POCACITO

european post-carbon cities of tomorrow

CASE STUDY ASSESSMENT REPORT

LITOMĚŘICE

CHARLES UNIVERSITY ENVIRONMENT CENTER (CUNI)

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I INTRODUCTION

This report presents the results of the initial assessment conducted in the case study city Litoměřice. The initial assessment is based on the key performance indicators selection as defined in D1.2.

II APPROACH AND METHODOLOGY

II.I MODEL AND CONCEPT

We followed the joint methodology and instructions for the data collection as introduced by the leader of WP3.

The original time plan was postponed. The following key performance indicators were selected to capture the transition of a current city to post-carbon city (D1.2). Some of the data collected for the case study of Litoměřice however differ in i) years covered, ii) geographical coverage or iii) the exact indicator variable. The actual collected dimensions are listed at each indicator in chapter V.

Table 1: Suggested list of key performance indicators

DIMENSION	SUB-DIMENSION	INDICATOR	UNIT	YEAR
SOCIAL	Social Inclusion	Variation rate of unemployment level by gender	Percentage	2003-2012
		Variation rate of poverty level	Percentage	2003-2012
		Variation rate of tertiary education level by gender	Percentage	2003-2012
		Variation rate of average life expectancy	Average Nº	2003-2012
	Public services and Infrastructures	Variation rate of green space availability	Percentage	2003 2012
	Governance effectiveness	Existence of monitoring system for emissions reductions	Yes/No Description	2013
ENVIRONMENT	Biodiversity	Variation rate of ecosystem protected areas	Percentage	2012
	Energy	Energy intensity variation rate	Toe/euro Toe	2003 2012
		Variation rate of energy consumption by sectors	Percentage	2003 2012
	Climate and Air Quality	Variation rate of carbon emissions intensity	Ton CO_2/euro Ton CO_2	2003 2012

DIMENSION	SUB-DIMENSION	INDICATOR	UNIT	YEAR
		Variation rate of carbon emissions by sector	Ton CO_2	2003 2012
		Exceedance rate of air quality limit values	Nº	2010 2012
	Transport and mobility	Variation share of sustainable transportation	Percentage	2001 2011
	Waste	Variation rate of urban waste generation	Kg/person/year	2007 2012
		Variation rate of urban waste recovery	Percentage	2007 2012
	Water	Water losses variation rate	m^3/person/year	2003 2012
	Buildings and Land Use	Energy-efficient buildings variation rate	Percentage	2007 2012
		Urban building density variation rate	Nº/ km^2	2003 2012
ECONOMY	Sustainable economic growth	Level of wealth variation rate	eur/person	2003-2012
		Variation rate of GDP by sectors	Percentage	2003-2012
		Employment by sectors variation rate	Percentage	2003 2012
		Business survival variation rate	Percentage	2008,2009,2010
	Public Finances	Budget deficit variation rate	Percentage of city's GDP	2003-2012
		Indebtedness level variation rate	Percentage of city's GDP	2003-2012
	Research & Innovation dynamics	R&D intensity variation rate	Percentage	2003-2012

II.II DATA COLLECTION PROCESS

The data were collected from following sources:

- National statistics – Czech Statistical Office;
- European statistics – Eurostat;
- Data collected on the city level and provided by the city office.

The data on the city level were obtained from the local authorities as they are not part of publicly available statistical databases. We differentiate four levels of geographical coverage according to the data availability:

- Litoměřice city (NUTS5);
- Litoměřice municipality district (NUTS4);
- Ústecký kraj (NUTS3);
- Severozápad (NUTS2).

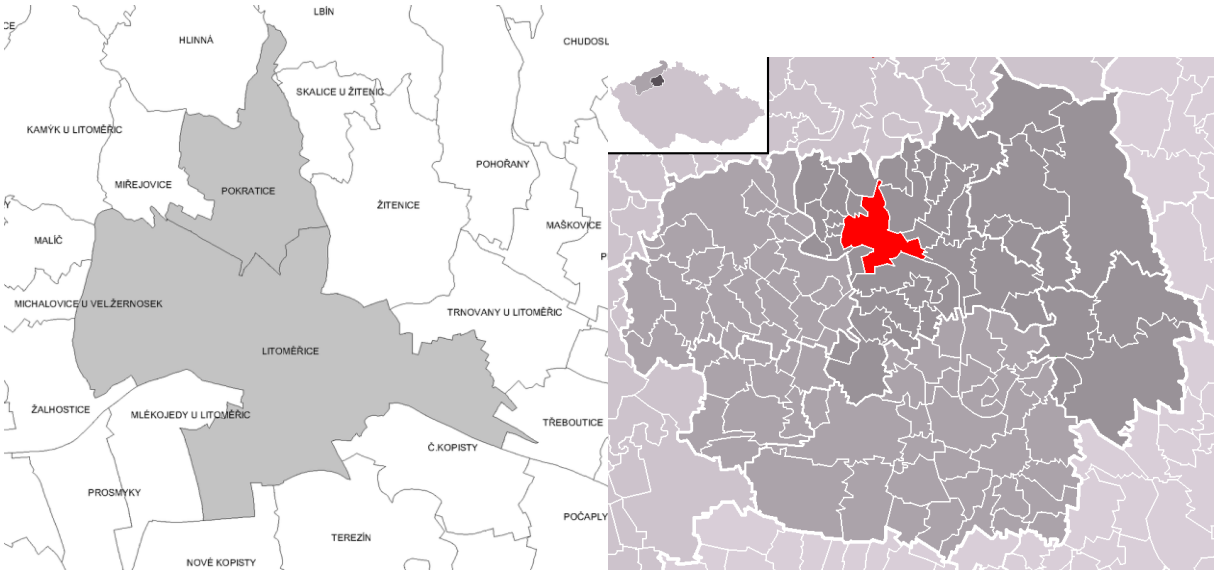
The collected data were inserted on an online platform created by the WP3 leader. If the indicator differs in the available variable, it is reported only in this report and not on the online platform, where the variable formats were exactly prescribed.

