

## UNDER2MOU - ABRUZZO REGION APPENDIX

### General economic indicators



Abruzzo is a region of central Italy. Its western border lies 80 km (50 mi) east of Rome.

**Geographically**, Abruzzo, stretches from the heart of the Apennines to the Adriatic Sea, and includes mainly mountainous and wild land. The mountainous inland is occupied by a vast plateau including Gran Sasso, at 2,912 metres (9,554 ft) the highest peak of the Apennines, and Mount Majella 2,793 metres (9,163 ft). The Adriatic coastline is characterized by long sandy beaches to the north and pebbly beaches to the south.

Abruzzo is known as "**the greenest region in Europe**" as one third of its territory, the largest in Europe, is set aside as national parks and protected nature reserves: there are three national parks, one regional park, and 38 protected nature reserves. These ensure the survival of 75% of Europe's living species including rare species, such as the small wading dotterel, golden eagle, the Abruzzo chamois, Apennine wolf, and Marsican brown bear. Abruzzo is also home to Calderone, Europe's southernmost glacier. The Abruzzo region has **two types of climate**: Mediterranean climate with hot

dry summers and mild winters in coastal areas and sublittoral climate where temperatures progressively decrease with increasing altitude and precipitation with altitude in rainy hills. Like almost all Italian territory, Abruzzo Region is mainly characterized by historical towns. Abruzzo Region includes four province: L'Aquila, Chieti, Pescara and Teramo with 305 municipalities in total. The area and population for each province are listed in Table 1.

PROVINCE	AREA (km <sup>2</sup> )	POPULATION (January 1th, 2016)
Chieti	2.588	390.962
L'Aquila	5.034	303.239
Pescara	1.189	321.973
Teramo	1.951	310.339
<b>Total</b>	<b>10.762</b>	<b>1.326.513</b>



**Table 1.** Area and population in the four province in Abruzzo.

The **GDP** per capita in 2016 amount to € 22.835,3. Despite the decrease, especially over the period 2011-2014, it is worth to highlight that in 2015 the GDP per capita was the highest in the South of Italy and that in 2016 it was higher than the average data of the South of Italy (€ 17.146,00) approaching the national average (€25.890,50).

	2000	2015	2016	Average % rates per year of variation 2000-16	Average % rates per year of variation 2015-16
GDP	€ 30.643,3	€ 30.250,4	€ 30.192,8	-1,5	-0,2
GDP per capita	€ 24.295,0	€ 22.804,5	€ 22.835,3	-6,0	0,1
Employment rate (15-64 years) %	56,3	54,5	55,7		
n. of employees (thousands)	489,9	521,6	524,2		
Unemployment rate (total) %	10,2	12,6	12,1		
n. of jobseekers (thousands)	53,8	69,1	66,9		

Source "SVIMEZ Report, 2017"

**Table 2.** Economical and occupational indicators for the Abruzzo Region.

Moreover, the GDP has decreased (-0,2%) in all regions affected by the terrible earthquake in August and October 2016. The trend of the regional GDP between 2000 and 2016 is reported in Table 2. The employment data show that the performances in the Abruzzo Region are higher than those of the South Italy. The number of employees is +0,5% in 2016 (from 521.600 to 524.200 units) meanwhile the number of jobseekers decreases (-3,2% from 2015 to 2016). The employment rate grows (+1,2%) from 2015 to 2016 meanwhile the unemployment rate decreases (-0,5%).

The principal sectors of the **regional economy** are industry and tertiary, despite the role maintained by agriculture. The last one, in fact, boasts 27.383 active units (2016). The wheat is one of the most widespread products, with potatoes and beet. Moreover, important products are olive (with significant production of high quality oil) and grapes employed to produce wine such as the DOP wines Montepulciano, Controguerra and Trebbiano of Abruzzo. The region has one of the highest productivity rate in Southern Italy and its economic structure is largely based on SMEs. In 2015, Abruzzo was the one of the most industrialised region in Southern Italy (29.3% of value added from industry). Abruzzo in fact reaches industrialisation rates above the national average (66 enterprises per 10,000 residents vs. a national average of 64). The industrial activities include: electrochemical plants, cement and asphalt industries, sugar mill, milling, oil, brick and wood industries, foundries, wire drawing mills, paper mill, garment industry, glass industry, mechanical and electromechanical industry, automotive, motorcycle, food industry, manufacturing activities (14.953 local units), etc. The reachest area of industrial activities are the valley of Pescara and southern Vastese (province of Chieti). A decisive contribution to the regional economy comes from the tourist activities (12.815 local units for activity of accommodation and catering services) present principally in the many coastal centers, but also in the internal areas, which are characterized by an important environmental heritage (National Park of Gran Sasso and Monti della Laga, National Park of the Maiella Mountain, National Park of Abruzzo, Lazio and Molise and many areas protected by the Region). The development of an advanced tertiary sector benefits from the presence of the University of Chieti-Pescara, University of Teramo and University of L'Aquila. to these it is added the Gran Sasso National Laboratory for the research in the field of the particle physics.

