



**Politecnico
di Torino**

URBAN PLANNING FRAMEWORK

Elena Vigliocco – **Luca Staricco** – Alice Barreca

HERITAGE RENOVATION AND ENHANCEMENT PROJECT

Group 1 : Borchartt Ana Eliza – Quennesson Laetitia – Prax Marie Lou – Sharapova Adelina– Okyay
Berrak Ilgin – Budaili-Khasanshina Ziliia – Singh Bisht Kartikeya

1

URBAN PLANNING FRAMEWORK

REGIONAL

PTR 1 : TERRITORIAL REDEVELOPMENT, LANDSCAPE
PROTECTION AND ENHANCEMENT

PTR 2 : ENVIRONMENTAL SUSTAINABILITY, ENERGY EFFICIENCY

PROVINCIAL

PTGM:ECONOMIC-PROCUTIVE UNITS

PTGM:HISTORICAL, CULTURAL NETWORK

PTGM:SYSTEM OF PROTECTED AREAS AND GREEN
INFRASTRUCTURES

PAI: HYDROGEOLOGICAL PLANNING PLAN

MUNICIPAL

PGR: GENERAL REGULATORY PLAN

TERRITORIAL REDEVELOPMENT, LANDSCAPE PROTECTION AND ENHANCEMENT

SISTEMA POLICENTRICO REGIONALE

Livelli di gerarchia urbana:

- metropolitano
- superiore
- medio
- inferiore

Torino e centri di I e II rango storico:

- Torino
- I rango
- II rango

□ Ambiti di integrazione territoriale (Ait)

MORFOLOGIA E CARATTERISTICHE DEL TERRITORIO

Zone altimetriche Istat:

- montagna
- collina
- pianura
- ▨ Comuni appartenenti a zone montane in base ad art. 32, par. 1, lett. a Regolamento (UE) n. 1305/2013 (CSR 2023-2027), di cui
- ▨ Comuni parzialmente montani

BASE CARTOGRAFICA

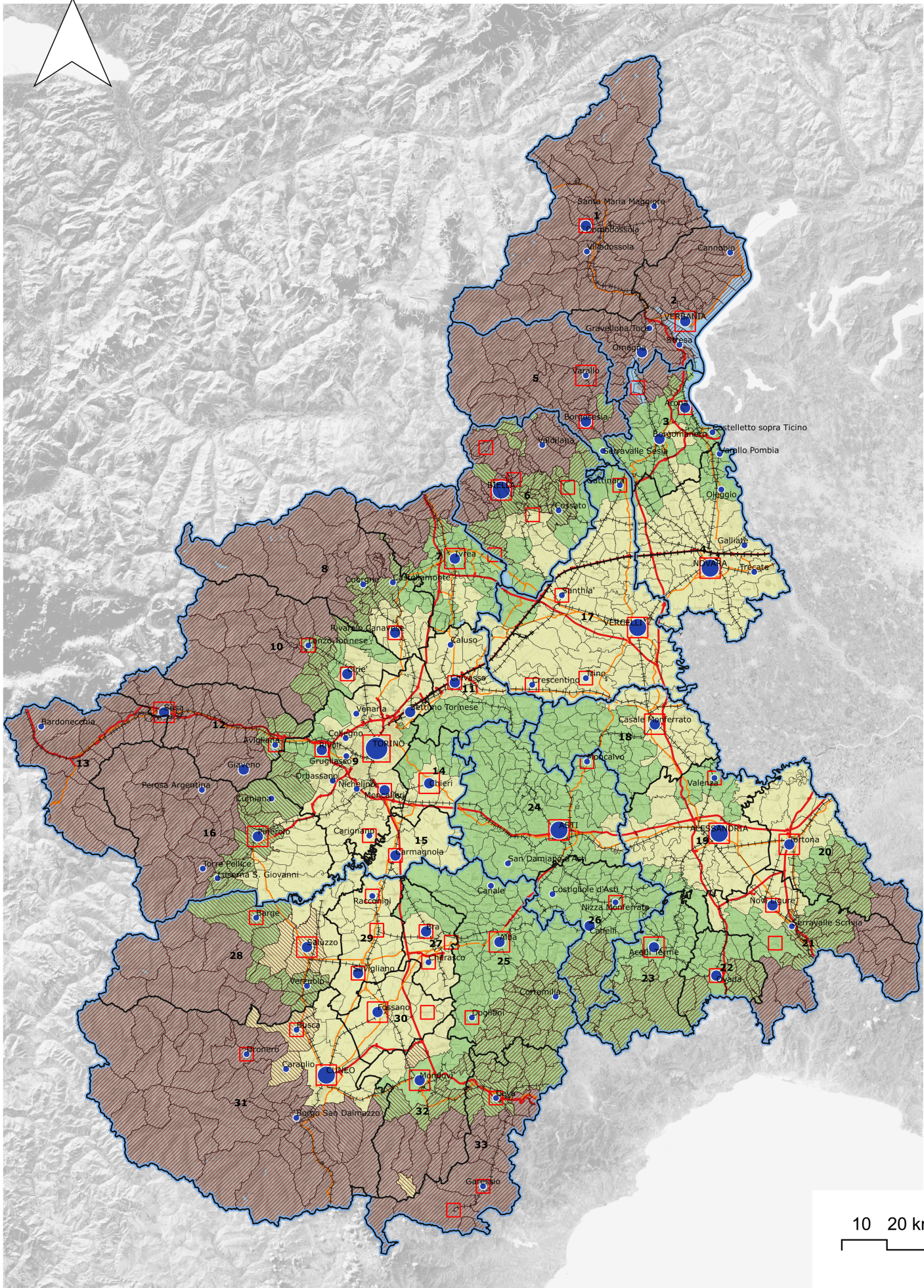
- Province/Città metropolitana
- Comuni
- Laghi

Ferrovie:

- ⇄ alta velocità
- ⇄ ordinaria

Rete stradale:

- autostrade
- strade extraurbane a traffico e velocità elevati



TERRITORIAL REDEVELOPMENT, LANDSCAPE PROTECTION AND ENHANCEMENT






| DOMAIN | CAN | SHOULD | CANNOT |
|---|--|--|--|
| Art. 16 – Territorial redevelopment, landscape protection and enhancement | Integrate economic activities and valorize environmental and landscape heritage. Rehabilitate degraded urban, industrial, or rural areas. Create green and blue infrastructures. | Ensure consistency with the Regional Landscape Plan (PPR). Control land consumption, preserve biodiversity. Restore ecosystem balance. | Consume land unnecessarily. Fragment built areas and degrade traditional landscapes. |
| Art. 17 – Enhancement of Piedmontese polycentrism | Identify and strengthen urban hubs and Territorial Integration Areas (AIT). Develop integrated mobility infrastructures. | Promote interterritorial coordination and territorialization of projects. Reduce urban sprawl. | Centralize functions in a single hub. Ignore local identities. |
| Art. 18 – Environmental redevelopment of urban areas | Promote sustainable urban policies. Create green and blue systems. Use Nature-Based Solutions (NBS). | Set thresholds for resource consumption. Improve air, soil, water, and mobility quality. | Ignore environmental indicators. Increase pollution and energy consumption. |
| Art. 19 – Historic centers | Valorize historic centers as living heritage. Reuse and regenerate old buildings. | Preserve morphology, materials, and urban coherence. Avoid gentrification and promote functional mix. | Demolish historic buildings without justification. Introduce incompatible functions. |
| Art. 20 – Urban areas outside historic centers | Rehabilitate peripheral fabrics. Promote rational densification. | Stabilize urban limits and qualify margins. Reuse industrial brownfields. | Expand urban areas diffusely. Urbanize agricultural zones without planning. |
| Art. 21 – Productive and logistic settlements | Valorize existing productive areas. Develop intermodal logistics. | Reuse brownfields, ensure architectural and energy quality. | Create new hubs without impact studies. Fragment logistic territory. |
| Art. 22 – Commercial network | Support Commercial Districts and revitalize urban centers. | Plan large-scale retail in equipped areas. Balance supply and mobility. | Create large shopping centers without coordination. Ignore environmental and mobility impacts. |

TERRITORIAL REDEVELOPMENT, LANDSCAPE PROTECTION AND ENHANCEMENT

| DOMAIN | CAN | SHOULD | CANNOT |
|---|--|---|---|
| Art. 23 – Integrated tourism networks | Promote sustainable, innovative, and resilient tourism. Create integrated local tourism networks (lakes, mountains, hills, city of Turin). Valorize sports, cultural, naturalistic, and rural tourism. | Coordinate interventions for thematic tourist circuits. Integrate tourism and mobility. Ensure sustainability and respect for environmental and cultural heritage. | Promote mass tourism that is unsustainable. Fragment local policies without regional coherence. Consume land for unnecessary structures. |
| Art. 24 – Rural areas and agricultural lands | Develop sustainable and multifunctional agriculture. Restore degraded ecosystems (hedges, wetlands, natural drainage). Promote short supply chains and biodiversity. | Preserve agricultural mosaic and ecological continuity. Promote sustainable and integrated supply chains. Reuse existing farm buildings before constructing new ones. | Fragment rural territory. Convert agricultural land to incompatible uses. Destroy natural habitats and ecological continuities. |
| Art. 25 – Areas of high environmental and landscape value | Identify areas with high landscape and ecological value. Promote rehabilitation and renaturalization. Valorize forest ecosystem functions. | Maintain morphology, environmental quality, and biodiversity. Relocate inappropriate constructions via compensation (perequazione). Use Nature-Based Solutions (NBS). | Build without landscape coherence. Damage terrain, forests, and sensitive habitats. Introduce improper uses in protected areas. |
| Art. 26 – Territories suitable for agricultural development | <ul style="list-style-type: none">- Identify high agricultural vocation lands (SIAP and land-use capacity map).- Develop sustainable, productive, and competitive agriculture.- Valorize typical products (DOC, DOCG, DOP, IGP, PAT).- Integrate agricultural, social, and tourism activities (agritourism, direct sales, rural tourism). | <ul style="list-style-type: none">- Ensure maintenance and strengthening of agricultural activities.- Limit soil use changes, preserve fertility, avoid soil sealing.- Provide buffer zones around potentially polluting sites.- Promote rural diversification and local employment. | <ul style="list-style-type: none">- Convert agricultural land to built areas without justification.- Reduce farm profitability.- Alter agricultural landscape or destroy truffle-bearing areas. |
| Art. 27 – Peri-urban agricultural areas | <ul style="list-style-type: none">- Identify and rehabilitate agricultural areas near cities.- Develop proximity, educational, or social agriculture.- Create tourist, cycling, and landscape routes. | <ul style="list-style-type: none">- Maintain farming activities and profitability.- Minimize conflicts between urbanization and agriculture.- Improve ecological connectivity (hedges, green and blue corridors).- Define clear boundaries between built-up and open areas.- Reuse degraded land through demolition or transfer of volumes. | <ul style="list-style-type: none">- Spread urban areas disorderly into agricultural zones.- Eliminate ecological continuity.- Build infrastructure ignoring soil permeability or quality. |




ENVIRONMENTAL SUSTAINABILITY, ENERGY EFFICIENCY

ELEMENTI DELLA RETE ECOLOGICA REGIONALE




-  Sistema regionale delle aree protette del Piemonte
-  Aree contigue
-  Zone naturali di salvaguardia
-  Rete Natura 2000
-  Altre aree importanti per la biodiversità (SIR)

QUALITÀ DELLE ACQUE

Qualità delle acque dei laghi:

-  buona
-  non buona
-  non determinata










Qualità delle acque dei fiumi:

-  buona
-  non buona
-  non determinata





PRODUZIONE DI ENERGIA

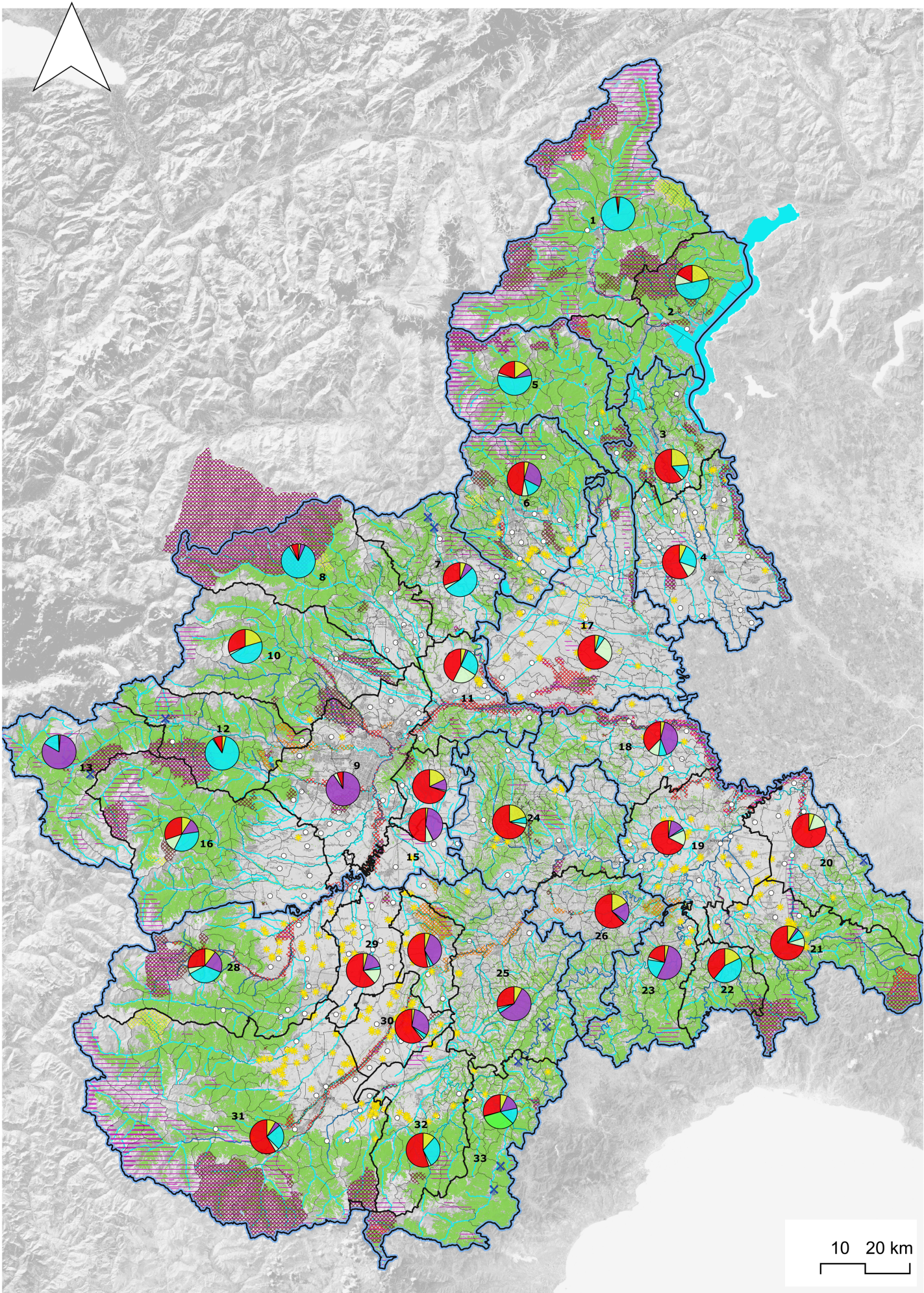


Produzione di energia per Ait (grafico a torta):

-  energia termica da biomasse (kW)
-  energia termica da teleriscaldamento (MWh)
-  energia idroelettrica (kW)
-  energia elettrica da eolico (kW)
-  energia elettrica da biogas (kW)
-  energia elettrica da solare (kW)
-  Impianti eolici
-  Impianti fotovoltaici a energia solare
-  Impianti biomassa

