

SUPPLEMENTARY MATERIAL

Development of small historic riverside towns: Implementing the Cittaslow idea in the Czerwińsk nad Wisłą

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Table S1. Evaluation of contemporary urban concepts in the context of the possibility of implementing their assumptions in Czerwińsk nad Wisłą

Urban planning concept name	Criterion						
	1	2	3	4	5	6	7
New urbanism							
Compact city							
Smart city							
Green city							
Urban acupuncture (city-event)							
Cittaslow							

Explanations: 1 = scale, 2 = local character, 3 = diversity, 4 = adaptability, 5 = quality of public spaces, 6 = openness of the system, 7 = quality of the environment; **blue colour** indicates the fulfilment of the criterion.

Source: own elaboration.

Table S2. Summary of the research for data to assess the certification feasibility for Czerwińsk and Wisłą

No.	Groups of criteria (number of indicators)	Scope of study, data source
1.	I. energy policy (5 indicators)	GUS (2021) GUS BDL (no date) Kasubska (2016) EKODIALOG Maciej Mikulski S.K.A. (2024) Urząd Miasta i Gminy w Czerwińsku nad Wisłą (2023) Urząd Miasta i Gminy w Czerwińsku nad Wisłą (2024) SIP (no date a) SIP (no date b)
	II. infrastructure policy (5 indicators)	Kasubska (2016) Urząd Miasta i Gminy w Czerwińsku nad Wisłą (2024)
	III. urban quality policy (9 indicators)	Field research (walk, photographic documentations) GUS BDL (no date) Kasubska (2016) Uchwała (2023) Urząd Miasta i Gminy w Czerwińsku nad Wisłą (2024) Urząd Miasta i Gminy w Czerwińsku nad Wisłą (2025)
	IV. agricultural, tourism, and craft policy (6 indicators)	GUS BDL (no date) Kasubska (2016) OpenStreetMap (https://www.openstreetmap.org) Portal organizacji pozarządowych (no date) SIP (no date a) SIP (no date b)
	V. hospitality, awareness, and education policy (5 indicators)	Muzeum Historii Polski (no date) Archiwa Państwowe. Narodowe Archiwum Cyfrowe Polona (https://polona.pl) SIP (no date a) SIP (no date b)
2.	Area capital assessment	value of area components in relation to their sustainability level on a scale of 0–5 points (EC, 2000)
3.	Recommendations	actions to enhance the competitiveness of the area

Source: own elaboration.

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GUS (2021) *Lokalne planowanie i zagospodarowanie przestrzenne za 2021 [Local planning and spatial development for the year 2021]*. Warszawa: Główny Urząd Statystyczny, Ministerstwo Rozwoju i Techno-

