

REIMAGINING THE EUROPEAN PERIPHERY: THE CASE OF ASTURIAS

IJsbrand Heeringa

Complex cities // Imagining (European) Regions

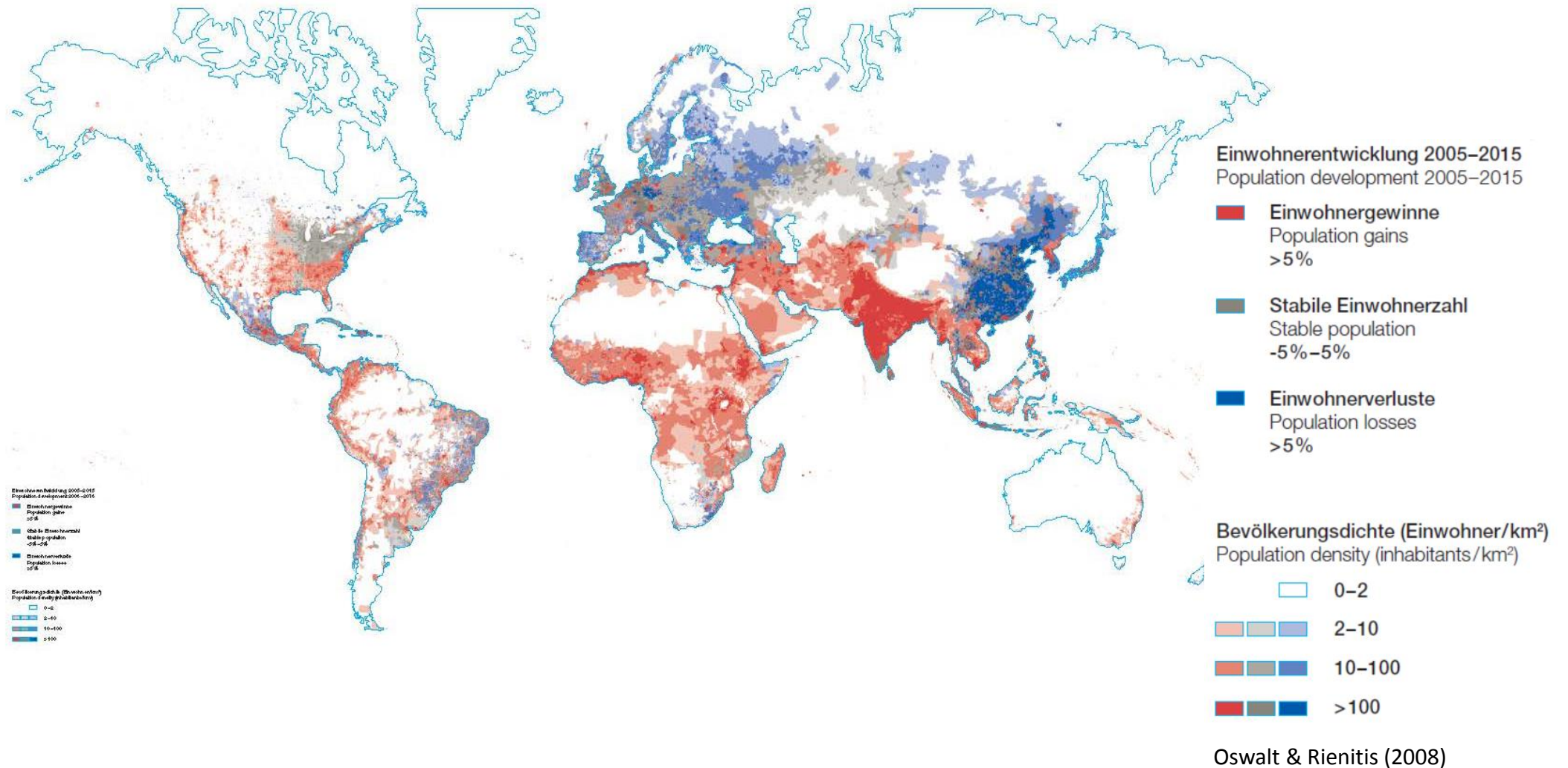