III OVERVIEW OF THE CASE STUDY CITY

III.I TERRITORY

The city of Litoměřice is situated in the northern part of the Czech Republic, 60 km north of the capital city of Prague, at the confluence of rivers Ohře and Elbe. The territory of the case study covers the area of 17.99 km^2 and encompasses the city Litoměřice with its four city quarters and 24,136 inhabitants. The exercise in WP4 – the vision building and backcasting scenario refer both to the territory of the city.

Figure 1: Litomerice city (NUTS5 - CZ0423 564567) and its position in municipality district Litoměřice (NUTS4)



Sources: http://cs.wikipedia.org/wiki/Litom%C4%9B%C5%99ice#mediaviewer/File:LT_Litom%C4%9B%C5%99ice.png; http://cs.wikipedia.org/wiki/Litom%C4%9B%C5%99ice#mediaviewer/File:Litomerice_LT_CZ.png

However, for the data collection, the city level is not captured in most of the statistical databases and the traditional unit for statistical reporting is the municipality district Litoměřice, which covers much larger territory of 1,032.16 km² with 150 municipalities and 119,250 inhabitants.

Some of the key performance indicators refer to broader territories of NUTS3 CZ042 – Ústecký kraj (indicated in Figure 2) and NUTS2 CZ04 – Severozápad (indicated in Figure 3).

Figure 2: NUTS3 - CZ042 - Ústecký kraj

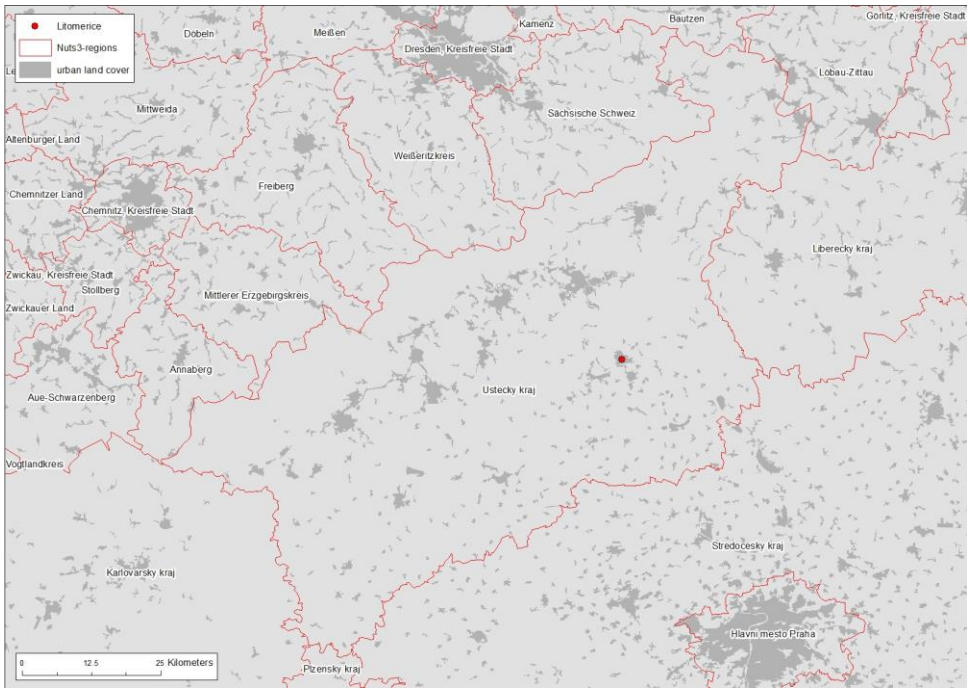
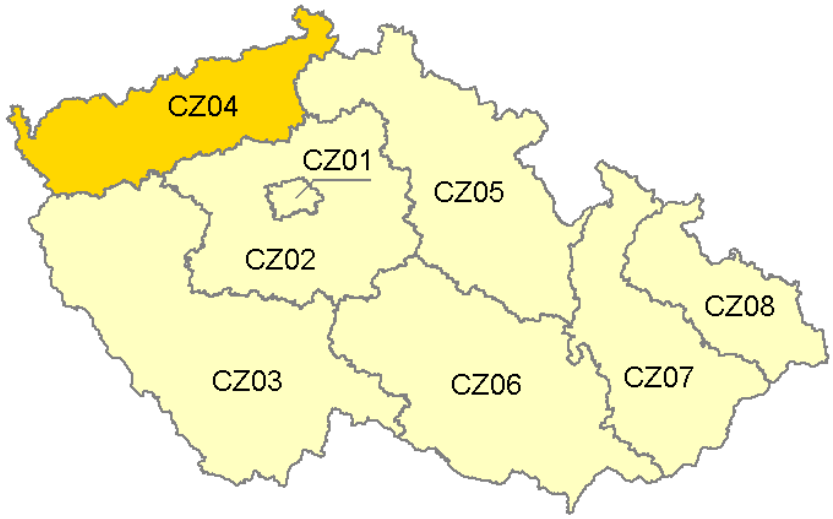


Figure 3: NUTS2 – CZ04 Severozápad and its position in the Czech Republic



Source: http://cs.wikipedia.org/wiki/NUTS_Severoz%C3%A1pad#mediaviewer/File:Cznuts2_04.png

III.II POPULATION

The population of the city is 24,136 (year 2013)[1]. The average age of its inhabitants is 41, with 14% of the population under 15 years and 15.2% of the population over 65 years old. The population density is 1,341.63 inhabitants per 1 km^2. 14% of its inhabitants have completed tertiary education. The employment rate is 45% (employed out of all inhabitants) and the unemployment rate in the city is 4% (unemployed out of all inhabitants). 94% of the inhabitants are Czechs, only 4% are foreigners.

III.III ECONOMY

The GDP per capita for the NUTS2 CZ04 equals 11,800 EUR (in 2011). The annual budget of the city is approximately 400 million CZK. In total there are 6,693 enterprises in the city.

Litomerice is a city with rich history which dates back to 9th century and offers a lot of cultural and natural heritage. The historical city centre is urban conservation area since 1950 and since the 17th century the area is called “the garden of Bohemia” which refers to the rather fertile lowland around the Elbe River. The district area partially overlaps with the protected landscape area České středohoří.

Typical for this administrative district is cultivation of crops, fruit and viticulture, but also chemical and paper industries. Most of the enterprises in the city itself are small companies without employees or micro enterprises with up to 10 employees. Most of the enterprises are active in commerce and services and construction industry.