- logii. Available at: <https://www.gov.pl/web/rozwój-technologia/badanie-statystyczne---lokalne-planowanie-i-zagospodarowanie-przestrzenne> (Accessed: April 17, 2024).
- GUS BDL (no date) *Bank Danych Lokalnych [Local Data Bank]*. [Online]. Available at: <https://bdl.stat.gov.pl> (Accessed: April 20, 2024).
- Kaszubska, J. (2016) *Lokalny Program Rewitalizacji dla Gminy Czerwińsk nad Wisłą na lata 2016–2020 [Local Revitalization Program for the Municipality of Czerwińsk nad Wisłą 2016–2020]*. Bądkowo: Westmor Consulting. Available at: https://bip-v1-files.idcom-jst.pl/sites/47097/wiadomosci/343421/files/20161013_czerwinsk_nad_wisla_ug_gpr.pdf (Accessed: February 7, 2024).
- Muzeum Historii Polski (no date) *Baza Czasopism Humanistycznych [Humanities Journal Database]*. [Online]. Available at: <https://bazhum.muzhp.pl/> (Accessed: April 20, 2024).
- Portal organizacji pozarządowych (no date) *Spis organizacji [List of organizations]*. [Online]. Available at: <https://spis.ngo.pl/> (Accessed: April 20, 2024).
- SIP (no date a) *Czerwińsk nad Wisłą*. [Online]. System Informacji Przestrzennej. Available at: <https://sip.gison.pl/czerwinskнадwisla> (Accessed: April 17, 2024).
- SIP (no date b) *Miasto i Gmina Czerwińsk nad Wisłą [Town and Municipality of Czerwińsk nad Wisłą]*. [Online]. System Informacji Przestrzennej. Available at: <https://czerwinskнадwisla.e-mapa.net/> (Accessed: April 20, 2024).
- Uchwała (2023) *Uchwała nr 340/XLI/2023 Rady Miejskiej w Czerwińsku nad Wisłą w sprawie uchwalenia „Programu Współpracy Miasta i Gminy Czerwińsk nad Wisłą z organizacjami pozarządowymi oraz innymi podmiotami prowadzącymi działalność pożytku publicznego wymienionymi w art. 3 ust. 3 ustawy o działalności pożytku publicznego i o wolontariacie na rok 2024 [Program of Cooperation between the Town and Municipality of Czerwińsk nad Wisłą and non-governmental organizations, as well as other entities conducting public benefit activities]*. Available at: <https://bip-v1-files.idcom-jst.pl/sites/47097/wiadomosci/823404/files/uchwala340xli202320231025.pdf> (Accessed: April 20, 2024).
- Urząd Miasta i Gminy w Czerwińsku nad Wisłą (2023). *Projekt uchwały w sprawie przyjęcia Założeń do planu zaopatrzenia w ciepło, energię elektryczną i paliwa gazowe dla Miasta i Gminy Czerwińsk nad Wisłą na lata 2023–2038 [Draft resolution on the adoption of the Guidelines for the heat, electricity, and gas fuel supply plan for the Town and Municipality of Czerwińsk nad Wisłą for the years 2023–2038]*. Available at: https://czerwinsk.bipgmina.pl/wiadomosci/16430/wiadomosc/671239/projekt_zalozen_do_planu_na_20232038 (Accessed: April 20, 2024).
- Urząd Miasta i Gminy w Czerwińsku nad Wisłą (2024) *Raport o stanie Miasta i Gminy Czerwińsk nad Wisłą za 2023 rok [Report on the state of the Town and Municipality of Czerwińsk nad Wisłą for 2023]*. Available at: https://bip-v1-files.idcom-jst.pl/sites/47097/wiadomosci/756345/files/raport_o_stanie_gminy__za_2023_sig.pdf (Accessed: September 20, 2024).
- Urząd Miasta i Gminy w Czerwińsku nad Wisłą (2025) *Sprawozdanie z realizacji rocznego programu współpracy Miasta i Gminy Czerwińsk nad Wisłą z organizacjami pozarządowymi oraz innymi podmiotami prowadzącymi działalność pożytku publicznego wymienionymi w art. 3 ust. 3 ustawy o działalności pożytku publicznego i o wolontariacie na rok 2024 [Report on the implementation of the annual program of cooperation between the Town and Municipality of Czerwińsk nad Wisłą and non-governmental organizations and other entities conducting public benefit activities listed in Article 3(3) of the Act on Public Benefit and Volunteer Work for 2024]*. Available at: https://bip-v1-files.idcom-jst.pl/sites/47097/wiadomosci/823404/files/sprawozdanie_program_wspolpracy.pdf (Accessed: June 20, 2025).