 **TU**Delft  **Urbanism**



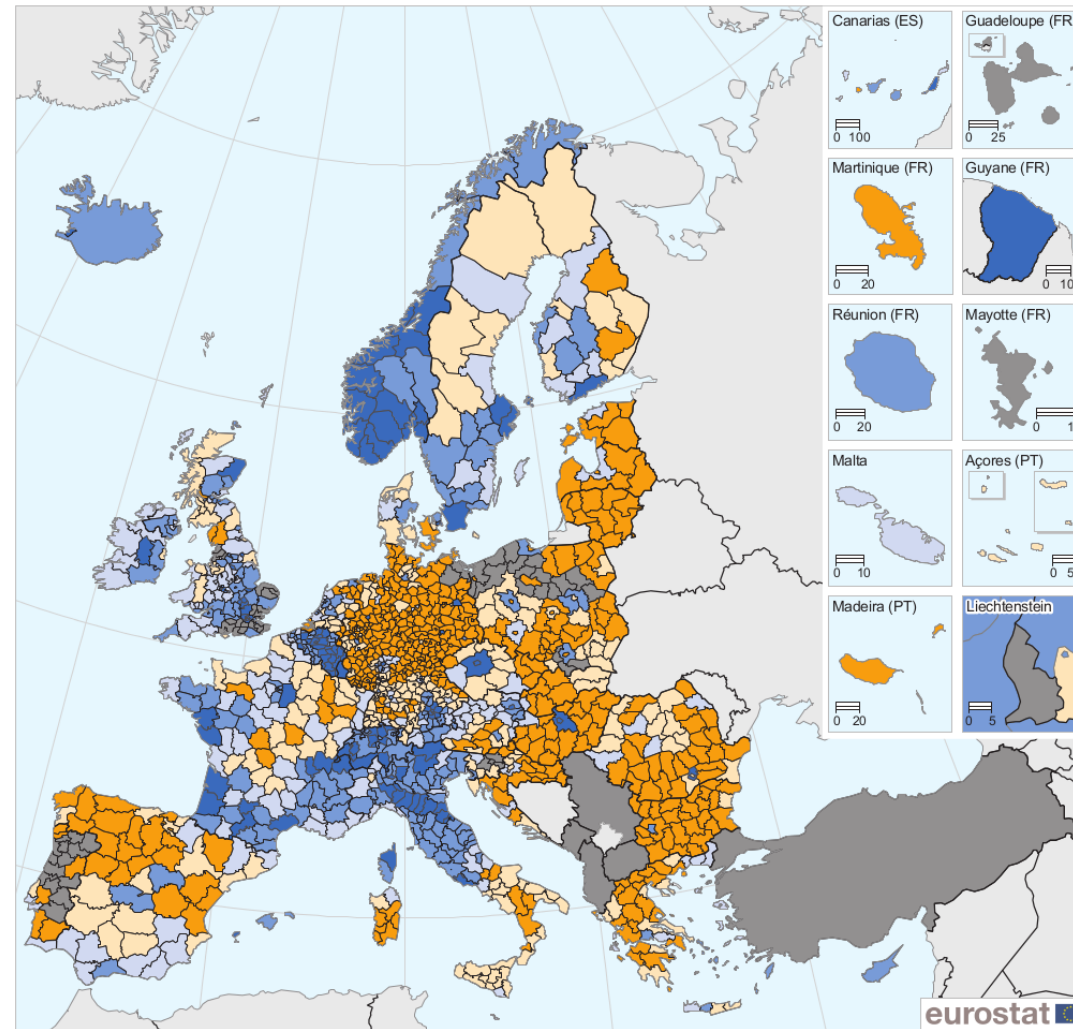


1. Introduction
Shrinkage:
a first world problem

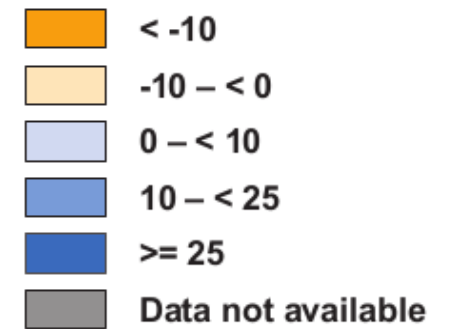