Table 2: Structure of enterprises in Litoměřice (in 2010)[2]

ACCORDING TO SIZE	
Without employees	4881
1-9 employees - micro enterprises	519
10-49 employees - small enterprises	121
50-249 employees - medium enterprises	30
> 249 employees - large enterprises	4
ACCORDING TO ECONOMIC ACTIVITY	
Commerce and services	3345
Construction industry	1079
Other public, social and personal services	979
Industry	695
Education and health	254
Transport	205
Agriculture, forestry, fisheries	120
Public administration	7

[1] Source: Czech Statistical Office

[2] Source: Local sustainable development indicators: http://www.indikatory.eu/ustecky/litomerice/litomerice/eco2-%E2%80%93-stabilita-diverzifikace-mistni-ekonomicke-zakladny-v-obci-litom

IV KEY STRATEGIES AND PROJECTS

Litoměřice is member of the National Network of Healthy Towns and of Energy Cities. It has currently an approved Strategy development plan of the city till 2030 and few other sectoral strategies and action plans, most importantly a new energy plan. Carbon footprint of the city was calculated in 2013.

IV.I STRATEGIES AND ACTION PLANS

STRATEGY/ACTION PLAN FACTSHEET 1	
Title	Strategic development plan of the city
Dimension of KPIs	All
Period	2012-2030
Strategy/Action Plan description	
Objective	Based on Agenda 21 recommendations, it presents the goals of the city´s development within 5 areas: A) Economy, business and tourism, B)Regional development, transport and housing, C) Social sphere, health, social development, education, D) Energy independent and low emission, E) Quality office and organization of the city.
Measures	Set in corresponding annual action plan.
Targets	A. Economy, business and tourism *(Litoměřice – attractive, picturesque and prosperous city)* B. Regional development, transport and housing *(Litoměřice - city pleasant for living in the heart of the bohemian garden Environment)* C. Social sphere, health, social development, education *(Litoměřice – healthy city, town of culture, sport and education)* D. Energy independent and low emission *(Litoměřice – the city of innovations)* E. Quality office and organization of the city *(Litoměřice - responsible, high quality and efficient urban management)*
Links and Contacts	
Promoter	City of Litomerice

Document/website	https://www.litomerice.cz/images/strategicke-dokumenty/SPRM_2012_FINAL_pro_web-2014.pdf

STRATEGY/ACTION PLAN FACTSHEET 2	
Title	Conception of social inclusion of excluded Roma localities in Litomerice
Dimension of KPIs	Social
Period	2014-2016
Strategy/Action Plan description	
Objective	Achieve social inclusion of excluded Roma inhabitants
Measures	Support in finding appropriate employment, requalification and education, housing.
Targets	n.a.
Links and Contacts	
Promoter	City of Litomerice
Document/website	n.a.

STRATEGY/ACTION PLAN FACTSHEET 3	
Title	4th Community plan of social services of Litomerice city
Dimension of KPIs	Social
Period	2014-2017
Strategy/Action Plan description	
Objective	Based on citizens needs current social services are evaluated and suggestions on new developments are made.
Measures	n.a.
Targets	n.a.
Links and Contacts	
Promoter	City of Litomerice
Document/website	http://komplan.litomerice.cz/

STRATEGY/ACTION PLAN FACTSHEET 4	
Title	Conception of family policy in Litomerice
Dimension of KPIs	Social
Period	2014-2019
Strategy/Action Plan description	
Objective	Improvement of family friendly environment and life conditions in the city
Measures	n.a.
Targets	*n.a.*
Links and Contacts	
Promoter	City of Litomerice
Document/website	https://www.litomerice.cz/images/strategicke-dokumenty/Koncepce_prorodinne_politiky_2014.pdf

STRATEGY/ACTION PLAN FACTSHEET 5	
Title	Marketing and tourism strategy
Dimension of KPIs	Economy
Period	2012+
Strategy/Action Plan description	
Objective	The strategy summarizes current city needs in the area of marketing and tourism and suggests 7 areas for marketing and tourism development.
Measures	n.a.
Targets	n.a.
Links and Contacts	
Promoter	*City of Litomerice*
Document/website	https://www.litomerice.cz/images/strategicke-dokumenty/MISTRAL_Strategie_marketingu_a_cestovniho_ruchu_140724.pdf

STRATEGY/ACTION PLAN FACTSHEET 6	
Title	Energy plan of Litomerice
Dimension of KPIs	Environment
Period	2014-2030
Strategy/Action Plan description	
Objective	The document summarizes the current energy demand of the city and suggests methodology and general framework for the city´s energy management.
Measures	Measures are suggested in the area of heating, public lightening, buildings, renewable energy etc.
Targets	n.a.
Links and Contacts	
Promoter	City of Litomerice
Document/website	https://www.litomerice.cz/images/strategicke-dokumenty/Energeticky_plan_mesta_Litomerice.pdf

IV.II KEY PROJECTS

PROJECT FACTSHEET 1	
Title	Geothermal power plant
Dimension of KPIs	Environment
Area of implementation (city, neighbourhood, etc.)	City
Implementation period	2000+
Project description	
Aims	Building new geothermal power plant in the ownership of the city with installation capacity of 20 MWh to cover most of the city´s demand for heat.
Activities	n.a.
Promoters/Beneficiaries; Partnership	City of Litomerice

Financing	City budget and external resources
Outcomes and impacts	Substantial increase of energy independency of the city, share of renewable energy, decrease of GHG emissions.
Links and Contacts	
Promoter	City of Litomerice
Website	http://www.prvnigeotermalni.cz/

V CASE STUDY CITY ASSESSMENT

This chapter includes details on the actual collected indicators for the case study Litoměřice. We indicate the actual geographical coverage and data source for each indicator. The collected data were inserted on the joint online platform created by the WP3 leader.

V.I ENVIROMENTAL PERFORMANCE

The indicators on environmental performance were provided by representatives from the city office, especially the Department for Projects and Strategies of Litoměřice City. Most of the data are available only for year 2013, as they were calculated for the purposes of the Energy plan and the Carbon footprint. Most of the required data are not collected or reported regularly. Thus the variation rates of the indicators are not known.

