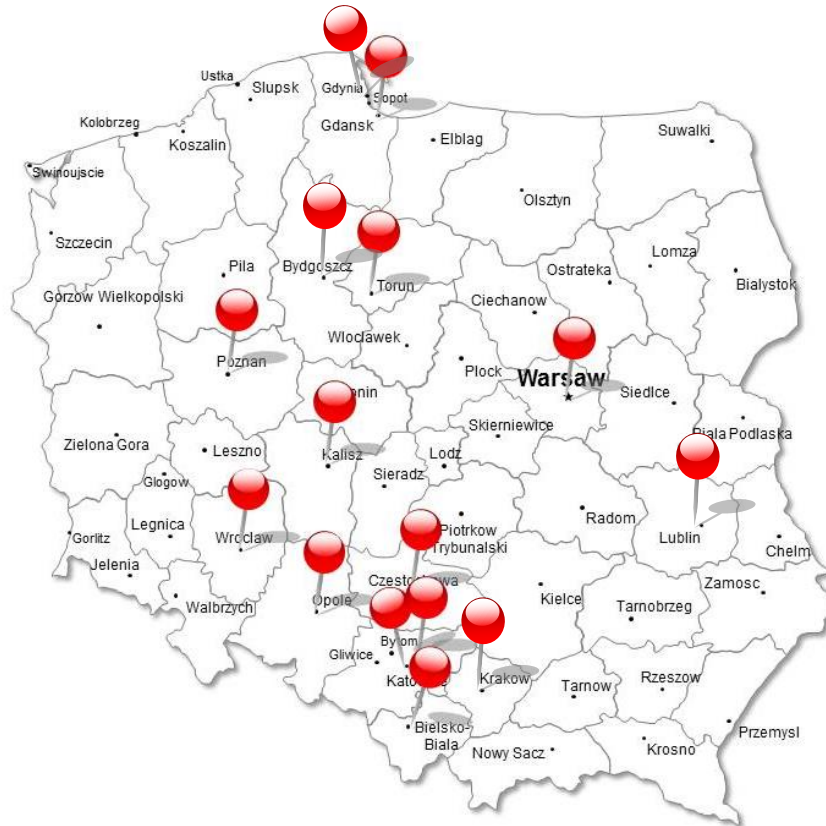


Związek Gmin
Dorzecza | Wisłoki
w Jasle

GREEN ROOFS – regional programs announced in 2023

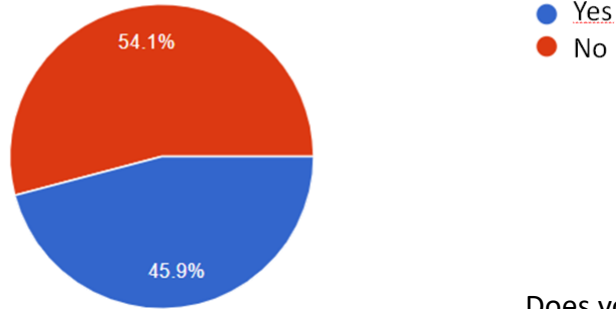


GREEN ROOFS – ACTIVITIES AT THE LEVEL OF CITIES