BASE CARTOGRAFICA

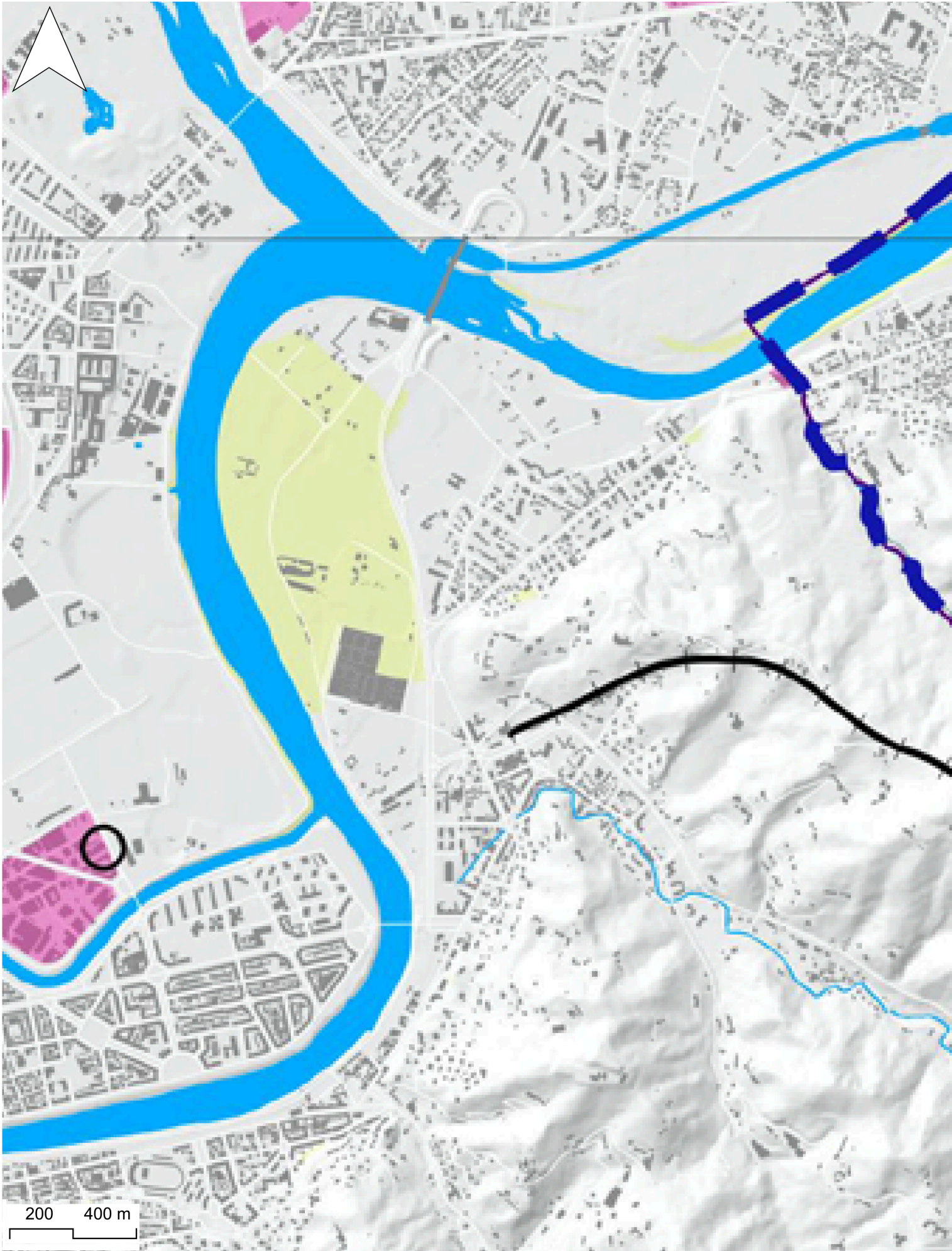
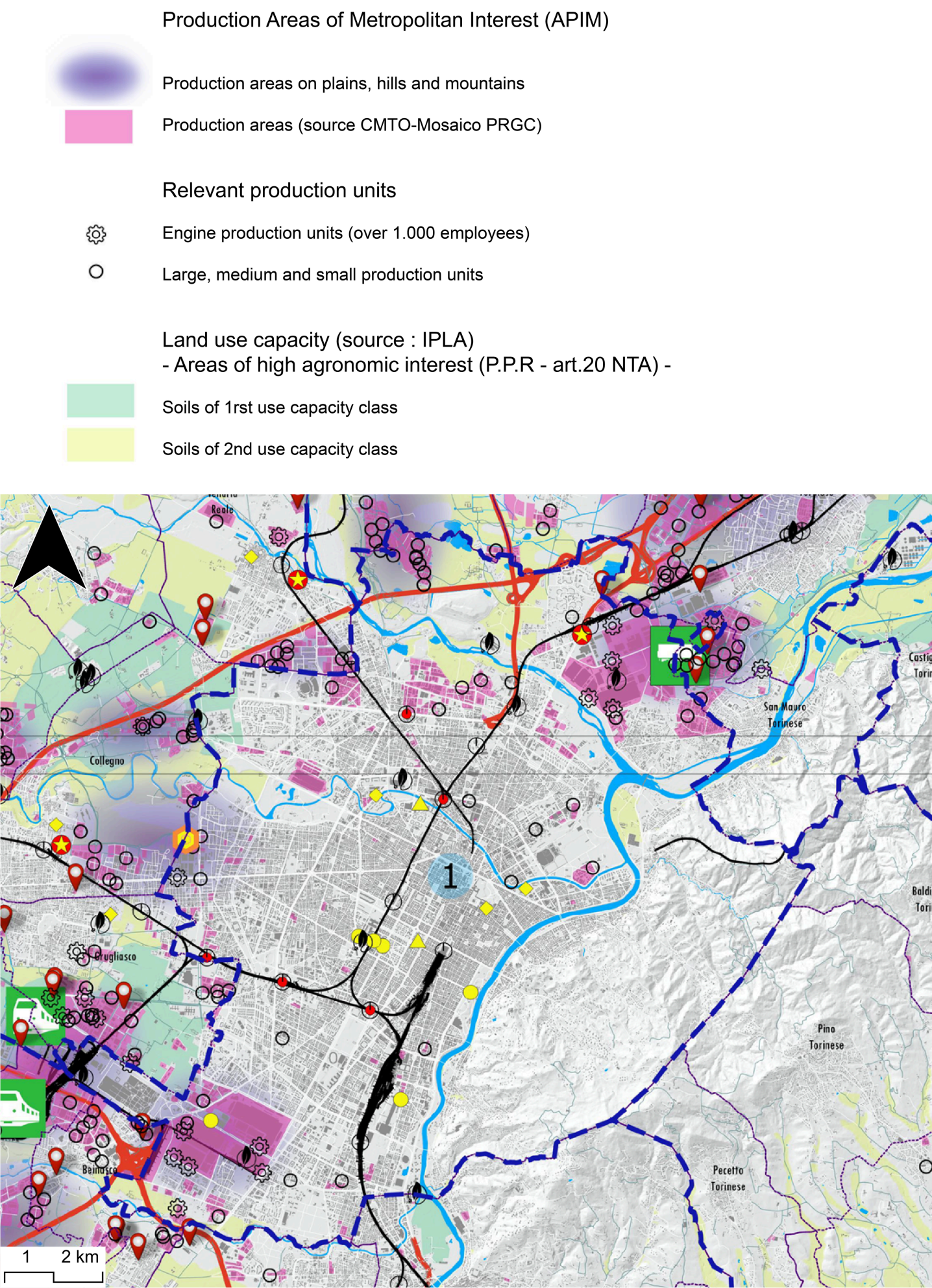
-  Province/Città metropolitana
-  Ait
-  Comuni
-  Aree boscate