Table 3: Actual collected indicators for environmental dimension

SUB-DIMENSION	INDICATOR	UNIT	YEAR	GEOGR. COVER.	DATA SOURCE
Biodiversity	Ecosystem protected areas	Percentage	2013, 2014	City	City office
Energy	Annual primary energy consumption	Toe	2013	City	City office
	Energy consumption by sectors	Percentage	2013	City	City office
Climate and Air Quality	Carbon emissions	Ton CO2	2013	City	City office
	Variation rate of carbon emissions by sector	Ton CO2	2013	City	City office
	Exceedance rate of air quality limit values	Nº	2013	City	City office
Transport and mobility	Share of sustainable transportation	Percentage	2013	City	City office
Waste	Urban waste generation	Kg/person	2013, 2014	City	City office
	Urban waste recovery	Percentage	2013, 2014	City	City office
Water	Water losses variation rate	n.a.	n.a.	n.a.	n.a.
Buildings and Land Use	Share of energy-efficient buildings	Percentage	2013 2014	City	City office
	Urban building density variation rate	n.a.	n.a.	n.a.	n.a.

ENV 01: ECOSYSTEM PROTECTED AREAS

Variable: Municipality surface area (km2) covered by Natura 2000 network and/or national protected areas

Geographical coverage: City

Data source: City office

The city of Litomerice lies on the border of protected landscape area České středohoří and majority of its territory is within the protected landscape area. The data available from the city office are for years 2013 and 2014 and the total surface protected area in both years is 16.58 km2 (out of 17.99 km2), thus covering 92% of the total cadastral area of the city.

ENV 02: ANNUAL PRIMARY ENERGY CONSUMPTION

Variable: Primary energy consumption in 2013

Geographical coverage: City

Data source: City office

The primary energy consumption in 2013 was 22,256 toe. The data for energy consumption is available only for 2013, when the carbon footprint of Litoměřice city was computed. The data for GDP per capita are available only for NUT3 and for 2011. The energy intensity per GDP is thus not computed.

ENV 03: ENERGY CONSUPTION BY SECTORS

Variable: Energy consumption per sectors in 2013

Geographical coverage: City

Data source: City office

The data on the consumption by sectors is available only for 2013, when the carbon footprint of Litoměřice city was computed. It was calculated for industry, housing and other.

Energy consumption by sector in 2013	Industry	Housing	Other	Total
Toe	8,787	11,029	2,440	22,256
%	39%	50%	11%	100%

ENV 04: CARBON EMISSIONS

Variable: Carbon emissions in 2013

Geographical coverage: City

Data source: City office

The total greenhouse gas emissions in 2013 were 136,427.9 t CO_2e, i.e. 5.652 t CO_2e per inhabitant. The data for GHG emissions is available only for 2013, when the carbon footprint of Litoměřice city

was computed. The data for GDP per capita are available only for NUT3 and for 2011. The carbon emissions intensity per GDP is thus not computed.

ENV 04: CARBON EMISSIONS BY SECTORS

Variable: Carbon emissions by sectors in 2013

Geographical coverage: City

Data source: City office

The data on the greenhouse gas emissions by sectors is available only for 2013, when the carbon footprint of Litoměřice city was computed. It was calculated for industry, transport, housing and other.

Energy consumption by sector in 2013	Industry	Transport	Housing	Other	Total
Ton CO_2e	39,399	30,604	48,707	14,132	132,830

ENV 05: EXCEEDANCE RATE OF AIR QUALITY LIMIT VALUES

Variable: Number of days of air quality limits values exceedance

Geographical coverage: City

Data source: City office

The data on the exceedance of air quality limit values was provided only for 2013. From the observed pollutants, only the limit for PM_{10} was exceeded on 19 daily measurements. The values for $PM_{2.5}$ are not available.

	O_3	NO_2	SO_2	$PM_{2.5}$	PM_{10}
No. of limit exceedance (24h limit)	0	0	0	n.a.	19

ENV 06: SHARE OF SUSTAINABLE TRANSPORTATION

Variable: Share of transportation modes in 2013

Geographical coverage: City

Data source: City office

The data on the share of transportation modes is available only for 2013, when the carbon footprint of Litoměřice city was computed.

Percentage of people by modal type	%
Walk	58.9
Car-driver	25.5

Percentage of people by modal type	%
Car-passenger	n.a.
Bus	6.4
Company or school collective transportation	n.a.
Metro/underground	not existing
Train	4.4
Motorcycle	0.0
Bicycle	4.8
Ship	n.a.

ENV 07: URBAN WASTE GENERATION

Variable: Total amount of urban solid waste production (kg/person/year) by waste classes

Geographical coverage: City

Data source: City office

Urban solid waste production (kg/person/year)	Paper	Plastic	Glass	Metals	Textiles	Organics
2013	10.2	10.4	8.6	0.0	2.9	61.8
2014	10.7	10.6	9.0	0.3	2.8	62.4

ENV 08: URBAN WASTE RECOVERY

Variable: Percentage of recovered/treated urban solid waste (%) by categories of final destination

Geographical coverage: City

Data source: City office

% of recovered/treated urban solid waste	Material recycling	Total incineration	Deposit onto or into land	Composting	Digestion
2013	34	0	0	64	0
2014	35	0	0	65	0

ENV 10: SHARE OF ENERGY-EFFICIENT BUILDINGS

Variable: Share of energy-efficient public buildings

Geographical coverage: City

Data source: City office

The information on energy efficiency standard of buildings is available only for public buildings and for years 2013 and 2014. In 2013 the share of public buildings complying the A and A+ energy classification standard was 2%, whereas in 2014 it was already 10%.

V.II SOCIAL PERFORMANCE

The overview of actual collected indicators representing the social performance of the city, their geographical coverage and data source is listed in Table 4. Each indicator is shown in more detail below.