The **transport infrastructures** include: 1) the Abruzzo International Airport; 2) four main ports located in Ortona, Vasto, Giulianova and Pescara that, over the years, became one the most important tourist ports of Italy and Adriatic Sea; 3) a railways network that show disparity between the Abruzzo coast and the inland areas; 4) three highways serving the Region (A24 Rome – L'Aquila – Teramo, A25 Torano – Avezzano – Pescara and A14 Bologna – Taranto).

## Regional ambitions on RES, EE and climate change issues

Regional RES goals are fixed by National Law. Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009, sets a mandatory 17% target for Italy for share of energy from renewable sources in gross final consumption of energy to be achieved in 2020. According to it, the **Burden Sharing Decree (MD 15/03/012)** by the Italian Government defined and quantified the intermediate and final goals that each Region and the Autonomous Province must achieve in order to meet the national targets by 2020 of overall renewable energy quotas in terms of final gross energy consumption in the electricity, heating and transport sectors amounting to 3% (that is, the 17% target less the imported quota). The Decree defines what is the Final Energy Consumption of a Region or Autonomous Province and what is the Renewable Energy Consumption and fixes in a Table the Regional Objective Trajectory, from the initial situation to 2020. In 2015, in the Abruzzo Region, the share of total energy consumption covered by renewable sources was 25,3%, that is higher than the MD forecast for the same year (13,6%) and the target to reach 2020 (19,1%). As showed in the figure here below, the Region of Abruzzo has reached and exceeded the targets set by the "Burden Sharing" Decree in terms of the share of total energy consumption covered by renewable sources.

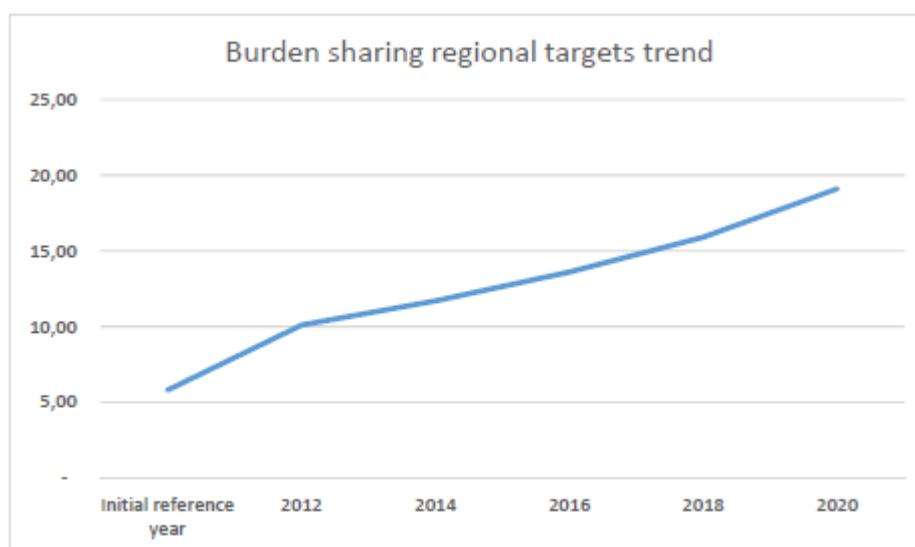


Figure 1: Burden sharing regional targets trend

	Initial year	Regional objective per year (%)				
		2012	2014	2016	2018	2020
Italy	5,3	8,2	9,3	10,6	12,2	14,3
Abruzzo	5,8	10,1	11,7	13,6	15,9	19,1

**Objectives to 2023 are also set within the ERDF ROP 2014-2020**, in particular:

- with reference to priority IV.4c "reduction of energy consumption in buildings, public building, and integration of RES", the aim is to reach the energy efficiency of the buildings with a reduction of energy consumptions of the Public Administration from 3GWh in 2011 to 2,7GWh in 2023 (about 10%);
- with reference to priority IV.4b, "promotion of Energy efficiency and use of renewable in companies", the expected result to be achieved is a widespread energetic efficiency of the enterprises in terms of:

estimated annual reduction of greenhouse gases: 1,720 Tons equivalent CO<sub>2</sub>; additional capacity for the production of electricity from renewable sources: 3 MW; decrease in the annual consumption of primary energy produced from fossil fuels: 265 TOE / year.

In 2015 the Region of Abruzzo has endorsed the **Covenant of Mayors for Climate and Energy initiative**, and thus the new challenging targets proposed for **2030 by the new climate and energy package of the European Union**. It joined the Covenant of Mayors in 2010 as a coordinator. It is currently working with its municipalities (305) and provinces (4) – all of them joined CoM in 2010 - to update the **Sustainable Energy Action Plans (SEAPs) into Sustainable Energy and Climate Action Plans (SECAPs)**.