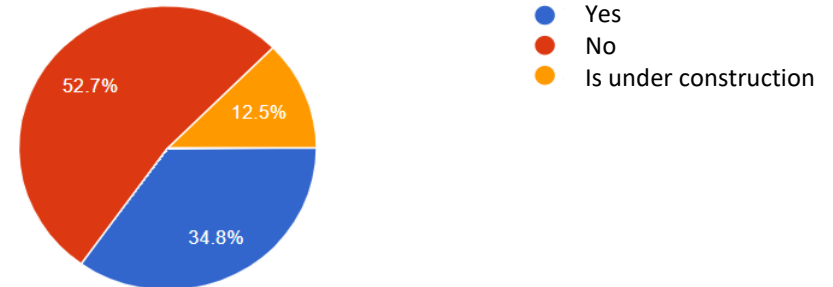
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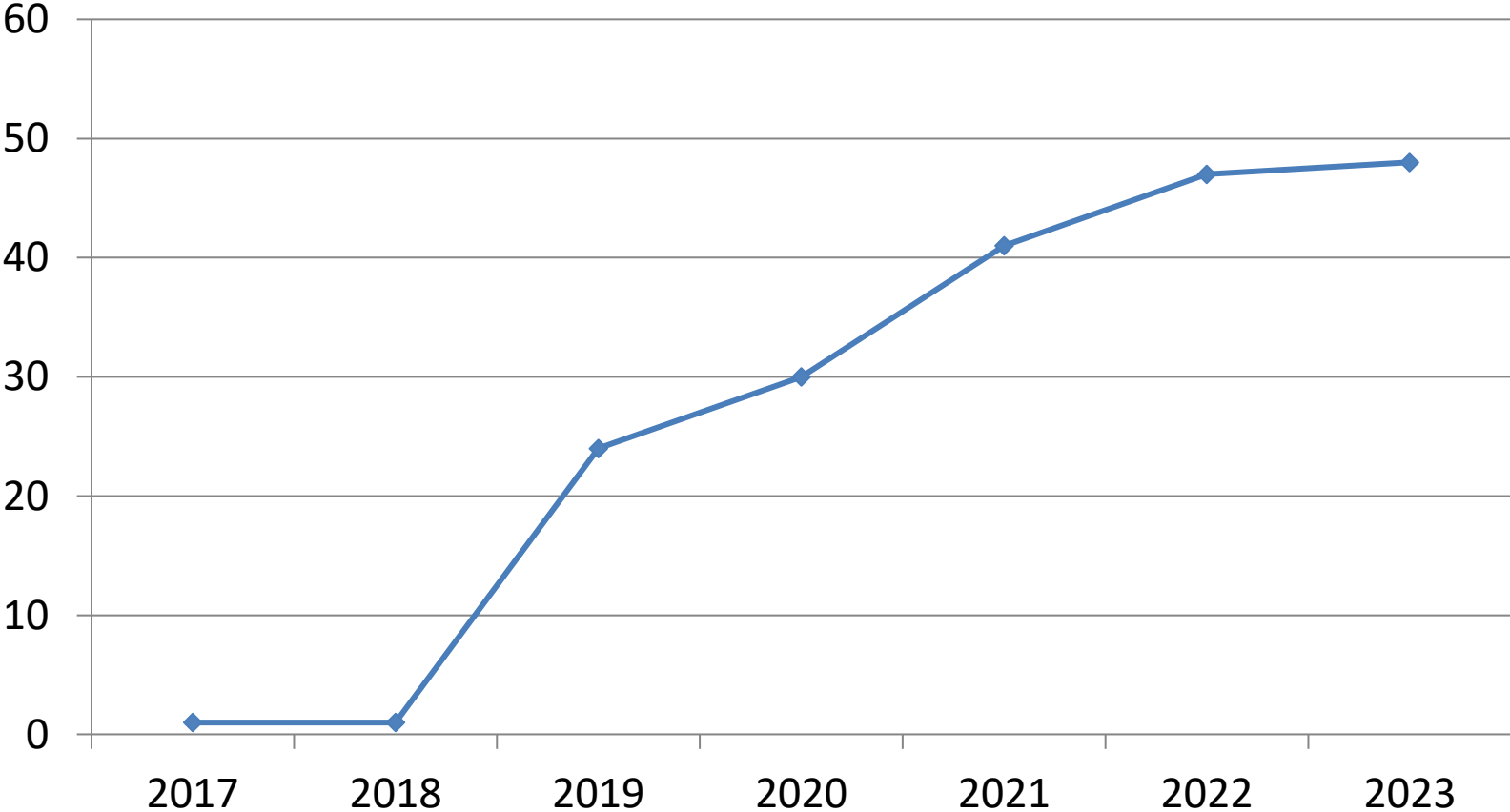


Does your city have a Municipal Climate Change Adaptation Plan?

