

Interreg



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IPA South Adriatic

CLEAN

Workshop «Good practices and grants scouting for sustainability»

Capurso SECAP

July 2nd, 2025





142 MUNICIPALITIES
FINANCED
1.119.000 €

REGIONE PUGLIA

- 2015 | CoM LOCAL COORDINATOR
- 2022 | REGIONAL CLIMATE STRATEGY
Adaptation toolkit for municipalities
- 2022 | Call for funding SECAPs
- 2022 | Call for fundind participatory processes

CITTA' METROPOLITANA BARI

- 2021 | Metropolitan Strategic Plan (MSP)
- 2023 | Guidelines to integrate SECAPS into local planning
- 2024 | Com Local coordinator
- 2025 | Participatory process to integrate Energy Poverty in SECAPS

AESS support:

- Città Metropolitana in drafting guidelines
- 20 Municipalities in drafting SECAPS
- some municipalities in participatory processes, in developping CERS
- Apulia Region arranging a training course for local authorities

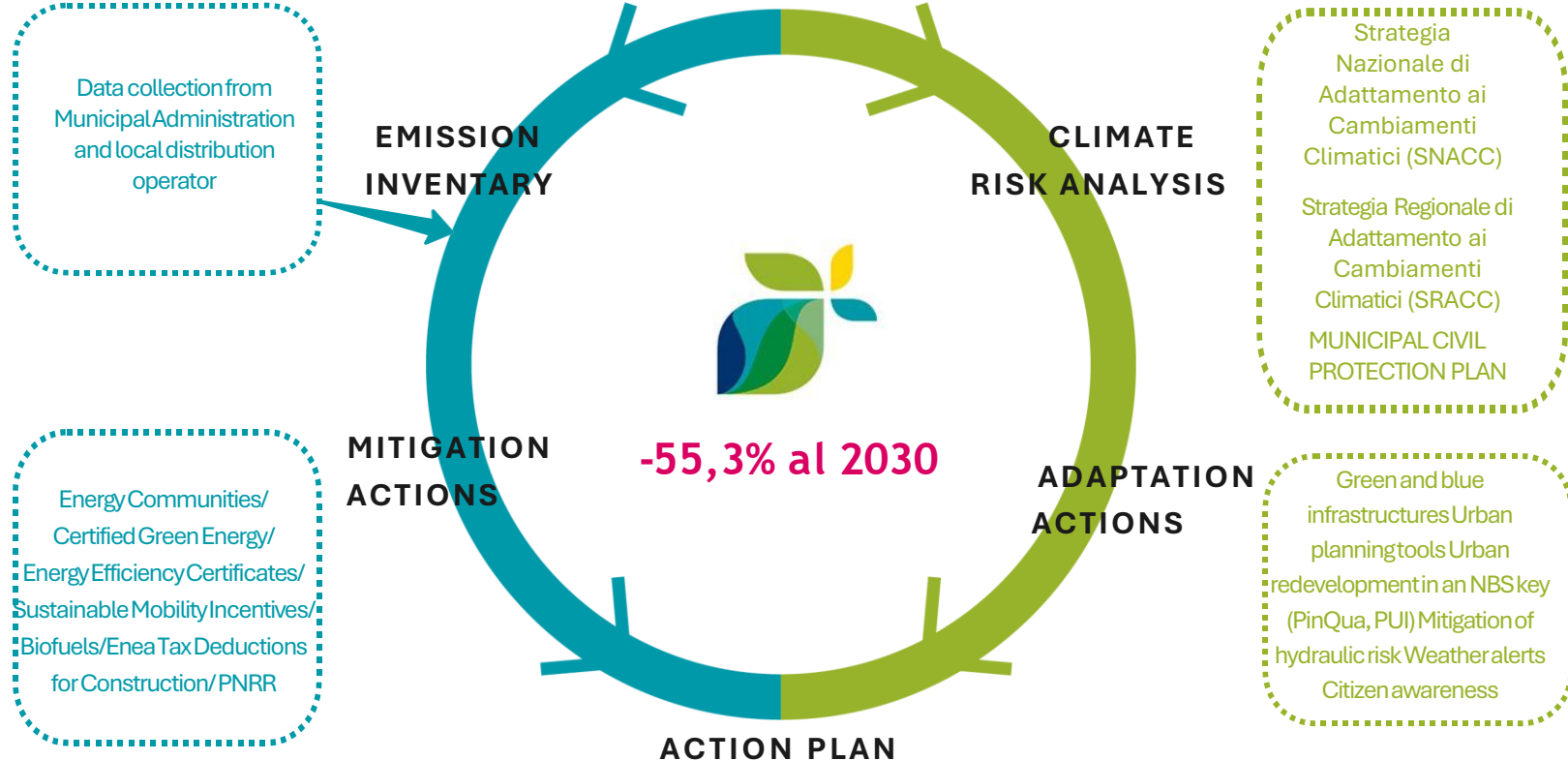


APULIA REGION



Apulia delegation in Brussels 2024

SECAP STRUCTURE



Energy efficiency and adaptation for a more resilient municipality by 2030



CHRONOLOGY

2012 Baseline

2022 SECAP membership

2024 *approval in the City Council*



AREAS OF THE PLAN

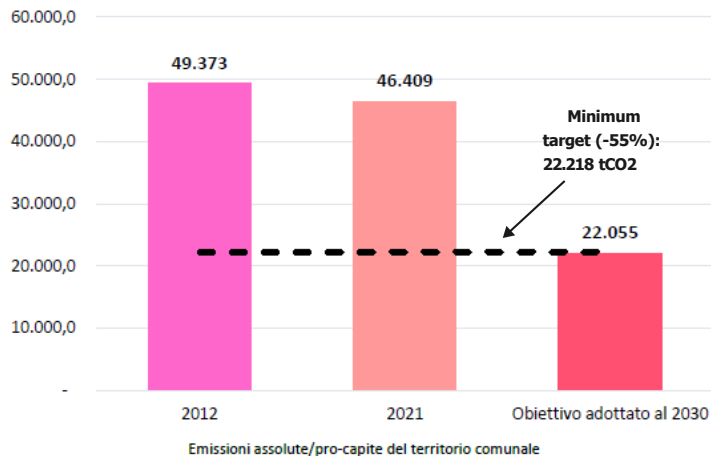
- Municipal buildings and equipment
- Residential
- Tertiary
- Industry
- Transport and sustainable mobility
- Renewable sources
- Training and awareness raising



ABSOLUTE EMISSIONS REDUCTION TARGET:

- 55.3% by 2030

Trend emissioni, obiettivo assoluto adottato
e obiettivo minimo PAESC al 2030 (linea tratteggiata)