It has also signed the **Under2 MOU (Memorandum of Understanding)**, a climate agreement that brings together subnational governments willing to make a number of key commitments, including either reducing greenhouse gas emissions equivalent to 80 to 95 percent below 1990 levels or to less than 2 annual metric tons per capita by 2050. “Under2” refers to the MOU’s goal of limiting global warming to below 2 degrees Celsius, which Intergovernmental Panel on Climate Change (IPCC) scientists say is needed to avert catastrophic climate change impacts, as well as to the goal of limiting greenhouse gas emissions to below 2 annual metric tons per capita by 2050. The Region has thus committed to the target of reducing greenhouse gas emissions 80 to 95 percent below 1990 levels, or to less than 2 metric tons per capita, by 2050.

### Regional local policy instruments to achieve these ambitions

These ambitions are achieved through a set of policies cutting across four tiers of government, policies and initiatives: the European Union, national, regional and local governments.

#### **Abruzzo Regional Operational Programme ERDF ROP 2014-2020.**

Axis focused on climate change and energy are:

- Axis IV. “Promotion of a low-carbon emissions economy»
- Axis V. “Reduction of hydrogeological risk”
- Axis VI. “Protection and exploitation of natural and cultural resources”
- Axis VII. “Sustainable urban development”

In particular, Axis IV foresees energy efficiency and energy saving interventions in both public (public buildings, in particular schools) and private sector (energy efficiency of enterprises), more specifically:

- Interventions for **energy efficiency of public buildings (schools)**, demonstrative projects and support measures: **€ 7.000.000**. The **call for proposals** has been published with deadline May 2017. The evaluation phase of the project proposals has been concluded.

- **Reduction of energy consumption and emissions in enterprises and integration of renewable sources**, demonstrative projects and support measures : **€ 8.000.000**. The **call for proposals** has been published with deadline 26/02/2018.

#### **Regional Plans in the field of energy, environment and climate change.**

Several plans in the field of energy, environment and management of the territory have been realized and implemented at Regional level, namely:

- Regional Plan of Adaptation to Climate Change – PACC (ongoing)
- Regional Plan of Energy
- Water Protection
- Water management
- Hydrogeological Asset
- Flood Protection
- Flood risk management
- Air Quality
- Waste management
- Quarrying and mining activities

All of them are in line with the national strategies (e.g. the National Energy Plan which introduces for the first time the concept of “energy community, and the National Plan of Adaptation to Climate Change) as well as the EU initiatives in the field.

The climate adaptation strategy of Abruzzo Region and the **Regional Plan of Adaptation to Climate Change (PACC)** have been launched through Decree of the Regional Executive no. 308 of 29 April 2015. The objectives of the strategy are:

- **To realise a regional climate change adaptation plan** that involves the main local actors through an active process and which represents a **monitoring tool of the whole regional territory**;
- **To develop an innovative information system** on climate change and its effects at local scale. The information system will support the participatory planning process, the selection of the best strategies and actions as well as the monitoring of the plan;
- **To define pilot actions** that involve both public and private sectors;
- **To raise citizens and stakeholders awareness** about the risks and vulnerabilities connected to climate change;
- Integrate Regione Abruzzo in the **network of European Regions** involved in climate change adaptation policies.

Main phases are:

- **RoadMap for Climate Change Adaptation.** Status: Already developed as a basis to the strategic plan – monitored and eventually updated in accordance to National and EU initiatives and policies;
- **Regional Climate Profile.** Status: completed;
- **Participatory Process** with the objective to develop and implement a bottom-up and replicable process in order to transfer technical-scientific information to stakeholders, collect and discuss best practices and initiatives already in place and identify and implement adaptation measures. Status: the participatory process for the climate profile and the drawing of guidelines for the plan of adaptation have been concluded.
- **Communication & Awareness Campaign.** Status: ongoing.
- **Tools of Governance**, mainly regional plans.
- **Guidelines for the realization of the regional plan of adaptation to climate change.** Status: ongoing;
- **Regional plan** of adaptation to climate change. Status: to be realized.
- **Monitoring.** It refers both to the monitoring of climate change impact (risk and vulnerability) on the basis of the Regional Climate Profile and monitoring of implementation level of actions provided by the Adaptation Plan.

#### **SEAPs and SECAPs.**

Moreover, all **SEAPs (Sustainable Energy Action Plans)** submitted under the 2020 Covenant of Mayors, that is 309 plans, are currently under monitoring. The Region is now working with its municipalities to evaluate the opportunity to update them into **SECAPs (Sustainable Energy and Climate Action Plans to be submitted under the 2030 Covenant)** also in line with the Regional Plan of Adaptation to Climate Change. Integration and coordination of all the above mentioned plans is also fostered.