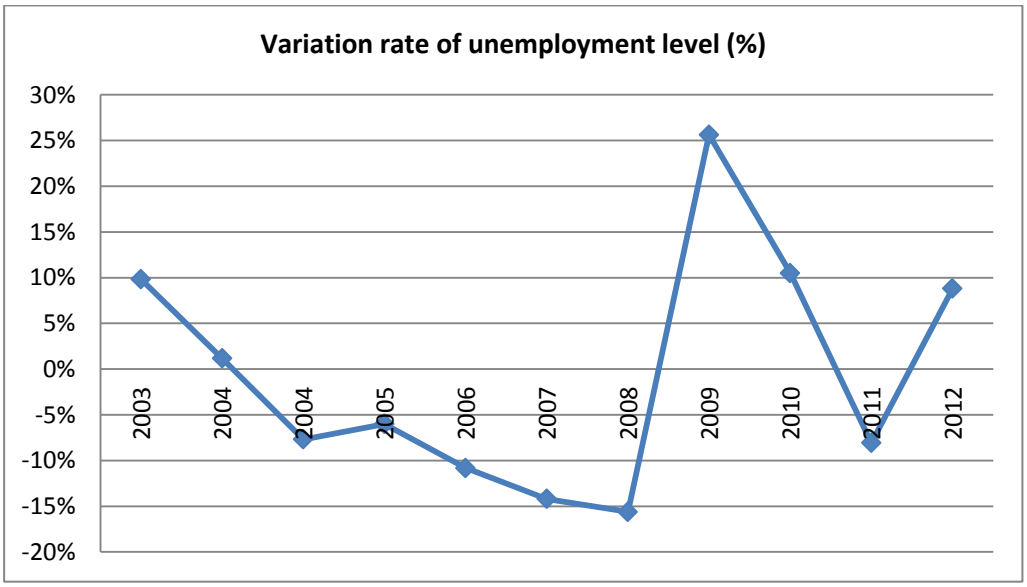
Table 4: Actual collected indicators for social dimension

SUB-DIMENSION	INDICATOR	UNIT	YEAR	GEOGR. COVER.	DATA SOURCE
Social Inclusion	Variation rate of unemployment	Percentage	2003-2012	Municipality district	Czech Ministry of Labour and Social Affairs
	Variation rate of poverty level	Percentage	2006-2013	NUTS2	Eurostat
	Population with tertiary education level by gender and its variation rate	Percentage	2001, 2011	City	Czech Statistical Office
	Average life expectancy and its variation rate	Average Nº, %	2008-2013	Municipality district	Czech Statistical Office
Public services and Infrastructures	Share of urban public green space	%		City	City
Governance effectiveness	Existence of monitoring system for emissions reductions	Yes/No Description	2013	City	City

SOC 01: VARIATION RATE OF UNEMPLOYMENT LEVEL, PERCENTAGE, 2003-2012

Geographical coverage: Municipality district

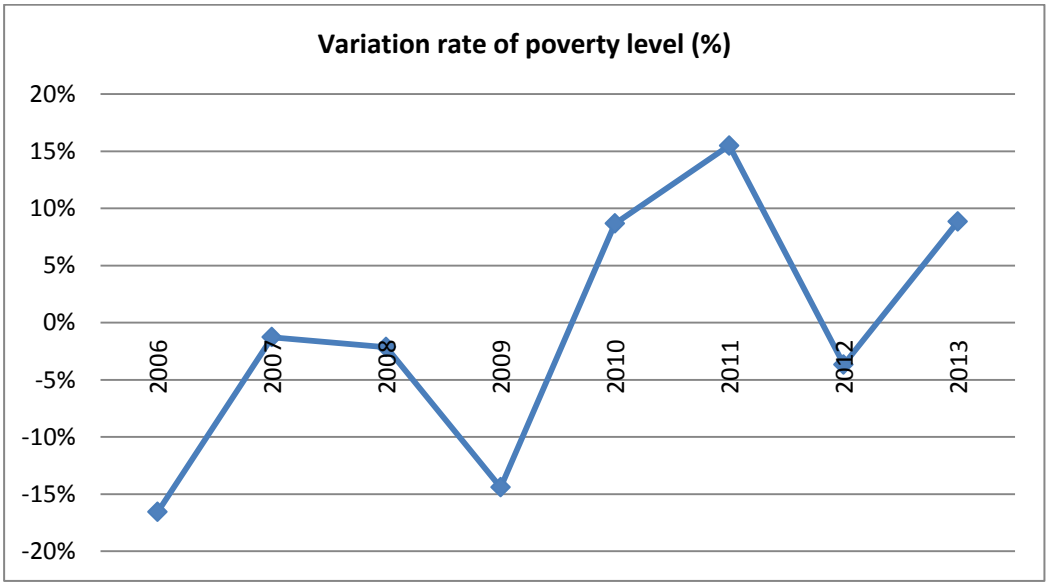
Data source: Ministry of Labour and Social Affairs, registered unemployment time series: time http://portal.mpsv.cz/sz/stat/nz/casove_rady



SOC 02: VARIATION RATE OF POVERTY LEVEL, PERCENTAGE, 2006-2013

Geographical coverage: NUTS2 - Severozapad

Data source: Eurostat, People at risk of poverty or social exclusion by NUTS 2 regions: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_peps11&lang=en



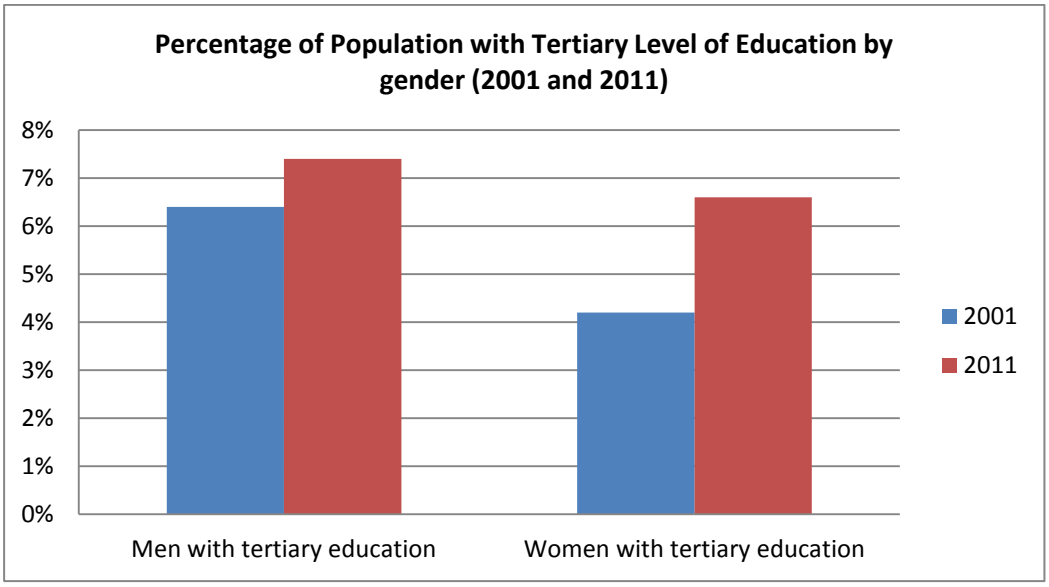
SOC 03: POPULATION WITH TERTIARY EDUCATION LEVEL BY GENDER AND ITS VARIATION RATE, 2001 AND 2011