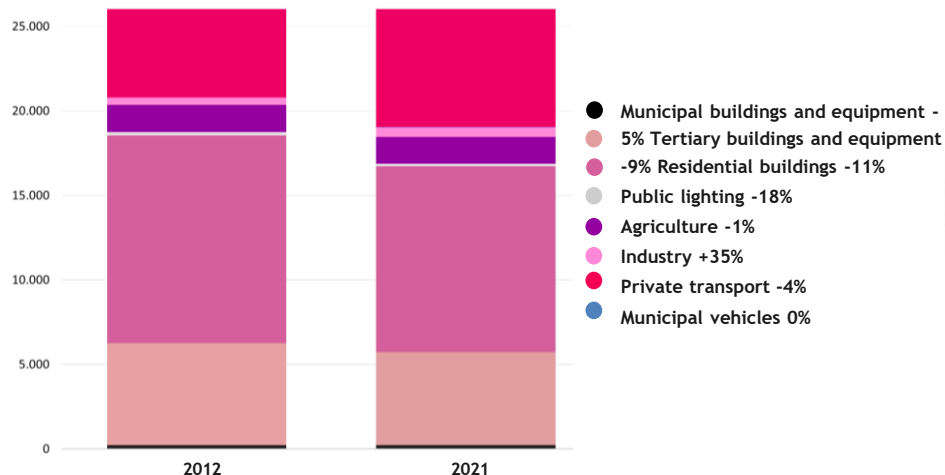


CAPURSO | Emission Inventory

-6% tCO₂ in 2012-2021



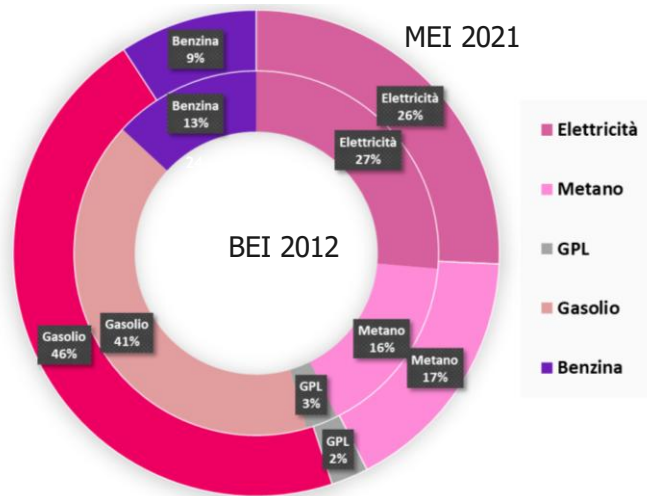
Comparison of emissions by sector
[tCO₂/year] 2012 vs 2021



-6% tCO₂ al 2021

emissions reduction in almost all sectors, in particular public lighting, tertiary, municipal and residential buildings

Breakdown by energy source [tCO₂/year] 2012 vs 2021



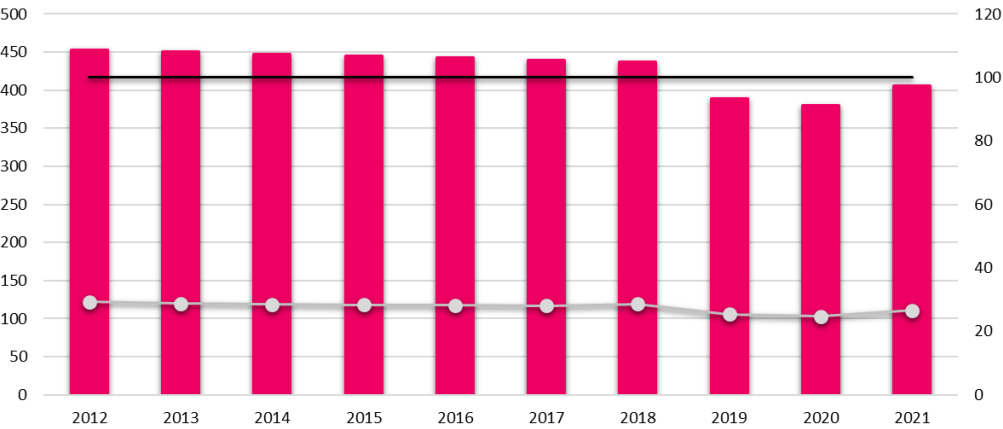
The weight of emissions from diesel and methane is increasing, while electricity and petrol are decreasing.

-18% tCO2 in 2012-2021

Increase network efficiency and lamp replacement



Cumulative public lighting electricity consumption in the Municipality of Capurso [MWh] 2012-2021



Reference: Naltional
Average consumption
100 kWh/inhabitant

The per-capita consumption (kWh/inhabitant) is much lower than the national average