112 responses

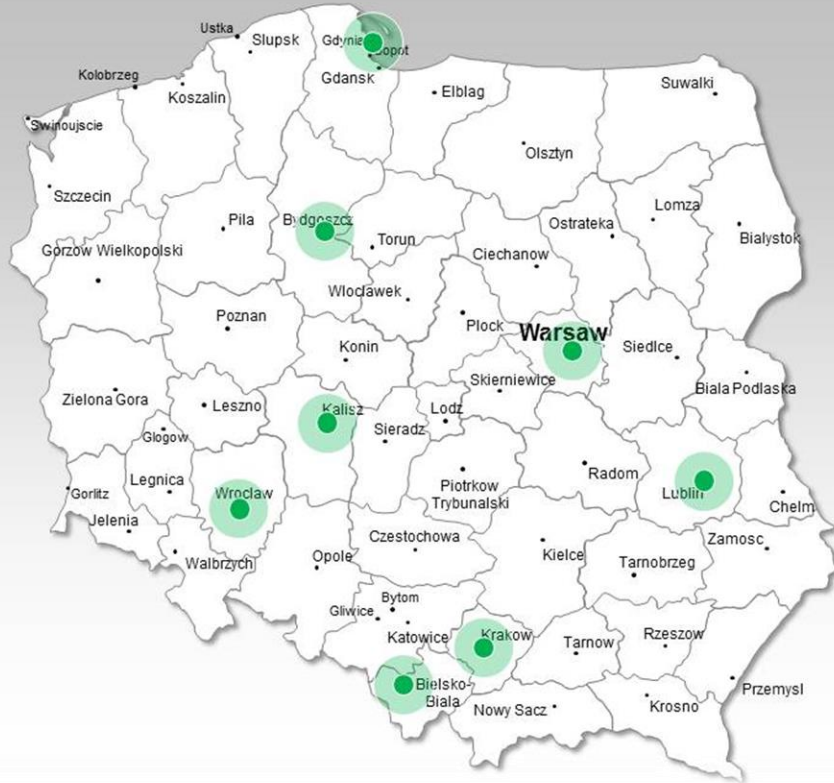


Municipal Climate Change Adaptation Plans

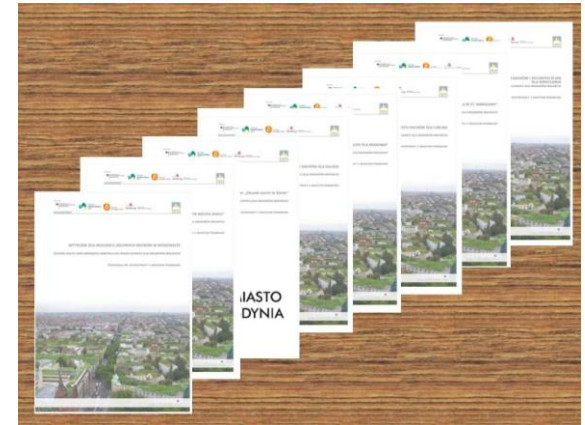


GRAD project - green roof development strategies for 8 Polish cities (2018 – 2020)

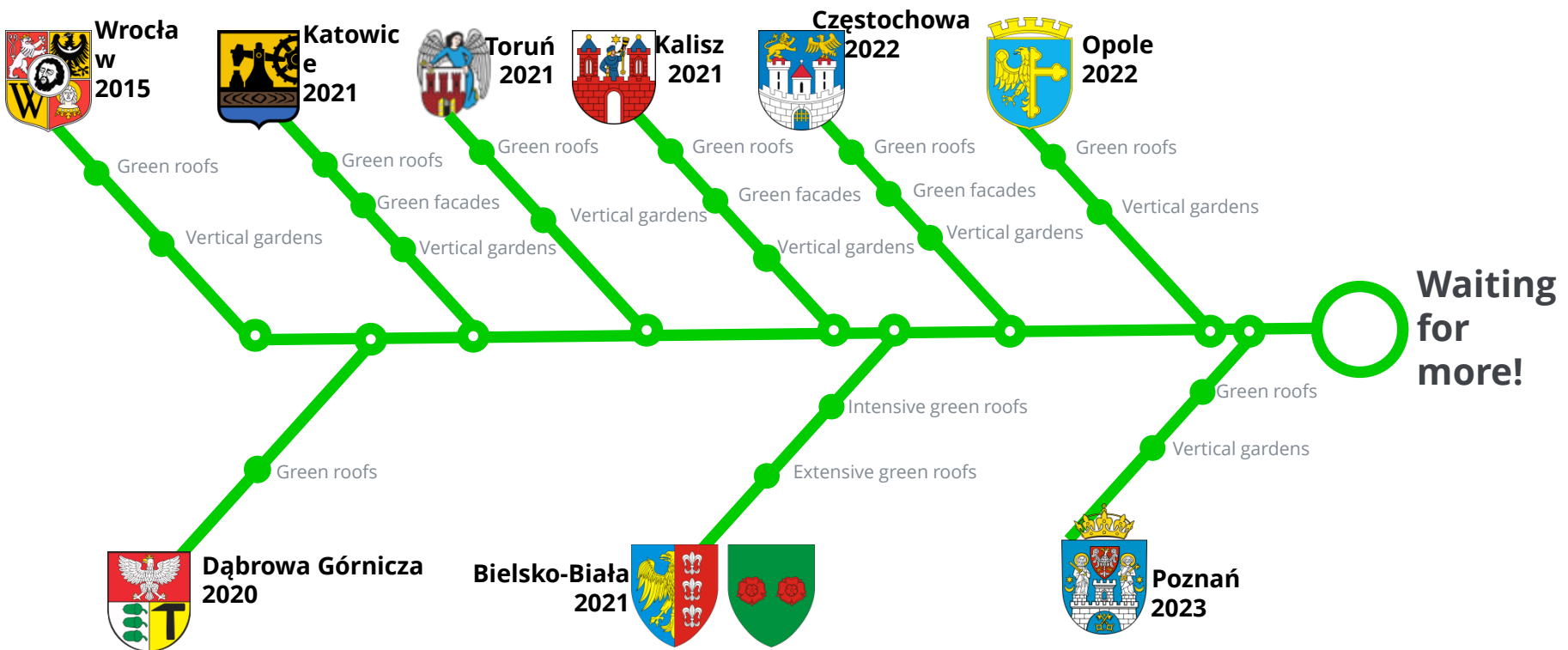
The Association of Municipalities Polish Network „Energie Cités” – project lider