Table S3. Summary of certification for Czerwińsk nad Wisłą with outlining the current status and potential for meeting various criteria across several areas of urban policy

No	Name of group of criteria Indicators name	Currently fulfilled	Possible to achieve in the short term	Possible to achieve in the long term
I. Energy policy				
1	Air quality protection	+		
2	Water quality protection	+		
3	Selective collection of municipal solid waste	+		
4	Wastewater treatment	+		
5	Reduction of public light pollution	+		
II. Infrastructure policy				
6	Length (in km) of city bike paths per km of city roads	–	+	
7	Harmonious planning of alternative mobility to private cars	–		+
8	Removal of architectural barriers	+	–	
9	Supporting family life and women's development programs	+		
10	Percentage of residents commuting to work in other municipalities daily	–	+	
III. Urban quality policy				
11	Actions to restore and enhance the city centre (small architecture, tourist signage, antennas, landscape softening, preserving urban landscape)	+		
12	Transformation and reuse of peripheral areas	+		
13	Use of ICT in the development of interactive services for residents and tourists	+		
14	Point for sustainable architecture (bio architecture, etc.)	–	+	
15	City wiring (fiber optics, wireless systems)	–		+
16	Monitoring and reduction of pollution (noise, electromagnetic fields, etc.)	–		+
17	Promotion of sustainable public urban systems (passive house, building materials, etc.)	–		+
18	Designation of spaces for the sale of local products	+		
19	Protection/enhancement of shops with unique character – creating natural shopping centres	–	+	
IV. Agricultural, tourism, and craft policy				
20	Protection of typical products and handicraft items (certification, museums of everyday items, etc.)	+	–	+
21	Enhancement of traditional working methods and professions	+	–	+
22	Use of local products, preferably organic, in public collective catering (school canteens, etc.)	+		
23	Taste education and promotion of the use of local products, preferably organic, in gastronomy and individual nutrition	+	–	+
24	Enhancement and preservation of local cultural events	+		
25	Non-hotel accommodation options (overnight stays/residents throughout the year)	–		+
V. Hospitality, awareness and education policy				
26	Proper reception of guests (staff training, signage, proper infrastructure, and working hours)	–	+	

No	Name of group of criteria Indicators name	Currently fulfilled	Possible to achieve in the short term	Possible to achieve in the long term
27	Sensitizing employees and those involved in trade (transparency of offers and prices, visible display of rates)	–	+	
28	Systematic and continuous informing citizens about the importance of belonging to Cittaslow (also before joining)	–	+	
29	Joining Cittaslow campaigns	–	+	
30	Placing the Cittaslow logo on stationery and the website	–	+	

Source: own elaboration.

Table S4. Cittaslow towns – verification of landscape advantages in terms of the presence of hydrographic features

No.	City name (voivodeship)	Presence of a hydrographic object in the city's landscape (type of object)	Element present in territorial marketing	Investments and actions in areas related to hydrographic objects due to Cittaslow membership
1	Barczewo (Warmian-Masurian)	Pisa, Kiermas River	+	development of Pisa River banks (riverside infrastructure)
2	Bartoszyce (Warmian-Masurian)	Łyna River, Urban lakes	+	water station, Łyna River boulevard
3	Biała Piska (Warmian-Masurian)	–	–	–
4	Biskupiec (Warmian-Masurian)	Dymer River, Kraksy Lake	–	development of lakefront areas, construction of cycling and walking paths, promotion of water tourism
5	Bisztunek (Warmian-Masurian)	–	–	–
6	Braniewo (Warmian-Masurian)	Pasłęka River	+	development of lakefront areas, construction of cycling and walking paths, promotion of water tourism
7	Dobre Miasto (Warmian-Masurian)	Łyna River, Limajno Lake	–	restoration of historical riverside areas, creation of walking and recreational zones
8	Działdowo (Warmian-Masurian)	–	–	–
9	Głubczyce (Opole)	–	–	–
10	Golub-Dobrzyń (Kuyavian-Pomeranian)	Drwęca River	–	private piers, naturally preserved state
11	Gołdap (Warmian-Masurian)	Gołdap Lake	+	development of the “Zdrojowy” area, creation of a spa park with rehabilitation equipment, a pier, walking and cycling paths; modernization of the city beach
12	Górowo Iławeckie (Warmian-Masurian)	Młynówka River, Garncarski Pond	+	recreational park by Garncarski Pond
13	Jeziorany (Warmian-Masurian)	–	–	–