Tendency to reduce consumption due to renovation of public lighting with LED

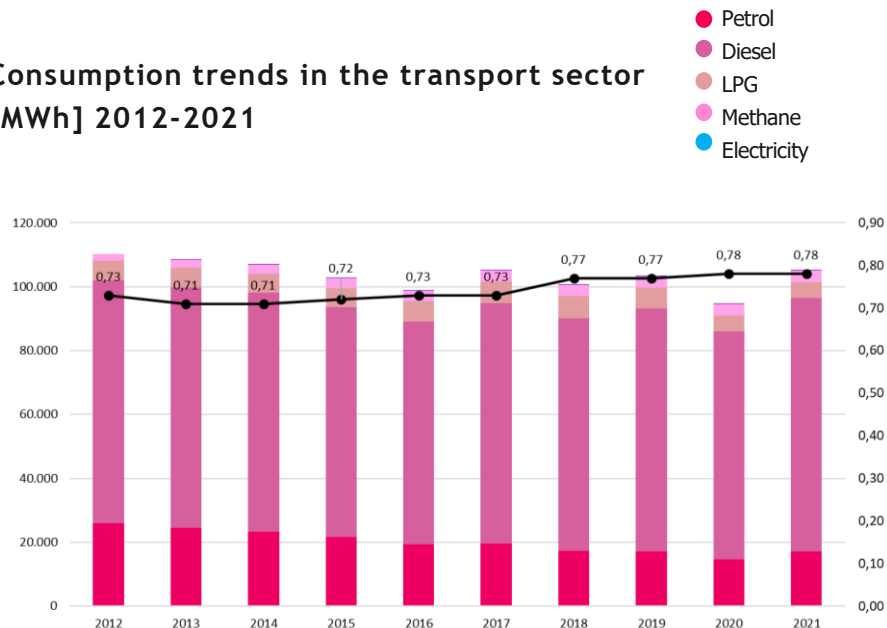
EMISSIONS / TRANSPORT INVENTORY

-4% tCO₂ in 2012-2021

Reduced consumption



Consumption trends in the transport sector
[MWh] 2012-2021



Average number of vehicles/inhabitant increasing since 2012 (0.71 to 0.78)

Reduction of consumption for private transport (MWh) -5%

Significant reduction in petrol consumption (-34%)

