



ZADAR

City baseline

Facts and figures

Population and history: Zadar has a population of 75 000, being the 5th largest city in Croatia.

Location: In the middle of the Dalmatian cost, the city has a very rich past and is full of historical monuments. It is the urban pole of the region and well connected with Italy and on the cruise roads in the Mediterranean.

Economic indicators: Zadar has a 7.2% unemployment rate, being one of the lowest in Croatia; this is depending on the season as the economy is based on tourism, construction

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and fishing (mainly for export: fishing farms and fishing culture, fishing transformation industry). Zadar has been for long one of the cities with the highest economic growth in Croatia.

Energy and Climate: The impact of climate change is becoming visible in Zadar, making the city vulnerable as the sea level rises and as in the last years the city faced severe drought, floods, forest fires and heat waves.

General context

Zadar is constituted by a small old city centre, a modern city in the main land and 7 islands that represent 57% of the area of the city but only 2.1% of the population. Approximately 1 000 inhabitants are living in the islands where electricity is generated by oil and heating by wood. Especially in the islands, Zadar is facing water supply problems and waste water collection that cannot be treated on the islands.

The city is mainly focussed on tourism and in the last years a new port was built in order to connect the cruise ships directly to the highway and avoid pollution and congestion right in the old city centre. However, the biggest cruises are also a source of pollution. Due to the blooming tourism sector, there are many small retail shops in Zadar; there are also two big shopping malls.

In general, the touristic period is hugely demanding in terms of electricity consumption due to airconditioning, but also because hot water is mostly not produced with solar energy, but with electricity.

The fastest growing sector is the construction one. Currently, for the first time in history, workers are coming from other countries such as Nepal. Zadar is the third most expensive city concerning residential market (both for tourism and for local residents).

Zadar signed the Covenant of Mayors in 2012 and the Sustainable Energy Action Plan was developed in 2014. According to the monitoring report done in 2018 Zadar reached 19% reduction, based on data from 2017. Zadar is currently preparing its 2030 Sustainable Energy and Climate Action Plan (SECAP) that should be completed by September 2020.





In 2010, the most carbon intensive sectors were: the building sector with 57%, the transport sector with 42% and the public lighting with only 1%. In 2017, the local CO₂ emissions were summing up to 200.000 tons, showing an 19% reduction (47 300 tons CO₂) between 2010 and 2017. This was mainly due to switching energy supply in buildings from fuel oil to gas and to the use of new more energy efficient cars.

Between 2010 and 2019, Zadar refurbished 131 housing units, reducing the total CO₂ emissions by 825 tons. The total co-financing summed up to EUR 400 000 out of which EUR 250 000 was supported by the municipality and EUR 150 000 from the national Environmental Protection and Energy Efficiency Fund. There are more demands than grants available: approx. 4 applications for 1 funded project. Zadar was also offering co-financed energy audits and energy refurbishment projects for residential buildings; however, the demand was low. The energy refurbishment of residential buildings (audits, projects, construction works, etc.) are now linked to co-funding for energy efficient refurbishment via the Structural Funds.

In terms of transport, the municipal transport company is owned by Zadar municipality (58%) as well as other smaller municipalities in the area. In 2019 the city bought 28 new buses and has currently 4 charging points for electric cars, 6 bike-sharing points (electric and non-electric) and 4 e-scooters-sharing stations. The national Environmental Protection and Energy Efficiency Fund is co-financing the charging point installation and grants EUR 10 000 per households for buying an electric car. Currently only 6 electric car owners are registered in Zadar. The municipality is actively encouraging citizens and is providing information to households to obtain the grants for electric cars, bikes and scooters.

The city is also responsible for some of the big cultural facilities (concert hall). The education sector is very attractive and continuously growing with 5 500 students currently. The University is independent and has no link to Zadar Municipality.

Zadar is now focusing on learning from the mistakes of other cities on the Dalmatian coast and avoid being overloaded by massive tourism.