ENVIRONMENTAL SUSTAINABILITY, ENERGY EFFICIENCY

| DOMAIN | CAN | SHOULD | CANNOT |
|---|--|--|---|
| Art. 30 – Sustainable development | Integrate environmental, economic, and social components into territorial planning. | Ensure balance between economic growth and ecological stability; use common sustainability indicators. | Develop one pillar (economic, social, environmental) at the expense of the others. |
| Art. 31 – Limiting land consumption | Reuse, regenerate, and ecologically compensate already urbanized areas. | Reduce land consumption to zero; set maximum consumption thresholds; prioritize inner densification and redevelopment. | Urbanize without justification; plan isolated new settlements; exceed the 3% threshold without legitimate reason. |
| Art. 32 – Soil protection | Implement structural and non-structural actions to reduce geological, hydrological, and seismic risks. | Plan in accordance with the PAI and PGRA; select safe areas for new projects; ensure cooperation between Region, Province, and Municipalities. | Build in risk-prone areas without compatibility checks or mitigation measures. |
| Art. 33 – Renewable energies | Promote energy production from renewable sources (RES) and collective self-consumption. | Ensure compatibility with landscapes and agricultural lands; promote energy efficiency, water savings, cogeneration, and green hydrogen. | Install RES systems in unsuitable areas or without specific environmental assessment. |
| Art. 35 – Protection of water resources | Use River, Lake, and Wetland Contracts for integrated water management. | Protect surface and groundwater; ensure sustainable use; maintain riparian vegetation; prevent pollution. | Degrade the quality or quantity of water; ignore PTA or River Contract guidelines. |

ECONOMIC-PRODUCTIVE UNITS



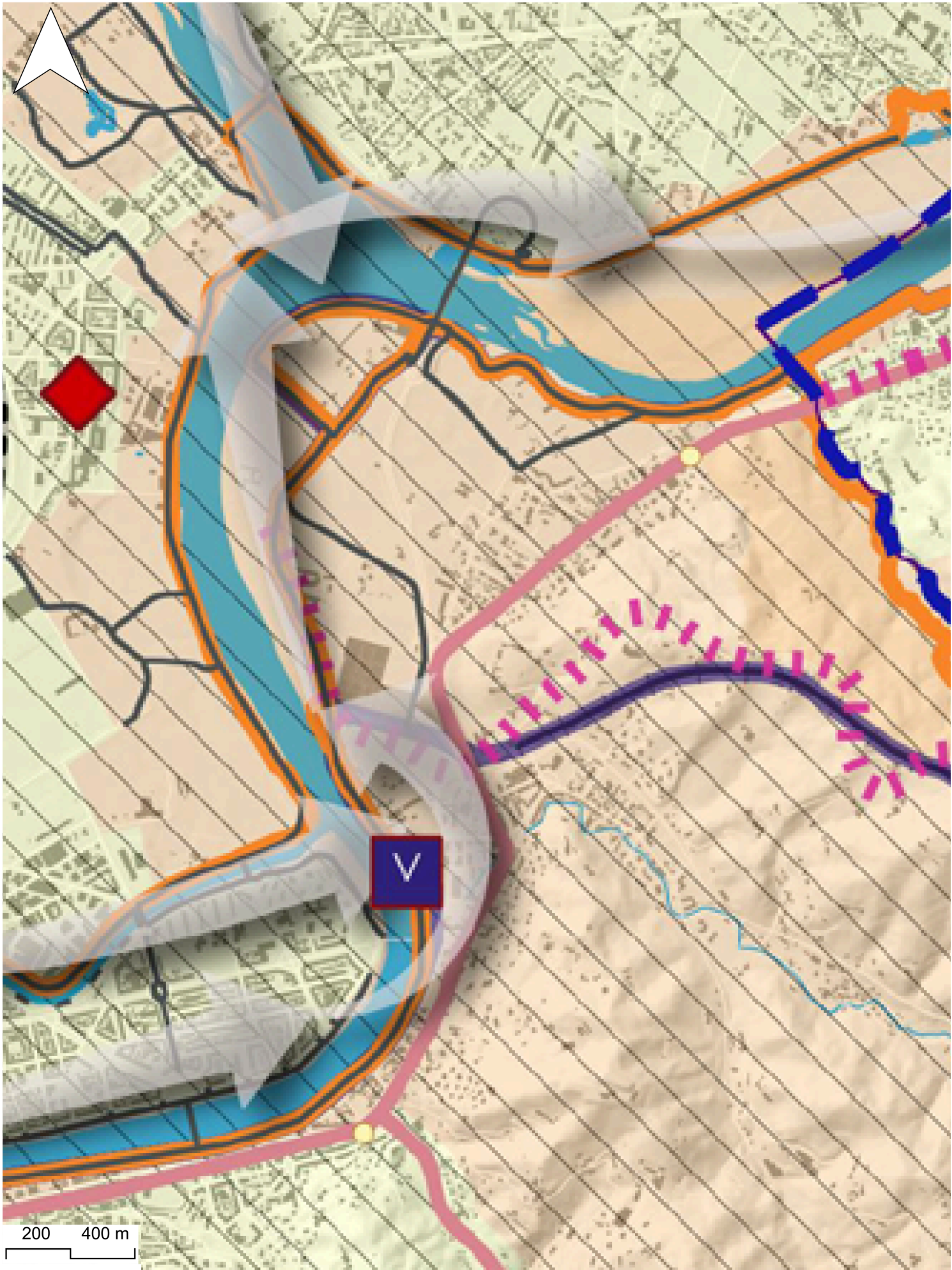
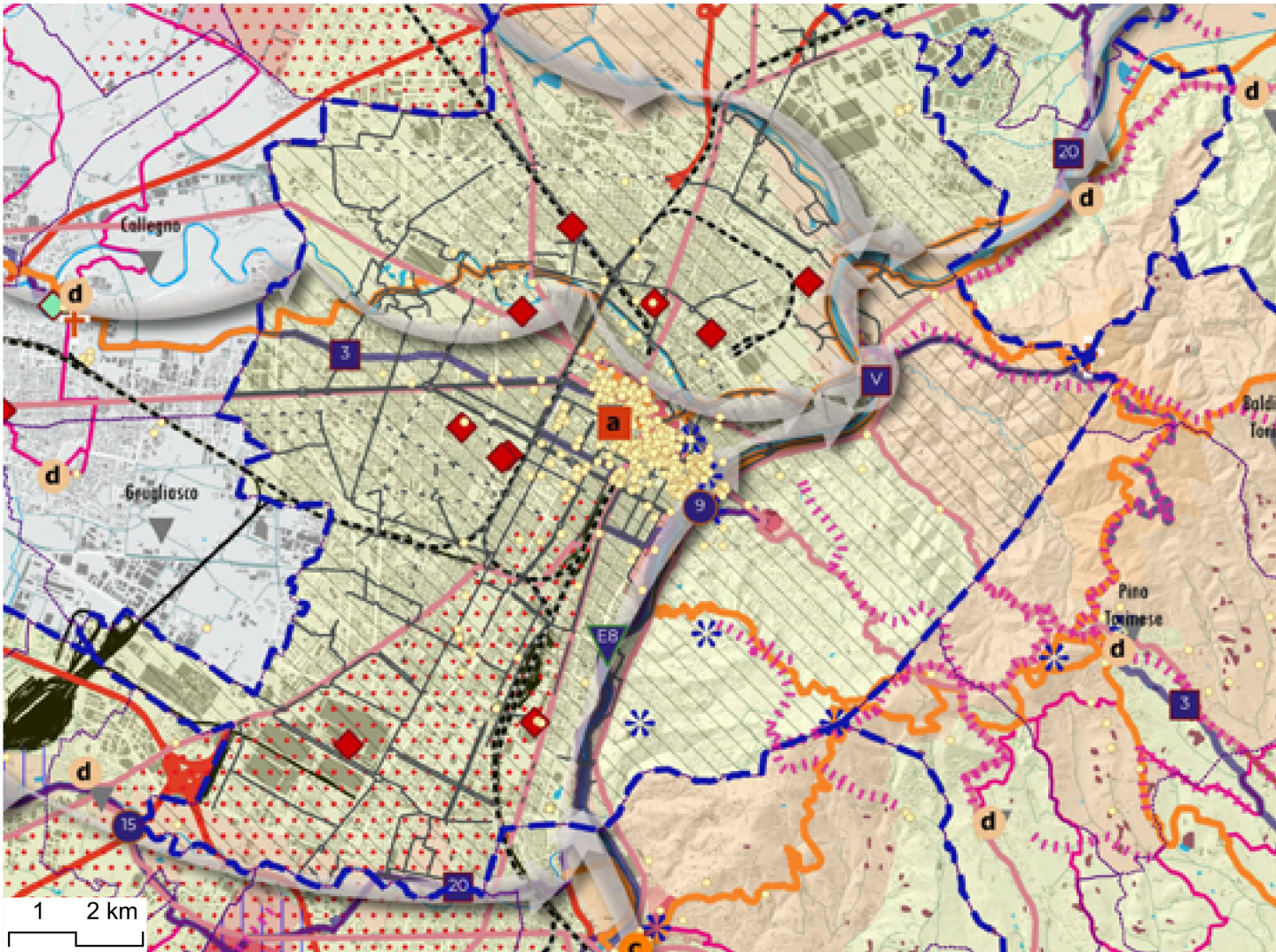
ECONOMIC-PRODUCTIVE UNITS