INTRODUCTION



INTRODUCTION

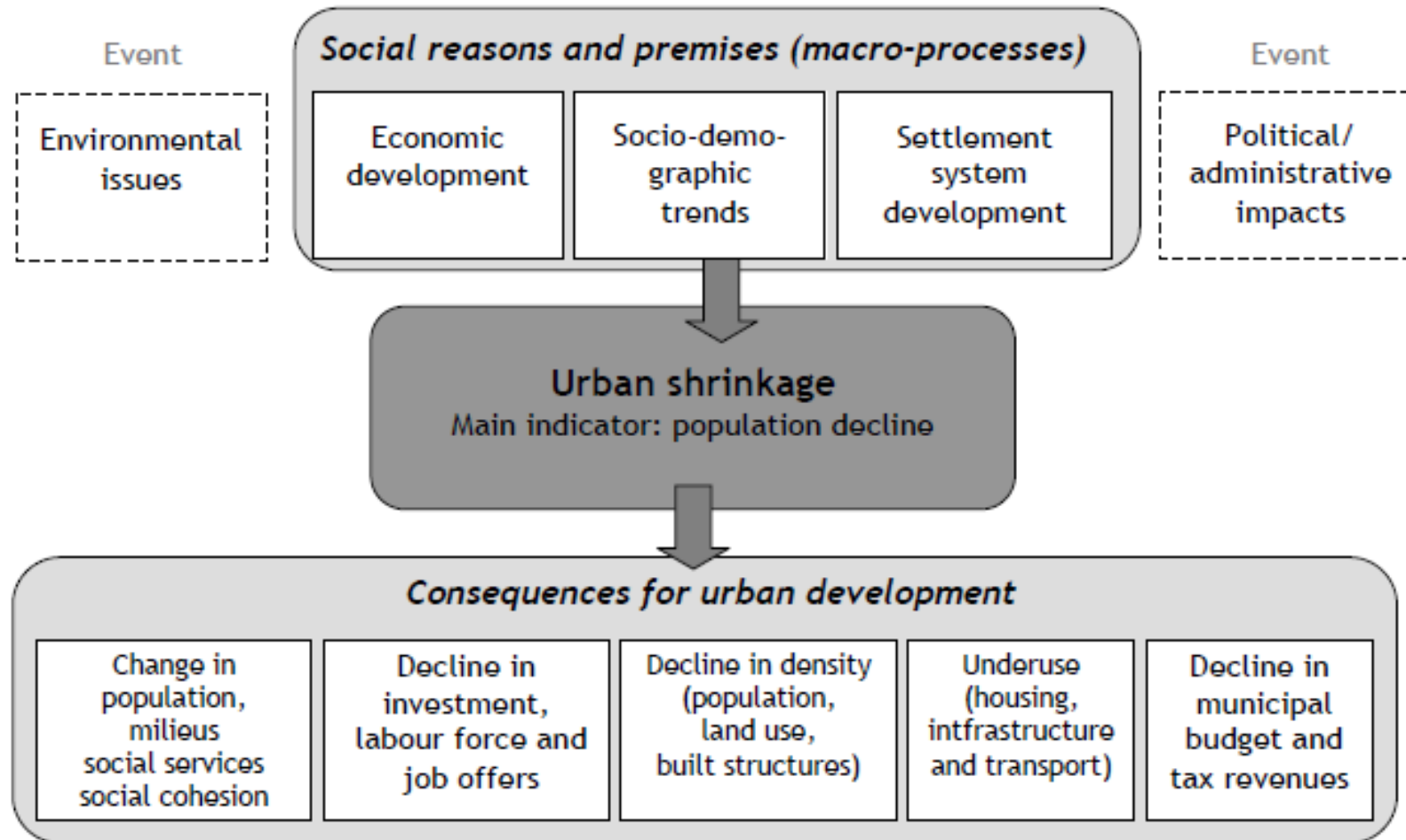


Expected population
change 2015-2050
NUTS 3 level



Eurostat (2017)