First electricity consumption starting from 2013

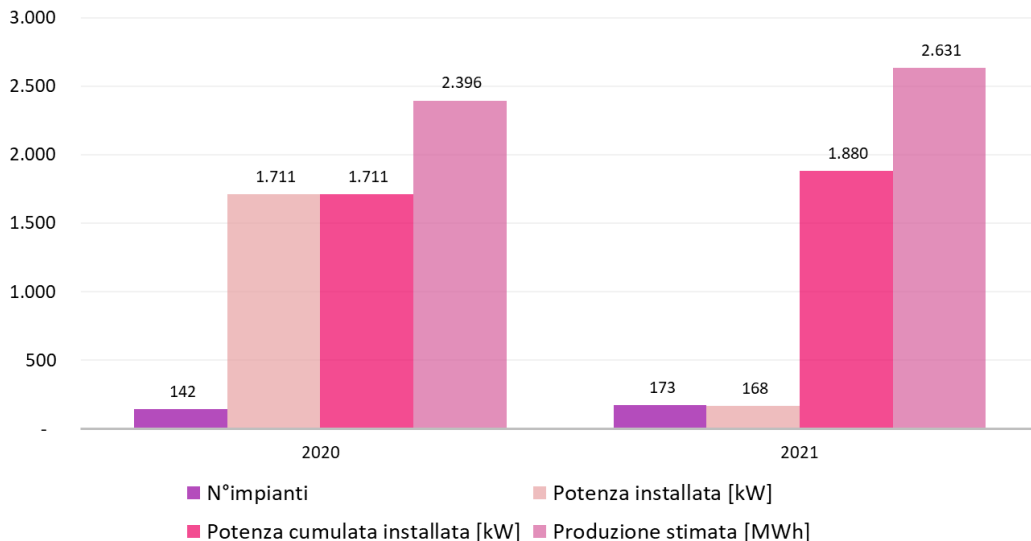
EMISSIONS INVENTORY / RENEWABLE ELECTRICITY

8% of total needs

2020-2021: % of the number of plants, % of electricity production (MWh) PV

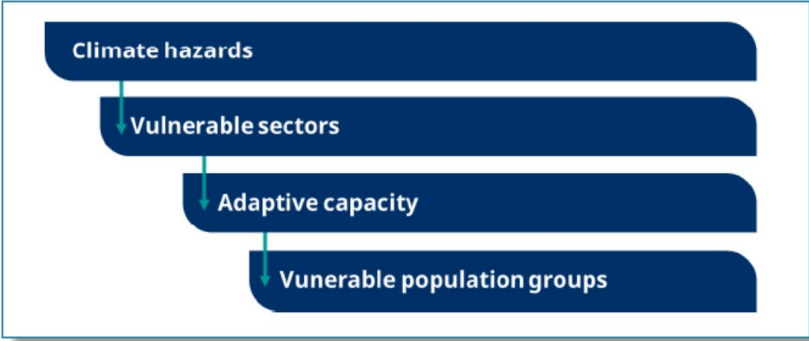


PV plants in Capurso 2020s and 2021



173 impianti FV installati al 2021
1.880 kW di potenza totale installata al 2021

2.631 MWh di energia
elettrica prodotta nel 2021



RISCHI CLIMATICI

	<i>ondate calore</i>		<i>trombe d'aria</i>
	<i>ondate freddo</i>		<i>siccità</i>
	<i>precipitazioni intense</i>		<i>frane e smottamenti</i>
	<i>alluvioni e innalzamento livello mare</i>		<i>incendi</i>

SETTORI VULNERABILI

	<i>Edifici</i>		<i>Ambiente e Biodiversità</i>
	<i>Trasporti</i>		<i>Salute</i>
	<i>Infrastrutture per energia</i>		<i>Protezione civile</i>
	<i>Infrastrutture per acqua</i>		<i>Turismo</i>
	<i>Infrastrutture per rifiuti</i>		<i>formazione scolastica</i>
	<i>Pianificazione Territoriale</i>		<i>Tecnologie Dell'informazione e Telecomunicazione.</i>
	<i>Agricoltura e Forestazione</i>		

CAPURSO/ RISK AND VULNERABILITY ANALYSIS

+ 2 °C T annual average daily / decrease in precipitation in summer



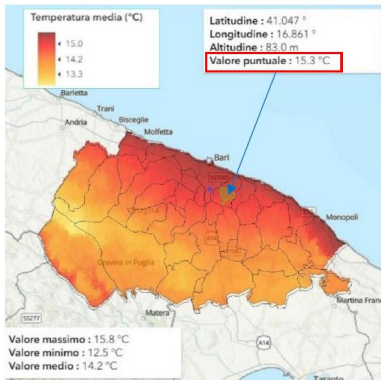