| DOMAIN | CAN | SHOULD | CANNOT |
|--------------------------|---|--|---|
| Agronomy | Carry out cultivation adapted to Class I-II soils; maintain meadows, pastures, and fodder crops. | Apply sustainable techniques such as crop rotation, cover crops, and efficient irrigation. | Convert agricultural land to residential, industrial, or commercial use. |
| Landscape | Maintain the traditional agricultural layout (hedgerows, tree lines, ditches, riparian vegetation). | Restore historic rural elements and strengthen landscape continuity. | Remove rural structures or seal / impermeabilize soils. |
| Urban Planning | Reuse or rehabilitate existing agricultural buildings. | Plan urban growth outside protected agricultural zones. | Build new non-agricultural constructions, create new settlements, or fragment farmland. |
| Energy / Extraction | Install integrated energy systems (e.g. rooftop solar panels, small-scale biogas on farms). | Promote local, landscape-compatible energy solutions. | Build ground-mounted solar plants, industrial wind farms, or open-pit quarries without restoration. |
| Rural Culture & Heritage | Develop educational or agritourism activities connected to local agriculture. | Promote the cultural, historical, and hydrogeological values of the rural landscape. | Neglect or damage rural heritage, ignore local agricultural traditions. |

| | |
|---------|----------------------------------|
| Art. 20 | Areas of High Agronomic Interest |
|---------|----------------------------------|

HISTORICAL, CULTURAL NETWORK

- Biosphere Reserves - Man and Biosphere (art. 35)
- Po-Collina and Monviso
- Core zones Buffer zones Transition zones
- Privileged places for landscape observation (art. 35 and 38)
- Panoramic routes * Belvedere
- Industrial and energy production of historical interest (art. 40)
- ◆ Industrial production system of the nineteenth and twentieth centuries
- Other components of the metropolitan tourism system
- Historical-cultural and landscape heritage (art.35)
- Historic roads and railway heritage
- Varied network in the modern and contemporary age
- Road network in Roman and medieval times
- Military roads (traffic managed by the Metropolitan City of Turin)
- Historic railway network
- Metropolitan excursion network (itineraries and routes - art. 35,37)
- Recorded itineraries Itineraries under evaluation
- Itineraries of interprovincial interest Itineraries of metropolitan interest
- Enhancement Proposals (art.35)
- Enhancement areas unitary landscaping
- Guidelines for fruition to be strenghtened