Institutional context

Currently at the city council there is no elected representative responsible for climate change issues. There is an elected representative in charge of the Administrative Department for Physical Planning and Construction. Energy efficiency is included in the Administrative Department for Physical Planning and Construction. The environmental protection is under the Department of Utilities and Environmental Protection, represented by the Head of Administrative Department.

Each department is doing its forecast and the finance department is coordinating all needs, makes choices and proposes them to the city council for decision. The entire budget process is monetary based.

The political commitment to the Covenant of Mayors is not an issue, but the challenge is to embed it into the governance of the city council, of the different programmes and into the municipal budget. Also, the finance department has never been involved with climate issues. More information on savings achieved with the energy efficiency refurbishment should be done, as a first step.

On energy and climate policies

> Local





Climate change can be experienced in Zadar: heavy rains, hotter summers, rise of the sea level and bigger waves. Citizens and local stakeholders don't link these changes though to any changes needed in their current lifestyles.

Prevention to risks and risks assessment is the responsibility of the environmental protection department; however, the responses to risks are dealt with by the economic department. Most of the city's budget is used to comply with compulsory environmental protection measures in order to avoid a fine.

Zadar's nature-based solution strategy was drafted at the beginning of 2019 and put on line on the city's website for comments and consultation; however only one NGO reacted to it.

The Programme for the air protection is dealt with by the Environmental protection department who needs to liaise with the Transport department.

Energy efficiency in private housing has been supported by the municipality for more than a decade now, being one of its main programmes on energy mitigation. This was initiated via a national programme of grants and since 2015 it is exclusively financed by the municipality. Structural Funds are used for deep renovation of schools to A energy class; the foreseen energy savings on heating represent 89%!

The existing local landfill will be closed in 2022. The waste management of the big cruises will be dealt by a new plant financed by the national government and the EU. This will allow for waste separation and the waste collected will be sold.

Currently there is no local energy production, in spite of some studies showing sea energy (energy from the sea currents) potential in the islands.

Energy poverty is an important issue and more than 10% of an average income in Croatia can be dedicated to cover energy supply needs. In Zadar, the municipality supports low income households via its social department. They are covering the costs of 300 households in terms of energy, water, wood. This represents EUR 135.000,00 per year out of a total municipal budget of 720.000.000,00 million Kuna.

> National

At national level there are many subsidies and programmes dedicated to resource protection and climate change.

The national Electricity Company is deploying a fast-charging network on highways for electric vehicles.

Important aspects of climate and energy planning

Main achievements in past SEAPs

In 2017, the local CO_2 emissions were summing up to 200.000 tons, showing an 19% reduction (47 300 tons CO_2) between 2010 and 2017. This was mainly due to switching energy supply in buildings from fuel oil to gas and to the use of new more energy efficient cars.

Projects to build on

The current Compete4SECAPs project will support the preparation of Zadar's SECAP in 2020.



The INTENSIFY INTERREG project is focusing on carbon reduction through intense community engagement. This project is currently running and should be linked to the implementation of the URBACT ZCC project.

The EmpowerMed project is concentrating on the mapping of the local energy poverty situation and on empowering vulnerable households, specifically women.

Traffic Master Plan

In 2018, a traffic masterplan was developed for the functional region of North Dalmatia. Its purpose was to enable efficient and sustainable transport development of the region in accordance with European and national strategies and plans. The transport masterplan is the basic strategic document for the long-term development of transport and will define future interventions in transport and transport infrastructure in the functional region of North Dalmatia, and increase the level of preparedness and the possibility of financing projects from EU funds in the field of transport. The study includes a plan of measures by 2040 which is essential for the development of SUMP.