Sources: Strategia Nazionale di Adattamento ai Cambiamenti Climatici (SNACC) / Piano Nazionale di Adeguamento ai Cambiamenti Climatici (PNACC) / Strategia Regionale di Adattamento ai Cambiamenti Climatici (SRAAC) Regione Puglia / ISPRA - Istituto Superiore per la Protezione e la Ricerca Ambientale / Progetto europeo LIFE MASTER ADAPT (LIFE15 CCA/IT/000061) / Progetto europeo Interreg AdriaClim / Indirizzi per la stesura della Strategia Regionale di adattamento ai cambiamenti climatici / Piano comunale di Protezione civile / Piano Assetto Idrogeologico / portale IDROGEO / Legge quadro in materia di incendi boschivi, n. 353 del 21.11.2000

Average temperature trend in the municipality of CAPURSO

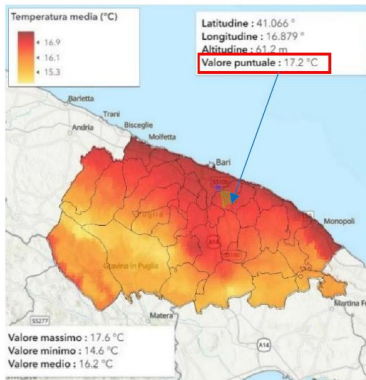
1 °C1 during the period 1961-2020

TEMPERATURE MEDIE ANNUE

1961 – 1990



1991 - 2020



2050 PROJECTIONS (SRAAC – Regime Puglia)

MINIMUM WINTER TEMPERATURE = 6.9 °C (1961-1990) / 7.2 °C (2021-2050) average minimum daily temperature = + 0.3 °C

MAXIMUM SUMMER TEMPERATURE = 28.5 °C (1961-1990) / 29.5 °C (2021-2050) average daily minimum temperatures = + 1 °C

ANNUAL RAINFALL = 596 mm (1961-1990) / 400 mm (2021-2050)

NUMBER OF RAINLESS DAYS IN SUMMER = 15 (1961-1990) / 15 (2021-2050)

NUMBER OF TROPICAL NIGHTS = 80 (1961-1990) / 85 (2021-2050)

SUMMER HEAT WAVES = 15 (1961-1990) / 24 (2021-2050)