City of Hamburg - project partner & good example



Activities of local governments to motivate construction of green roofs



Wroclaw: ZŁAP DESZCZ (CATCH THE RAIN)



2019 – first edition

2021 – best practices catalog

2019 – green roofs included



Green roof on Wroclavia shopping center, Wrocław

Gdansk: rainwater retention on development sites

„Gdańskie wody”
(Gdansk water)

Rainwater retention required!
(2019)



Standards developed by the city of Warsaw

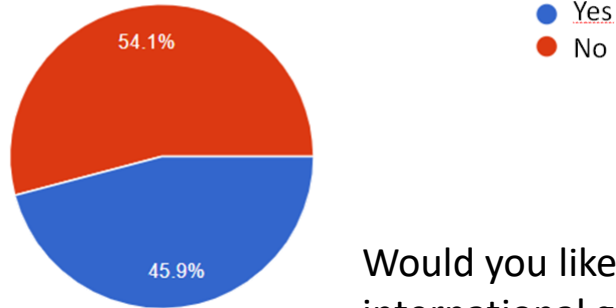
requirements & recommendations

- green roofs - minimum 20% of the roof area
 - biosolar roofs
-
- minimum 20 cm thickness of substrate



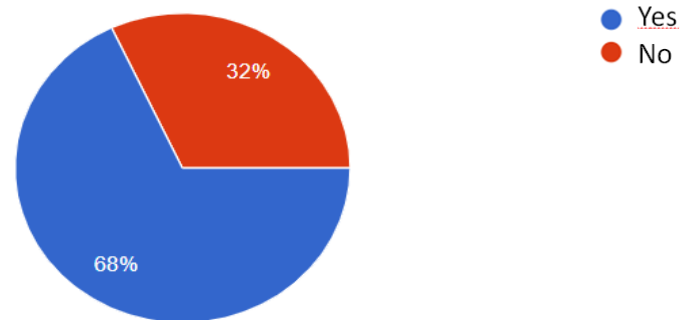
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Are there activities in your city that support the development of green infrastructure?



Would you like to receive information from the PSDZ on national and international green infrastructure events?

244 responses



Example city:

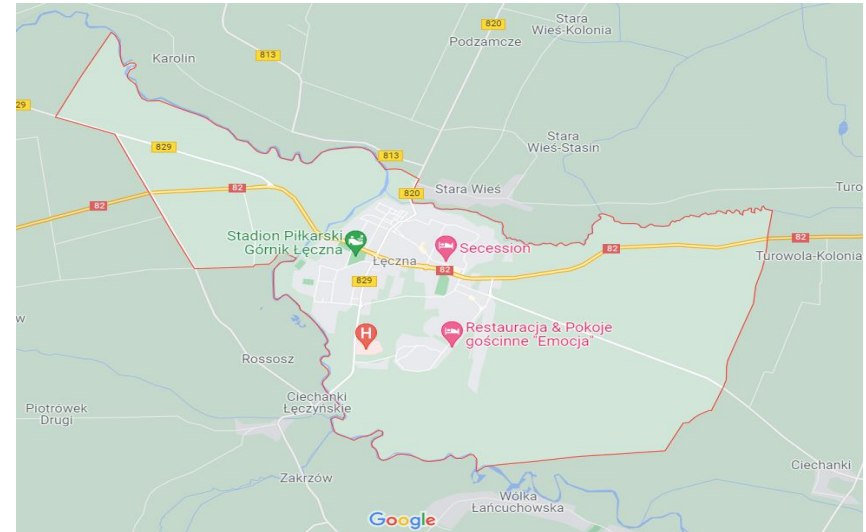
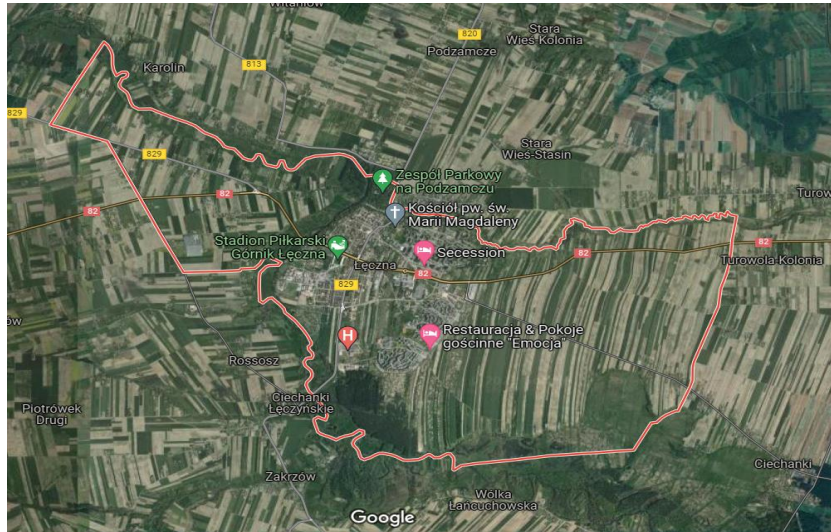
- lack of action to support the development of green infrastructure
- lack of interest in receiving information on this subject



<https://www.google.com/maps>

Example city:

- lack of action to support the development of green infrastructure
- lack of interest in receiving information on this subject



<https://www.google.com/maps>

Example city:

- lack of action to support the development of green infrastructure
- interesting in receiving information on this subject



<https://www.google.com/maps>

sources of graphics and information:

https://www.polskawliczbach.pl/najwieksze_miasta_w_polsce_pod_wzgledem_liczy_ludnosci

<http://www.gdmel.pl/component/attachments/download/11>

file:///C:/Users/user/Downloads/Badanie_dotycz%C4%85ce_adaptacji_do_zmian_klimatu_2022.pdf

https://pl.123rf.com/photo_119962942_uproszczona-mapa-polski-z-wojew%C3%B3dztwami-regionami-lub-stanami-polski-wydzia%C5%82-administracyjny-na-bia%C5%82.html?vti=undefined-1-88

<https://www.gov.pl/web/nfosisgw/moja-woda--wsparcie-dzialan-realizowanych-przez-wfosisgw>

https://stimeo-domki.pl/blog/15_rodzinne-ogrodki-dzialkowe-dla-poczatkujacych.html

<https://www.youtube.com/watch?v=7BprhrrbAo>

<https://www.feniks.gov.pl/>

https://pl.wikipedia.org/wiki/Herb_Wroc%C5%82awia

https://pl.wikipedia.org/wiki/Herb_Katowice

https://pl.wikipedia.org/wiki/Herb_Torunia

https://pl.wikipedia.org/wiki/Herb_Kalisza

https://pl.wikipedia.org/wiki/Herb_Cz%C4%99stochowy

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https://pl.wikipedia.org/wiki/Herb_Bielska-Bia%C5%82ej

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https://dzienniki.slask.eu/eli/POL_WOJ_SL/2020/5028/ogl/pol/pdf

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https://www.bip.kalisz.pl/uchwaly/2021_45_620.pdf

https://edzienniki.duw.pl/eli/POL_WOJ_DS/2021/5740/ogl/pol/pdf

http://edzienniki.bydgoszcz.uw.gov.pl/eli/POL_WOJ_KP/2021/6940/ogl/pol/pdf

https://dzienniki.slask.eu/WDU_S/2021/8726/akt.pdf

<http://44mpa.pl/miejskie-plany-adaptacji/>

<https://klimada2.ios.gov.pl/zagospodar-wody/wroclawski-program-dotacyjny-zlap-deszcz/>

<http://zielonainfrastruktura.pl/warszawa-przyjela-miejski-plan-adaptacji/>

<http://zielonainfrastruktura.pl/poznan-dofinansowanie-do-dachow-zielonych-i-ogrodow-wertykalnych-nawet-25-000-z/>

<https://www.google.com/maps>