The **main initiatives and activities** are:

#### **The public and private initiatives and the Pescara Charter.**

The Abruzzo Region is promoting since time the public and private initiatives and partnerships in its policy instruments, plans and programmes also through the participation to dedicated European projects. Between them, it is worth to highlight the NEW FINANCE project, “New finance for energy efficiency measures in public buildings”, funded within the Interreg MED 2014-2020 and currently ongoing. NEW FINANCE will help accelerate new investment in energy efficiency and renewable energy sources in public buildings by increasing the confidence of key decision makers from public

and finance sector to find and apply working strategies for the mobilization of private funding and better use of ESI funds. . In order to reach this goal, the project will focus on effective replication of proven implementation models and smart networking activities equally involving stakeholders from public and private sector whilst capitalizing on a number of previous and ongoing similar initiatives.

In this frame, the Abruzzo Region is working with local municipalities, ESCOs, financial institutions and banks, to identify already implemented and successful private and public projects as well as to jointly work at new project proposals. 3 initiatives have been highlighted as good practices within the NEW FINANCE project: one on the Energy service agreements - EPC, ESC - implemented in a school of the municipality of Pescara; one on the public-private partnership on energy efficiency of clear claps in a real estate of the municipality of Montesilvano; one on the public-private partnership on the swimming pool of Atesa). Details about each of them are available in the NEW FINANCE platform: <http://newfinanceplatform.com>.

### **Pescara Charter.**

In November 2016, the Abruzzo Regional Council published the “Pescara Charter”, a pact between Abruzzo Regional Council and enterprise in order to follow the way of a sustainable industry. The Charter is the result of five months of stimulating debate underpinned by themed round tables with enterprise, and partnerships with universities and research institutes. The Pescara Charter for sustainable industry is inspired by the European Union’s strategic orientation and its policies (such as the Europe 2020 strategy). Abruzzo Regional Council identifies as “sustainable industry” any manufacturing enterprise pursuing one or more of the following areas of sustainability:

- **environmental**, representing the capability to preserve over time the three functions of the environment: supply of resources, receiver of waste, direct source of utility;
- **economic**, representing the capability of an economic system to generate enduring growth of economic indicators, in particular earnings and employment;
- **social**, representing the capability to guarantee conditions of human welfare (safety, health, education) distributed equally by class and gender, and to promote social inclusion.

In order to be part of the Pescara Charter and benefit from advantages, enterprises have to commit to respect some of the 61 sustainability conditions that have been identified. The conditions are not compulsory and different levels of engagement – basic, intermediate, advanced – are available, depending on the number and type confirmed. The higher the level, the greater the opportunities and returns. In particular, Pescara Charter offers applicant companies a “region-enterprise partnership process” that provides specific advantages for enterprise committed to pursuing the abovementioned aims of sustainable industry. Synthetically, the Abruzzo Regional Council identified advantages in terms of: simplified procedures, reduction of administrative, national and local taxes, economic concessions and supporting legislation. More detailed information about conditions and advantages proposed in the Pescara Charter can be found in the Tables at pages 14-20 of the Pescara Charter’s brochure available at the following link: [http://www.abruzzolavoro.eu/wp-content/uploads/2016/07/A5\\_CartadiPescara\\_EN.pdf](http://www.abruzzolavoro.eu/wp-content/uploads/2016/07/A5_CartadiPescara_EN.pdf).

### **The participatory process (involvement of stakeholders and citizens).**

The Abruzzo Region is implementing since years initiatives aimed at involving citizens and regional stakeholders in its policies, programmes and activities. The objective is: to hear about citizens and stakeholders proposals, comments, solutions, challenges, etc... so to take care of them in the implementation of regional policies and initiatives; to identify actions and initiatives already in place in the regional territory highlighting bad and good practices; to transfer technical-scientific information to stakeholders and raising awareness between all citizens; identify and implement new measures.

The participatory process is a crucial step towards the realization of the regional plan of adaptation to climate change. Several meetings have been organized during past months in different cities of the region. We are currently realizing the guidelines for the participatory process.

### **Participation to EU projects and cooperation programmes.**

The Abruzzo Region is involved, both as coordinator and partner, in several EU projects in the field of energy and climate change. Between the ongoing projects it is worth to highlight:

- “Community owned and led energy for security climate change and employment” (COALESCCE) – Interreg Europe;
- New finance for energy efficiency measures in public buildings (NEW FINANCE) – Interreg MED;
- HySchools - Hydrogen in Schools – Erasmus plus;
- L’Officina della creatività – energy virtual lab at schools – Erasmus plus;
- LINKPAS – ESPON 2020, on networks of protected areas and climate change governance.