Geographical coverage: City

Data source: Czech Statistical Office, Census 2001 and 2011

Variation rate:

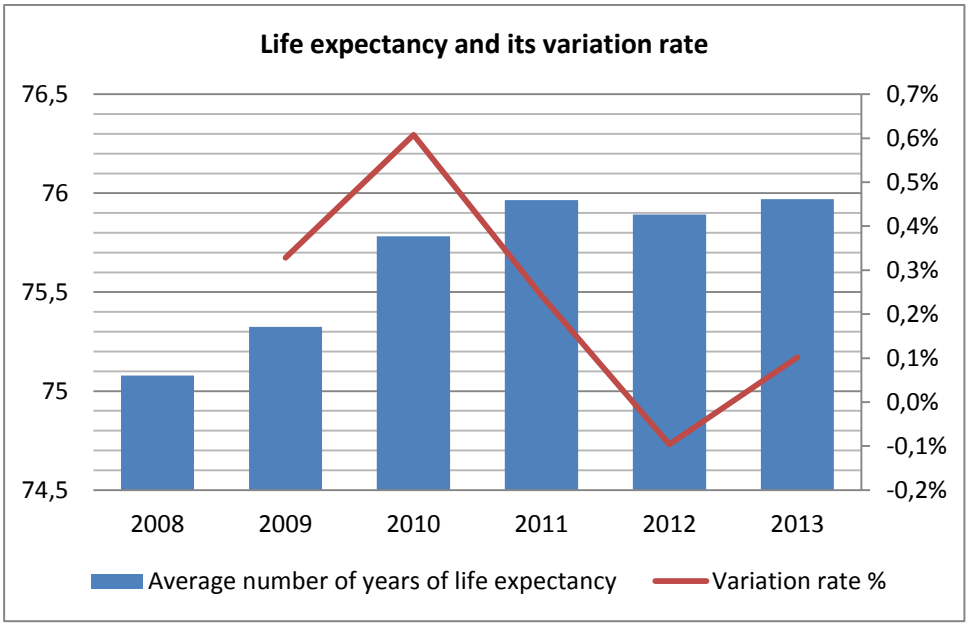
The share of men with tertiary education within the city´s population increased between 2001 and 2011 by 16%. The share of women with tertiary education within the city´s population increased between 2001 and 2011 by 57%.



SOC 04: AVERAGE LIFE EXPECTANCY AND ITS VARIATION RATE, 2008-2013

Geographical coverage: Municipality District

Data source: Czech Statistical Office, Life expectancy in Administrative Districts of Municipalities with Extended Powers: http://www.czso.cz/csu/redakce.nsf/i/umrtnostni_tabulky



SOC 05: SHARE OF URBAN PUBLIC GREEN SPACE

Variable: Share of urban public green space

Geographical coverage: City

Data source: City office

The data available from the city office are for years 2013 and 2014 and the total surface of public green spaces in both years is 1.685 km^2 (out of 17.99 km^2), thus covering 9% of the total cadastral area of the city.

SOC 06: EXISTENCE OF MONITORING SYSTEM FOR EMISSIONS REDUCTIONS

Geographical coverage: City

The city of Litomerice does not have a system for regular monitoring of GHG emissions reduction. Energy conception has been elaborated in 2008 that mapped the CO_2 emissions from the operation of municipality facilities, however a system to ensure regular monitoring is not yet in place. The city is able to monitor emissions of other pollutants thank to national monitoring system of Czech Hydrometeorological Institute.

V.III ECONOMIC PERFORMANCE

The overview of actual collected indicators representing the economic performance of the city, their geographical coverage and data source is listed in Table 5Table 4. Each indicator is shown in more detail below.

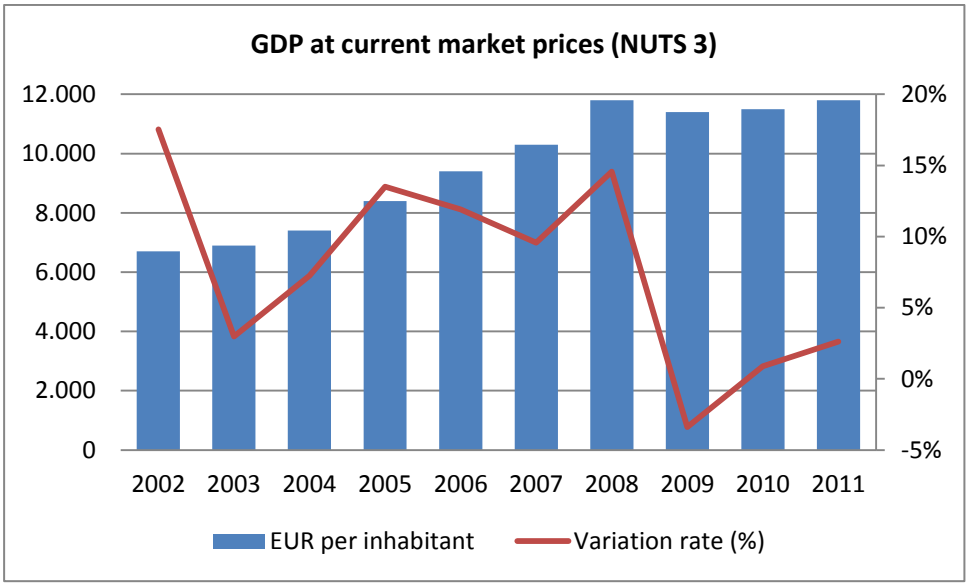
Table 5: Actual collected indicators for economic dimension