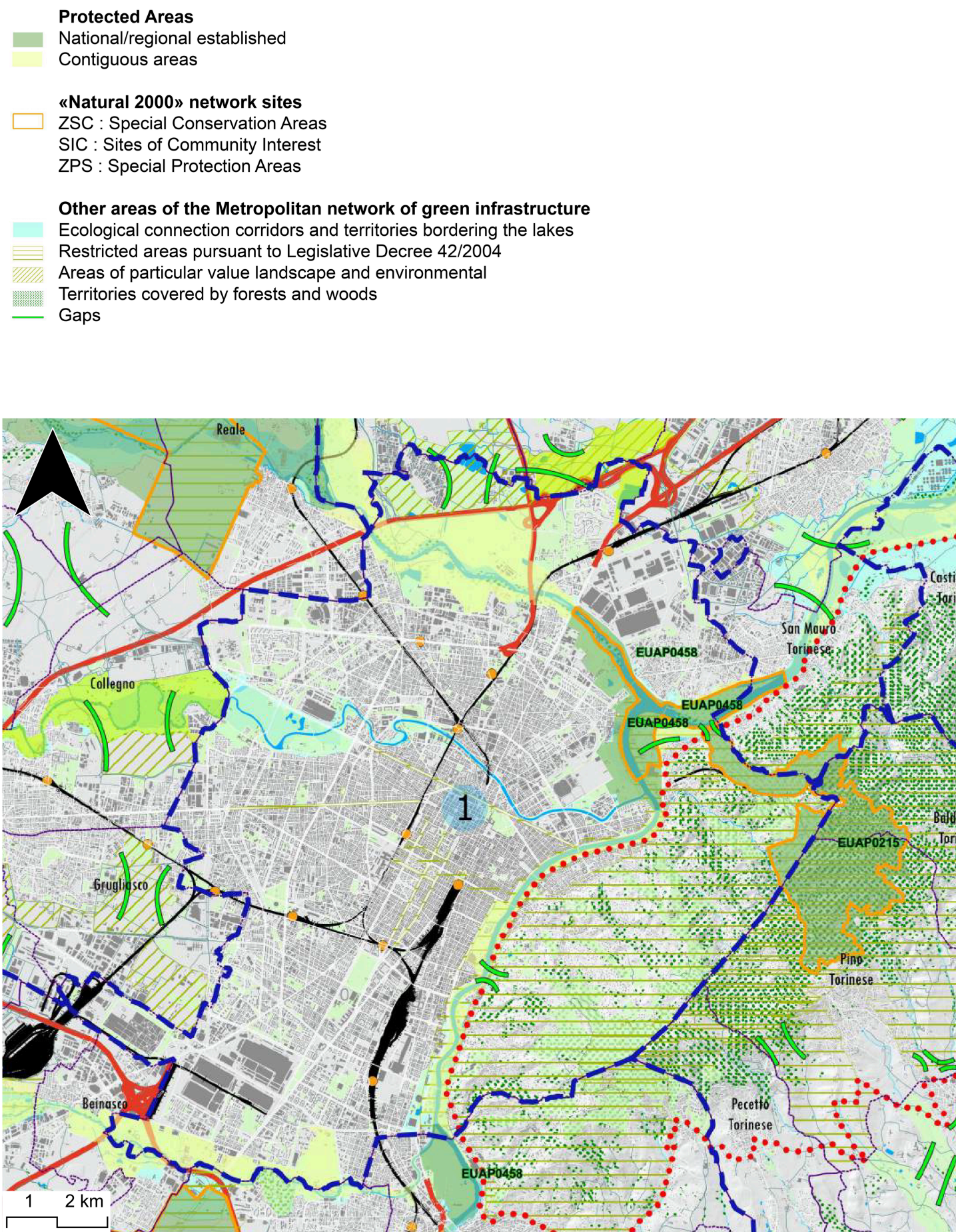


HISTORICAL, CULTURAL NETWORK

| DOMAIN | CAN | SHOULD | CANNOT |
|---------------------------------------|---|--|---|
| Biosphere and Protected Natural Areas | Participate in conservation and management activities in buffer and transition zones, observe and study biodiversity, maintain green spaces and natural reserves. | Promote environmental awareness, support research and educational or ecotourism initiatives, protect and enhance landscape quality. | Degrade habitats, build incompatible infrastructure, exploit natural resources unsustainably. |
| Historical and Cultural Heritage | Observe, document, and access recognized historic buildings and remains, integrate them into cultural or educational itineraries. | Reuse buildings and open spaces for educational or museum purposes, protect and enhance artifacts and their dependencies. | Destroy, alter, or vandalize historic and cultural heritage. |
| Viewpoints and Landscapes | Access identified viewpoints and belvederes, integrate them into pedestrian or tourist routes. | Preserve readability of viewpoints and surrounding landscapes, avoid construction that degrades historic or visual perception, promote sustainable mobility. | Build infrastructure that blocks views or degrades landscapes. |
| Infrastructure and Historical Network | Use historic roads and pathways, integrate them into pedestrian and tourist itineraries. | Protect and maintain historic infrastructure, support restoration and conservation initiatives. | Modify, destroy, or pollute historic roads or pathways without authorization. |
| Hiking Trails and Routes | Use marked trails, participate in the design and maintenance of trails and routes. | Ensure accessibility and maintenance of trails, protect landscapes and their historical and natural components. | Create unauthorized trails, cut through protected vegetation, pollute or damage trails. |
| Tourism and Site Valorization | Participate in educational, cultural, and tourist activities, integrate the site into metropolitan tourist route networks. | Develop educational and cultural initiatives compatible with site protection and sustainable development. | Install heavy or commercial infrastructure that disrupts landscapes or planned uses. |

| | |
|---------|--|
| Art. 35 | Metropolitan Historical, Cultural and Recreational Network |
| Art. 37 | Routes and Paths of the Metropolitan Network |
| Art. 38 | Preferred Places for Landscape Observation – Historical, Cultural and Recreational Network |
| Art. 40 | Industrial and Energy Production of Historical Interest |