POPULATION DECLINE & SHRINKAGE



Source: Großmann, Haase and Rink (2008b), modified

SPATIAL IMPLICATIONS



OPPORTUNITIES



- Renewable energy park in Morbach, GE
- High line in New York, USA
- Eco-farming in Altiplano Estepario, SP

Source: Commonland, : timbre-project.eu, wikicommons

PROBLEM STATEMENT

- Dramatic land use change throughout Europe
(Dagmar Haase, Haase, & Rink, 2014).
- Negative social, economic and environmental consequences
(Branas et al., 2011; Garvin, Branas, Keddem, Sellman, & Cannuscio, 2013; Megan & Jeremy, 2012).
- Planners and decision makers are slow to respond
(Pallagst, Fleschurz, & Said, 2017).
- Growth-oriented strategies and policies
- Retainment of undeveloped land
- Elimination of opportunities to develop alternative uses
- Loss to the local population and the European society.

RESEARCH GAPS

1. REGIONAL SCALE
2. VERTICAL AND HORIZONTAL COLLABORATION
3. DESIGN APPROACH
4. PRINCIPLES AND STRATEGIES

RESEARCH QUESTIONS

How can regional spatial development be directed to exploit the opportunities that stem from shrinkage?

Sub research questions:

1. What are the manifestations of shrinkage in the territory and planning system?
2. What are principles and strategies for design and planning that can be used to exploit the opportunities in shrinkage?
3. How can these principles and strategies be integrated in to a regional design that guides regional spatial development?