SUB-DIMENSION	INDICATOR	UNIT	YEAR	GEOGR. COVER.	DATA SOURCE
Sustainable economic growth	GDP at current market prices	EUR/ inhabitant	2002-2011	NUTS3	Eurostat
	GDP at current prices by sectors and its Variation rate	Percentage	2003, 2012	NUTS3	Czech Statistical Office
	Employment by sectors and its variation rate	Percentage	2001, 2011	City	Czech Statistical Office
	Business demography	№	2010	NUTS3	Eurostat
Public Finances	Annual city budget deficit/surplus by GDP and its variation rate	Percentage	2004-2011	City, NUTS3	City, Eurostat
	Indebtedness level variation rate	n.a.	n.a.	n.a.	n.a.
Research & Innovation dynamics	Share of &D expenditure on GDP and its variation rate	Percentage	2002-2011	NUTS2	Eurostat

ECO 01: GDP AT CURRENT MARKET PRICES

Geographical coverage: NUTS3 – Ustecky kraj

Data source: Eurostat, Annual GDP per capita:
http://epp.eurostat.ec.europa.eu/portal/page/portal/region_cities/regional_statistics/data/database

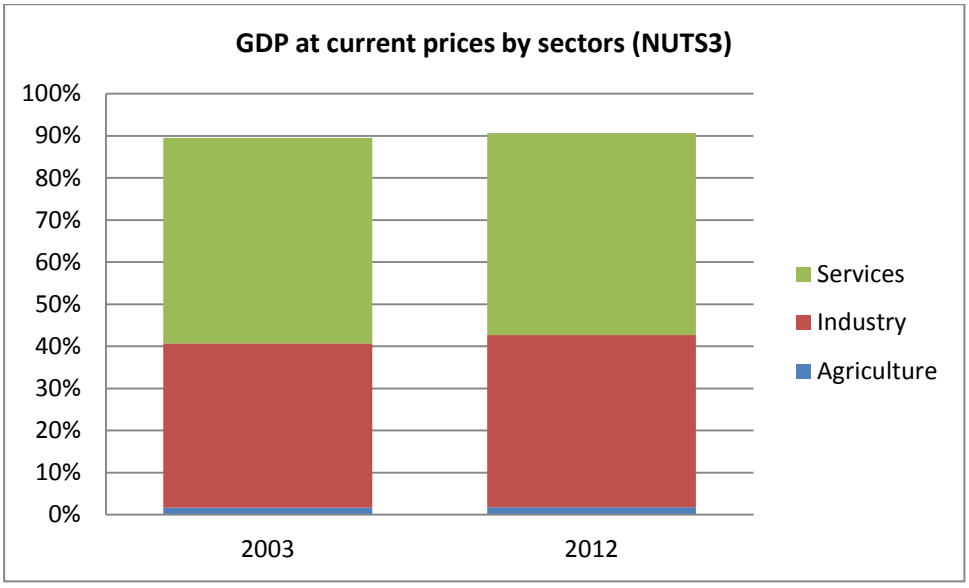


ECO 02: GDP AT CURRENT PRICES BY SECTORS AND ITS VARIATION RATE

Geographical coverage: NUTS3 – Ustecky kraj

Data source: Czech Statistical Office, Gross domestic product at current prices by sectors: http://apl.czso.cz/pll/rocenka/rocenka.presmsocas

The highest increase in share on GDP between year 2003 and 2012 was in industry. The variation rate between these years equals 4.8%. Also share of agriculture slightly increased between 2003 and 2012 - variation rate equals 3.7%. On the other hand share of services on GDP slightly decreased. The variation rate equals -1.6%.

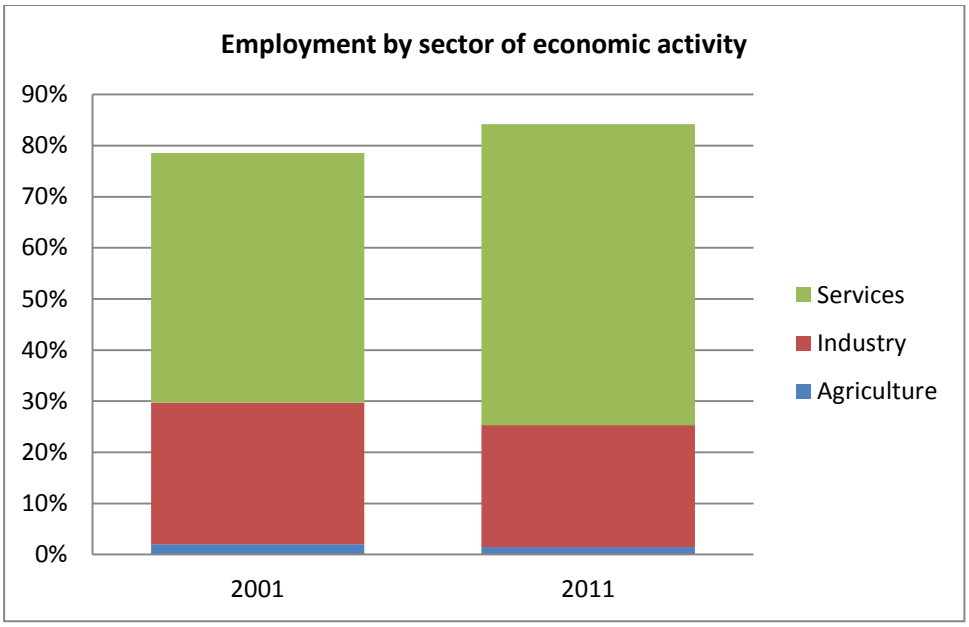


ECO 03: EMPLOYMENT BY SECTORS AND ITS VARIATION RATE

Geographical coverage: City

Data source: Czech Statistical Office, Census 2001 and 2011

Most inhabitants of Litoměřice city are employed in services (58.9% in 2011) and least in agriculture (1.4% in 2011). Furthermore, between 2001 and 2011 decrease of employment rate in agriculture can be observed. The variation rate between 2001 and 2011 is -28.9%. Also the employment in industry decreases, the variation rate between 2001 and 2011 equals -13.8%. On the other hand, employment in services increased from 48.9% in 2001 to 58.9% in 2011, the variation rate being 20.5%.