SYSTEM OF PROTECTED AREAS AND GREEN INFRASTRUCTURES



SYSTEM OF PROTECTED AREAS AND GREEN INFRASTRUCTURES

| DOMAIN | CAN | SHOULD | CANNOT |
|---|--|---|---|
| Metropolitan Green Infrastructure Network (RIV) | Implement RIV projects, integrate green spaces, forests, wetlands, protected areas, Natura 2000 sites, restricted areas. | Maintain ecological continuity, restore degraded areas, promote biodiversity. | Fragment natural areas or remove key ecological elements. |
| Ecological corridors and wetlands | Maintain/restore vegetation and wetlands, create or strengthen corridors, connect territories bordering lakes, fill ecological gaps. | Restore ecological continuity, improve accessibility and sustainable use, compensate environmental impacts. | Cover watercourses, incompatible urbanization, cut natural vegetation, create new gaps. |
| Protected areas and Natura 2000 | Manage parks and reserves, propose extensions, integrate other areas of the metropolitan network. | Preserve biodiversity, restore habitats, maintain connectivity, promote research and awareness. | Fragment the territory, build infrastructure that disrupts ecological continuity, alter sensitive habitats. |

| | |
|---------|--|
| Art. 42 | Metropolitan Green Infrastructure Network (RIV) |
| Art. 44 | Peripheral Water and Lacustrine Belts and Ecological Corridors |
| Art. 45 | Protected Areas and Natura 2000 Sites |

HYDROGEOLOGICAL PLANNING PLAN

| DOMAIN | CAN | SHOULD | CANNOT |
|---------------------|---|---|---|
| Band A (flood flow) | Crop changes, only in currently cultivated areas. | Maintain or improve surface drainage | Alter the morphology, hydraulics, infrastructure, or built environment of the site. |
| | Restore natural balances and remove incompatible human interferences. | Preserve the safety of existing structures. | Build new waste treatment or recovery facilities (unless already authorized). |
| | Temporary occupations of the site, provided they do not reduce the riverbed capacity and are carried out safely to avoid damage or endangering public | Restore spontaneous vegetation along riverbanks to stabilize the riverbed and reduce current velocity | Build new wastewater treatment plants (except for upgrading existing ones) |
| | Manual collection of pebbles, limited to ≤150 m³/year. | Follow local rules for soil and surface management. | Non-permanent crops or trees near riverbanks (except for bioengineering or renaturation with native species). |
| | Create access for boats to quarries, according to sector plans. | | Build outdoor tourist complexes. |
| | Temporary deposits related to authorized extraction activities or non-waste materials for backfilling quarries. | | Open-air deposits of materials or waste. |
| | Rural land improvements compatible with the band’s layout | | |
| | Adapt existing wastewater treatment plants to current regulations. | | |
| Band B (floodplain) | Carry out hydraulic works compatible with the band (levees, retention basins). | Maintain or improve surface drainage. | Reduce or divide storage capacity, unless compensated by equivalent capacity elsewhere. |
| | Install or secure wastewater treatment plants if they cannot be located outside the bands. | Preserve the safety of existing structures. | Build new waste treatment or recovery facilities (unless already authorized). |
| | Build outdoor tourist complexes after a compatibility study. | Ensure hydraulic functionality and conservation of natural and environmental features. | Interventions or excavations that direct the current toward levees or compromise the stability of their |
| | Temporary storage of manure for agricultural use and installation of containers for treatment and/or storage of livestock effluents. | | |
| | Complete existing complex waste treatment/recycling facilities if needed for the autonomy of optimal territorial areas. | | |

GENERAL REGULATORY PLAN

Zona urbana centrale storica

Zone urbane storiche ambientali

Zone urbane consolidate residenziali miste

Are non edificabili

Dividente

Limite di rispetto cimiteriale

Progetto unitario di suolo pubblico

Fili edilizi

Percorsi pedonali

Are oggetto di applicazione disciplina di cui all'articolo 81 del D.P.R. 616/77

Aree per la viabilità 'VI esistente

Aree per la viabilità 'VI in progetto

Aree per la viabilità 'VI in progetto: viabilità 'sotterranea

Aree per impianti ferroviari FS

Edifici di particolare interesse storico con segnalazione del gruppo di appartenenza:

1 Edifici di gran prestigio

2 Edifici di rilevante valore storico

3 Edifici di valore storico ambientale

4 Edifici di valore documentario

5 Edifici e manufatti speciali di valore documentario

Pertinenza storica

Edifici caratterizzanti il tessuto storico

Istruzione inferiore

Attrezzature di interesse comune

Spazi pubblici a parco, per il gioco e lo sport

Parcheggi

Servizi sociali ed attrezzature di interesse generale (art. 22 LUR):

Parchi pubblici urbani e comprensoriali

Altre attrezzature di interesse generale:

Cimiteri

Aree a Parco

Parchi urbani e fluviali: P1, P18, P19, P20, P21, P22, P23, P24, P25, P26, P27, P28, P29, P30, P31, P32, P33.

Utilizzazioni edificatorie 0,05 mq SLP/mq ST

Utilizzazioni edificatorie 0,01 mq SLP/mq ST

P 17 Basse di Stura

Area di concentrazione edilizia del sub-ambito 4 del P.17 Basse di Stura

Parchi collinari: P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, P14, P15, P16.

Utilizzazioni edificatorie 0,03 mq SLP/mq ST

Utilizzazioni edificatorie 0,01 mq SLP/mq ST

1 2 km

GENERAL REGULATORY PLAN

| ZONE / AREA | CAN | SHOULD | CANNOT |
|--------------------------------|---|--|--|
| P1 – Urban and River Park | Install paths, benches, playgrounds, light planting | Maintain green space, ensure ecological continuity, integrate into the landscape | Build residential or commercial buildings, degrade the soil |
| V – Public Park Spaces | Install light sports and recreational equipment | Maintain recreational use, preserve ecological and visual continuity | Build heavy buildings or infrastructure |
| P – Parking / Pedestrian Paths | Create parking lots, pedestrian paths, and bike lanes | Maintain circulation safety and functionality | Build buildings, create green areas not related to mobility |
| C – Cemetery | Create pedestrian paths, plantings, light maintenance equipment | Respect cemetery boundaries and distances from graves | Build residential or commercial buildings, alter graves |
| U.E. 0.05 SLP/mp ST (Meisino) | Build up to 5% of total area (≈ 122,500 m²) | Respect maximum density, integrate into the landscape context | Build beyond 5%, heavy infrastructure, degrade the soil |
| U.E. 0.01 SLP/mp ST (Meisino) | Build very minimally, up to 1% of total area (≈ 24,500 m²) | Respect maximum density, preserve the environment | Any significant construction, heavy infrastructure, degrade the soil |