PRESENTATION STRUCTURE

1.INTRODUCTION

2.RESEARCH DESIGN

3.DIAGNOSIS

4.PRINCIPLES & STRATEGIES

5.REGIONAL DESIGN

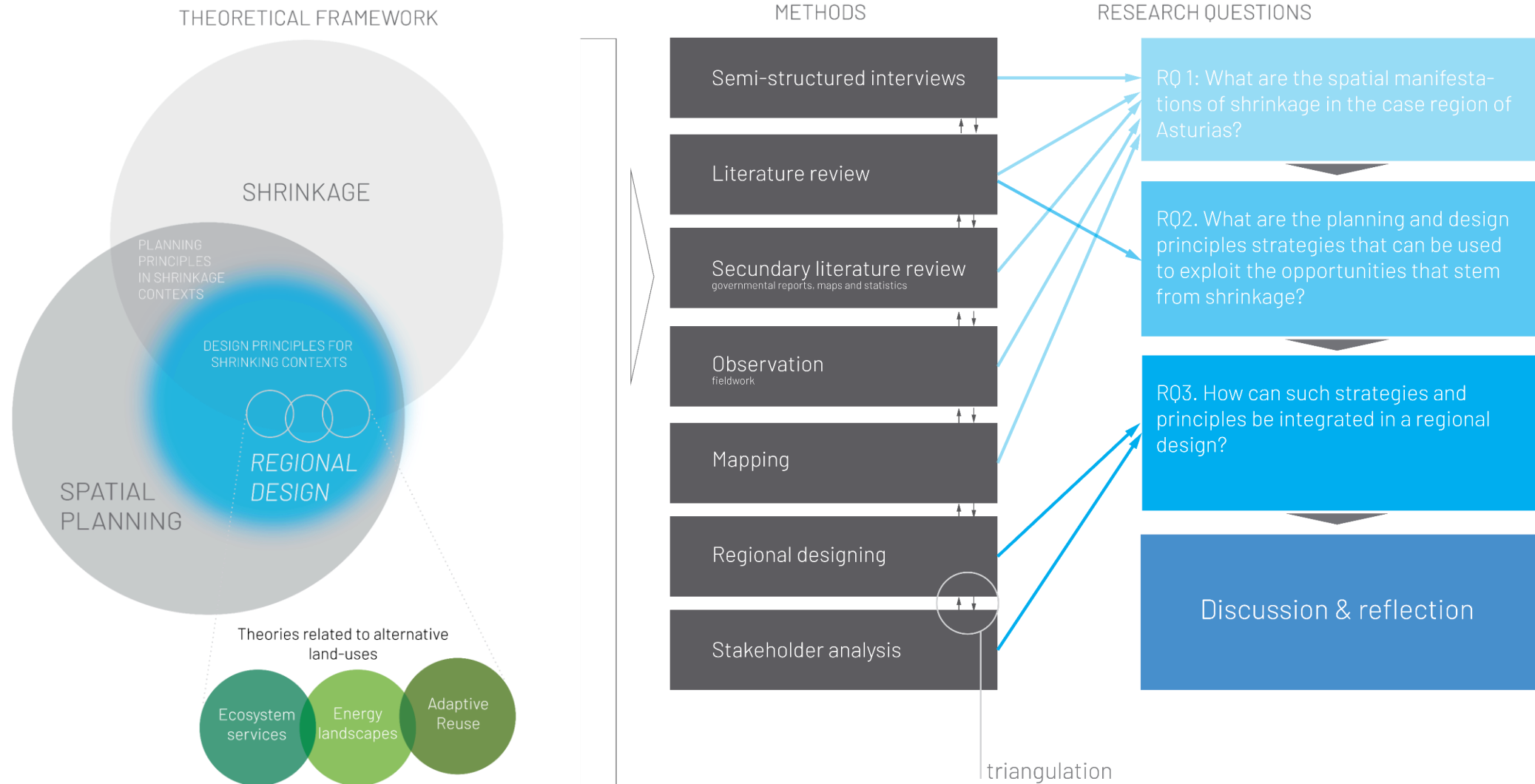