No.	City name (voivodeship)	Presence of a hydrographic object in the city's landscape (type of object)	Element present in territorial marketing	Investments and actions in areas related to hydrographic objects due to Cittaslow membership
14	Kalety (Silesian)	Mała Panew River	+	revitalization of boulevards
15	Kisielice (Warmian- Masurian)	Gardega (Gardeja) River	–	recreational activities based on local possibilities
16	Lidzbark (Warmian- Masurian)	Wel River, Lidzbarkie Lake	+	camper site by Małe Jeziorko, development of riverside areas along the Wel River
17	Lidzbark Warmiński (Warmian-Masurian)	Symsarna, Łyna River	+	development of riverbanks, construction of year- round recreational infrastructure; Łyna Park, redevelopment of a dry moat
18	Lubawa (Warmian- Masurian)	–	–	–
19	Moraġ (Warmian- Masurian)	Skiertąg Lake	–	construction of a water marina, promenade, and city beach, gradual development of lakefront tourism
20	Murowana Goślina (Greater Poland)	Warta River	–	organization of environmental and river conservation events, community engagement
21	Nidzica (Warmian- Masurian)	Nida River, Omulew Lake	+	revitalization of the city center as part of Cittaslow strategy, construction of a water marina, development of nature-based tourism, water tourism and castle history
22	Nowe Miasto Lubawskie (Warmian-Masurian)	Drwęca River	–	recreational use of waterfront, picturesque views, development of kayaking infrastructure, creation of tourist rest areas, traditional kayaking routes
23	Nowy Dwór Gdański (Pomeranian)	Vistula, Nogat Rivers	–	natural biodiversity
24	Olecko (Warmian- Masurian)	Lega River, Oleckie Wielkie Lake	–	natural areas promoted for tourism and sports, construction of a kayak marina, cycling paths around the lake
25	Olsztynek (Warmian- Masurian)	Jemiołówka River	–	museum of Folk Architecture, preservation of traditional riverside settlements, development of tourist trails
26	Orneta (Warmian- Masurian)	Drwęca River, Mieczowe Lake	–	natural riverbanks as a decorative and touristic feature, recreational paths, restoration of riverside areas for leisure
27	Pasym (Warmian- Masurian)	Kalwa Lake	+	Organization of year-round fishing competitions, including ice fishing, promotion of water tourism, creation of the “Wild Beach”
28	Prudnik (Opole)	Prudnik, Złoty Potok	–	–
29	Rejowiec Fabryczny (Lublin)	–	–	–
30	Reszel (Warmian- Masurian)	Sajna River	–	historical bridge, pedestrian footbridges, redevelopment of riverbanks, revitalization of green areas
31	Ryn (Warmian- Masurian)	Ryńskie Lake, Ołów Lake	+	development of a yacht marina, waterfront development along Ryńskie Lake
32	Rzgów (Łódź)	–	–	–

No.	City name (voivodeship)	Presence of a hydrographic object in the city's landscape (type of object)	Element present in territorial marketing	Investments and actions in areas related to hydrographic objects due to Cittaslow membership
33	Sępólno (Warmian-Masurian)	Łyna, Guber Rivers	–	–
34	Sianów (West Pomeranian)	–	–	–
35	Sierpc (Masovian)	Sierpieńca River	–	–
36	Szczytno (Warmian-Masurian)	Długie, Domowe Małe Lakes	–	natural waterfront areas utilized but remain unaltered
37	Węgorzewo (Warmian-Masurian)	Węgorapa River, Mamry, Świętajny Lakes	–	waterfront areas designated for water tourism, preserved in a natural state

Explanation: orange colour are marked towns without hydrographic features.

Source: own elaboration based on the Cittaslow Network City Development Program.