The URBACT Local Group

The potential local stakeholders to be part of Zadar's URBACT local group are:

- Local schools (two schools are part of a green school programme)
- The university (it has an ecology department)
- EKOZADAR EKOZADAR (an environmental NGO aiming at ecological education, delivering services for the municipalities on information campaigns. In Zadar, it ensures the waste management complaints hotline. It has 4 full time employees.)
- The municipal transport company
- The municipal waste company
- The water supply municipal company
- The gas and electricity companies (they operate at national level though)
- The two local shopping malls
- The Port Authority (they are not under the authority of the city)
- The Hospital (it recently connected to gas, thus reducing its CO₂ emissions by 35%)
- The local medical centre
- The Chamber of Commerce

In a past project titled EU Cities Adapt, Zadar set up a stakeholder group in 2013. This group is not active anymore, however, it was constituted of relevant stakeholders on which the URBACT ZCC project could build on.

Initial SWOT

Strengths	Weaknesses
Local organic food fair organised twice a year	There is no local energy production.
Refurbishment of 131 housing units	Lack of knowledge on the transport needs, and use
EkoZadar as an active local NGO	but public transport is owned by a municipal
	company, which can be activated.
	The energy and climate policies are too project
	focused and there is no global communication on
	the overall city policy.
	There are no bike lanes.
Opportunities	Threats





The fastest growing sector in Zadar is the construction	Risk related to climate change (heavy rains, hotter
sector. It is a crucial opportunity to apply the EU	summers, rise of the sea level and bigger waves);
directive on EPBD and NZEB (nearly zero carbon	though citizens and local stakeholders don't link
building) criteria needs to be included into the	these changes though to any changes needed in their
building code.	current lifestyles.
The political commitment to the Covenant of Mayors	
is not an issue, but the challenge is to embed it into	
the governance of the city council, of the different	
programmes and into the municipal budget.	
The finance department has never been involved with	
climate issues, but it could provide more information	
on savings achieved via the energy efficiency	
refurbishment.	
Some studies have shown sea energy potential in the	
islands; though investment was never done.	

How Zadar wants to use the ZCC project?

- As the current Compete4SECAPs project will support the preparation of Zadar's SECAPs in 2020, there is potential to use the URBACT ZCC project to activate consultation and debate with the local stakeholder groups and citizens.
- Focus on carbon literacy:
 - especially linked to the very successful organic local food fair twice a year that could be used as an opportunity to communicate on the climate footprint.
 - Develop a carbon tracker (small pilot) as a tool for citizens to be able to track their climate impact/footprint potentially via an app.
- Finding a way to show what has been achieved as a community (analyse the various projects that decreased GHG emissions and communicate better around them as a whole, and not as individual projects which do not show the overall picture of the transformation of the territories.
- Making the co-benefits of acting against climate change visible by focusing on attractivity, health, local economy, employment, quality of life.
- The political commitment to the Covenant of Mayors is not an issue, but the challenge is to
 embed it into the governance of the city council, of the different programmes and into the
 municipal budget. Therefore, the involvement of all departments is key, and in particular of
 the finance department which has never been involved with climate issues, but it could provide
 more information on savings achieved via the energy efficiency refurbishment.
- The development strategy of Zadar for 2013-2020 should be revised: include the Zero Carbon or climate neutrality concept into the discussions.
- Focus on a "low carbon tourism approach" with the involvement of the Chamber of Commerce.
- Many programmes on environment protection, air protection, sea protection, climate and adaptation exist and the potential to link them to a ZCC strategy is high if the timing is appropriate.
- Focus on green spaces via a moratorium on cutting trees could be a commitment from the city council as there are only few parks and the citizens are keen on preserving the trees in the urban area.
- Investigate on a future ERASMUS + project as an outcome of the current URBACT ZCC project in order to continue exchange between the local groups of the different cities.





Sources:

- Interviews with:
 - Ms Ana Bajlo, Administrative Department for Physical Planning and Construction, Head of Section for Energy Efficiency
 - Ms Žana Klarić, Administrative Department of Utilities and Environmental Protection, Head of section for Environmental protection
 - Nives Rogoznica, Vice president, NGO for promotion of organic farming, environmental protection and sustainable development "Eko-Zadar"