ECO 04: BUSINESS SURVIVAL VARIATION RATE

Geographical coverage: NUTS3 – Ustecky kraj

Data source: Eurostat, Business demography by size class and NUTS 3 regions: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=bd_size_r3&lang=en

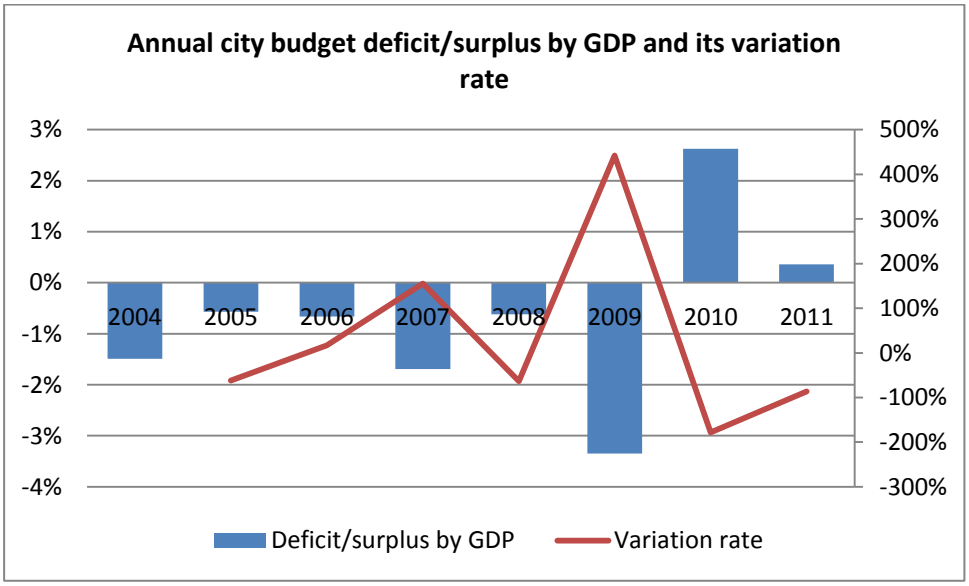
The data on business survival / demography for the relevant NUTS3 (Ústecký kraj) are available only for year 2010. In this year there were 66,447 active enterprises in the region.

ECO 05: BUDGET DEFICIT/SURPLUS AND ITS VARIATION RATE

Geographical coverage: City

Data source: Annual budget of the city, available online on the city website: https://www.litomerice.cz/rozpocet-a-hospodareni-mesta; Eurostat, Annual GDP per capita (ECO 01)

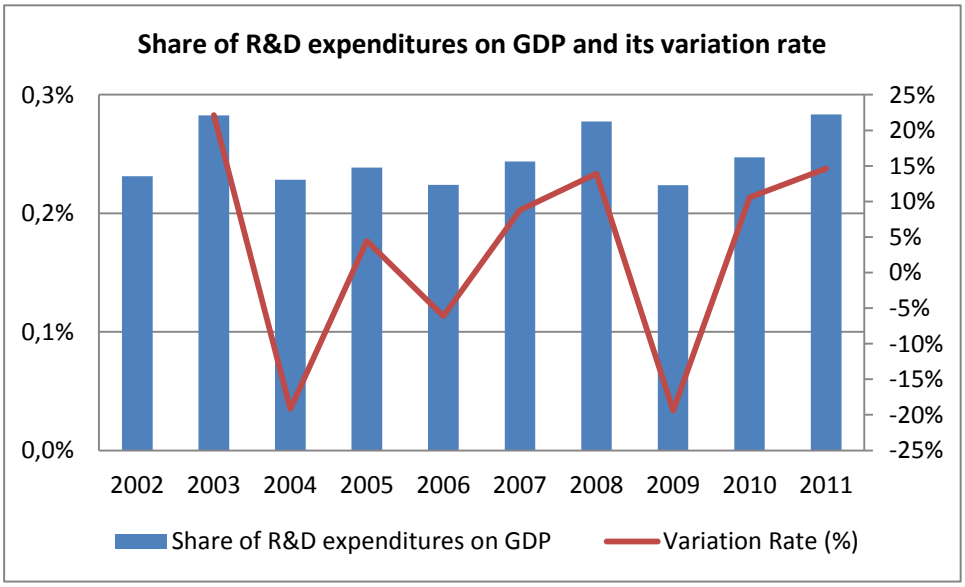
The GDP for the city of Litoměřice is not available. The indicator was thus constructed by multiplying the GDP per capita for NUTS3 (indicator ECO 01) by the number of inhabitants of the Litoměřice city.



ECO 07: SHARE OF R&D EXPENDITURE ON GDP AND ITS VARIATION RATE, 2002-2011

Geographical coverage: NUTS2

Data sources: Eurostat - Science and technology statistics (NUTS2): http://epp.eurostat.ec.europa.eu/portal/page/portal/region_cities/regional_statistics/data/database



VI FINDINGS AND KEY CHALLENGES

Litoměřice is one of the pioneer cities in Czech Republic aiming at energy efficiency and renewable energy production. Its commitment is manifested in the Strategy development plan and the Energy plan of the city. Currently, strong emphasis is given on the energy consumption and production. As member of the National Network of Healthy Towns, it targets a lot of activities as well as planning also to the social sphere and stresses an open communication with its inhabitants and their involvement in the city´s decision making.

The strategy of Litoměřice city is aiming at energy self-sufficiency based mainly on the project of geothermal power plant. The success of its strategy is thus strongly dependent on the availability of external financial resources. Litoměřice is small city that is from large extent influenced by the development of higher territorial units.

VII CONCLUSIONS

Litoměřice is the smallest case study city in the POCACITO project. Some of the data are not available at the city level as they are reported only on the level of higher territorial unit. The relevance of some of the data, e.g. the macroeconomic indicators, is questionable.