CAPURSO / RISK AND VULNERABILITY ANALYSIS

RISCHIO CLIMATICO	RISCHIO ATTUALE DI PRESENZA DI PERICOLO		RISCHIO FUTURO		
	PROBABILITÀ DI RISCHIO	IMPATTO DEL RISCHIO	VARIAZIONE DELL'INTENSITÀ DEL PERICOLO PREVISTA	CAMBIAMENTO PREVISTO NELLA FREQUENZA DEL RISCHIO	INTERVALLO DI TEMPO
CALDO ESTREMO	ALTA	ALTO	IN AUMENTO	IN AUMENTO	BREVE PERIODO
SICCITA' E SCARSITA' D'ACQUA	MODERATA	MODERATO	IN AUMENTO	IN AUMENTO	MEDIO PERIODO
INTENSE PRECIPITAZIONI	BASSA	MODERATO	IN AUMENTO	NESSUNA VARIAZIONE	MEDIO PERIODO
VENTO	BASSA	MODERATO	NESSUNA VARIAZIONE	NESSUNA VARIAZIONE	MEDIO PERIODO
INONDAZIONI	MODERATA	MODERATO	IN AUMENTO	IN AUMENTO	MEDIO PERIODO
MOVIMENTI DI MASSA SOLIDA	---	---	---	---	---
INCENDI	MODERATA	MODERATO	IN AUMENTO	IN AUMENTO	MEDIO PERIODO

caldo estremo



incendi



siccità



piogge intense



tempeste



inondazioni



Movimenti di massa solida



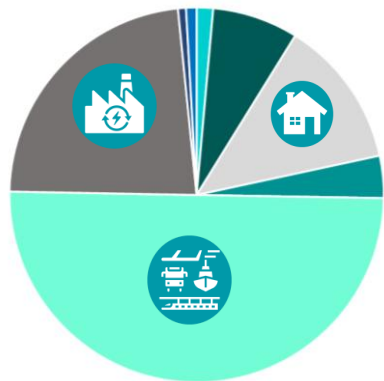
CAPURSO / MITIGATION ACTIONS

20 total actions / 8 sectors



Contribution to actions by
sector [% reduction in tCO₂]

-55,3% tCO₂



- Public buildings
- Tertiary buildings
- Residential buildings
- Industrial sector
- Transport
- Local electricity
- production Local
- heat/cold production
- Other/agriculture



A/ PUBLIC BUILDINGS AND FACILITIES (1%)

- A.01 - REDEVELOPMENT OF MUNICIPAL BUILDINGS
- A.02 - PUBLIC LIGHTING REDEVELOPMENT
- A.03 - CERTIFIED GREEN ENERGY IN THE PUBLIC SECTOR



B/ TERTIARY BUILDINGS AND EQUIPMENT (7%)

- B.01 - ENERGY EFFICIENCY IN THE TERTIARY SECTOR
- B.02 - CERTIFIED GREEN ENERGY IN THE TERTIARY SECTOR



C/ RESIDENTIAL BUILDINGS (13%)

- C.01 - ENERGY EFFICIENCY IN THE RESIDENTIAL SECTOR
- C.02 - REDEVELOPMENT AND RECOVERY OF SOCIAL HOUSING
- C.03- CERTIFIED GREEN ENERGY IN THE RESIDENTIAL SECTOR



D/ INDUSTRY (4%)

- D.01 - ENERGY SAVING IN THE INDUSTRIAL SECTOR
- D.02 - CERTIFIED GREEN ENERGY IN THE INDUSTRIAL SECTOR



E/ TRANSPORT (50%)

- E.01 - VEHICLE EFFICIENCY AND REDUCTION OF TRAFFIC (Sustainable mobility and SUMP)
- E.02 - DEVELOPMENT OF ELECTRIC MOBILITY
- E.03 - INCREASE IN THE SHARE OF BIOFUELS
- E.04 - RENEWAL OF THE MUNICIPAL FLEET



F/ LOCAL ELECTRICITY PRODUCTION (23%)

- F.01 - LOCAL PRODUCTION OF RENEWABLE ELECTRICITY
- F.02 - CONSTRUCTION OF MUNICIPAL REC AND PV SYSTEMS



G/ LOCAL HEAT PRODUCTION FOR HEATING (1%)

- G.01 - SOLAR THERMAL SYSTEMS



H-OTHER (1%)

- H.01 - CONSUMPTION TRENDS FOR THE AGRICULTURAL SECTOR
- H.02 - CERTIFIED GREEN ENERGY IN THE AGRICULTURAL SECTOR
- H.03 - IMPROVING THE NETWORK FOR THE SEPARATE COLLECTION OF URBAN WASTE



PUBLIC BUILDINGS | 9,4 mil €

Integration of metropolitan action (Metropolitan guidelines)

Package of renovation:

- Roof Insulation
- Heat pump + PV plant
- Internal air circulation
- Shading System

NEAR ZERO EMISSION BUILDINGS

GREEN CERTIFIED ELECTRICITY PROCUREMENT | 100% electricity

PUBLIC LIGHTING | 93% already LED lamps

PHOTOVOLTAICS | 7 new plants, around 200 KW

Piano della Mobilità Ciclistica (PMC o Biciplan)

Piano della Mobilità Sostenibile

CAPURSO / MITIGATION ACTIONS

20 total actions / 8 sectors



ACTION A.01 -PUBLIC BUILDINGS RENOVATION



SOGGETTO RESPONSABILE	Comuni di Capurso
START AND END OF ACTIVITIES	2021 - 2030
ACTIVITY PROGRESS	In progress
SOGGETTI COINVOLTI	Governo nazionale e subnazionale e/o agenzia
IMPLEMENTATION COSTS	9.387.218,88€
STRATEGIC TOOL	PNRR, Conto termico 2.0, Fondi FSC
MONITORING INDICATOR	n° interventions, sqm involved, MWh saved, t CO2 saved
OBIETTIVO 2030	Redevelopment of the municipal building stock and reduction of consumption



ENERGY SAVING
- 478 MWh/y



PRODUCTION OF
RENEWABLES
0 MWh/a



CO2
REDUCTION
-97 t/year

CAPURSO / ADAPTATION ACTIONS

6 actions / 3 areas



INFRASTRUTTURE
VERDI E BLU

.01 –PLANTING OF PLANTS AND
TREES - Piani Urbani Integrati (PUI)

A.02 – URBAN REDEVELOPMENT
IN NBS: Integrated Urban Plans and
PinQua projects

A.03 – URBAN PLANNING
INSTRUMENTS (URBAN PLANS
AND NEW MUNICIPAL BUILDING
REGULATIONS



OTTIMIZZAZIONE
DEI PROCESSI DI
MANUTEZIONE
E GESTIONE SERVIZI
PUBBLICI

B.01 – INFRASTRUCTURE NETWORK
MAINTENANCE AND HYDRAULIC
RISK MITIGATION

B.02 – WEATHER ALERT AND CIVIL
PROTECTION



FORMAZIONE
E SENSIBILIZZAZIONE

C.01 – TRAINING AND
AWARENESS-RAISING
INITIATIVES FOR CITIZENS AND
CHILDREN, DIGITALISATION OF
MUNICIPAL SERVICES

CAPURSO / ADAPTATION ACTIONS

6 actions / 3 areas



ACTION A.02 - URBAN REDEVELOPMENT IN NBS KEY: Integrated Urban Plans and PinQua project

SOGGETTO RESPONSABILE	Comune di Capurso e Città Metropolitana di Bari
START AND END OF ACTIVITIES	2023 - 2030
ACTIVITY PROGRESS	Ongoing
SOGGETTI COINVOLTI	Unione Europea / Governo nazionale e subnazionale / Agenzie / Imprese locali
INDICATORS	sqm green areas/public spaces redeveloped with NBS solutions/sqm permeable pavements/ sqm de-sealed areas
CLIMATIC RISK	   
SECTORS	    





CAPURSO | PAESC Piano di Azione per l'Energia Sostenibile e il Clima 2030

24 Ottobre 2024
AESS Agenzia per l'Energia e lo Sviluppo
Sostenibile

Marco Odaldi
marco.odaldi@aessenergy.it