6.CONCLUSION



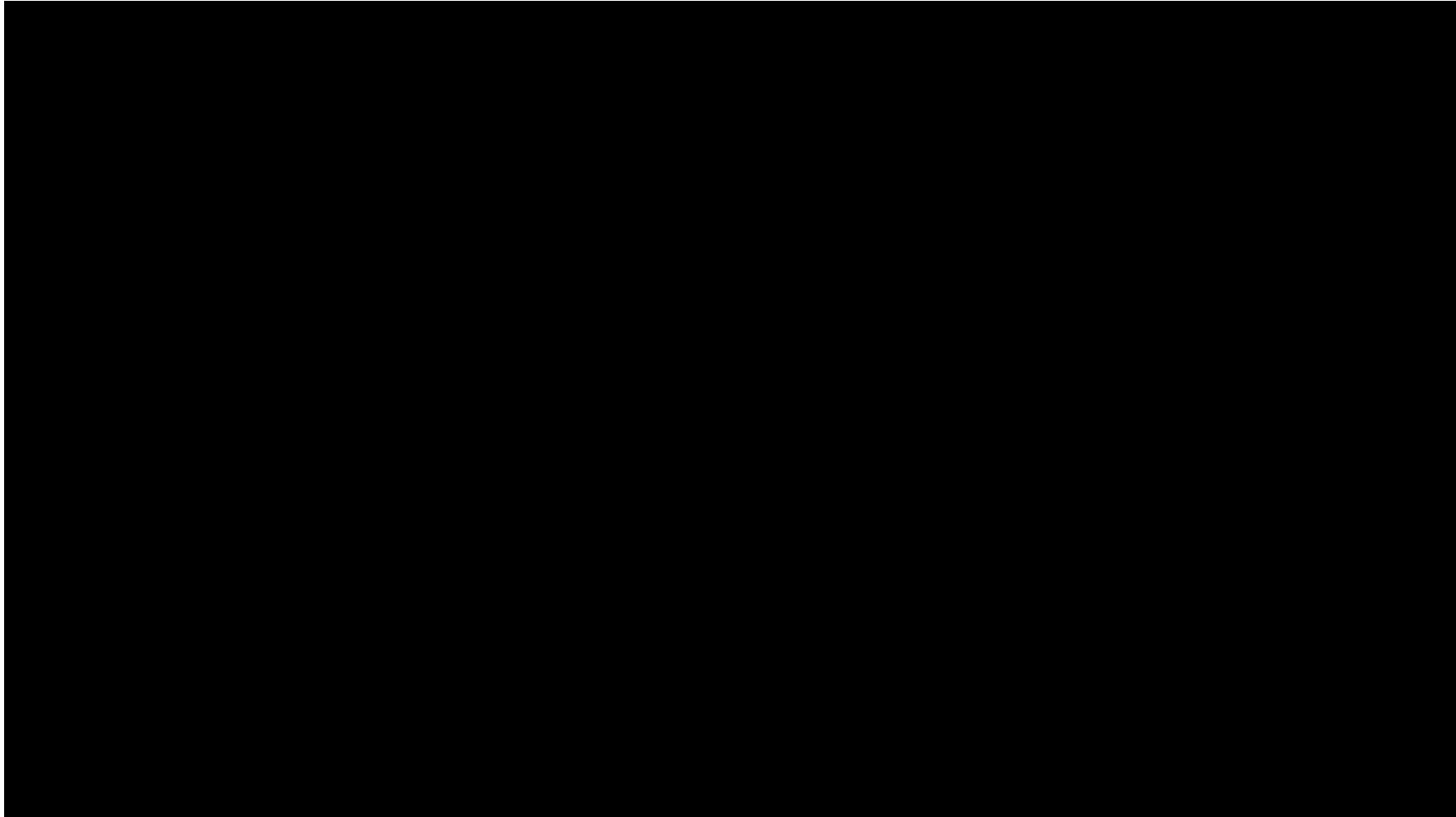
2. Research design



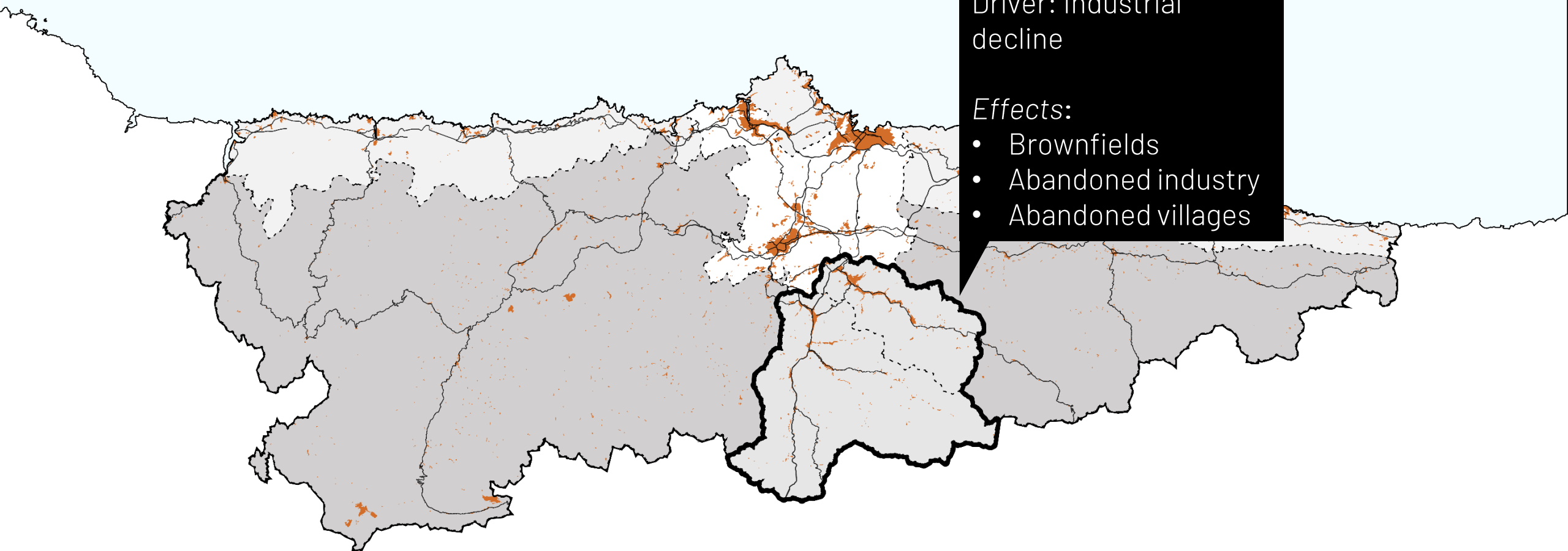
RESEARCH STRUCTURE



CASE: ASTURIAS



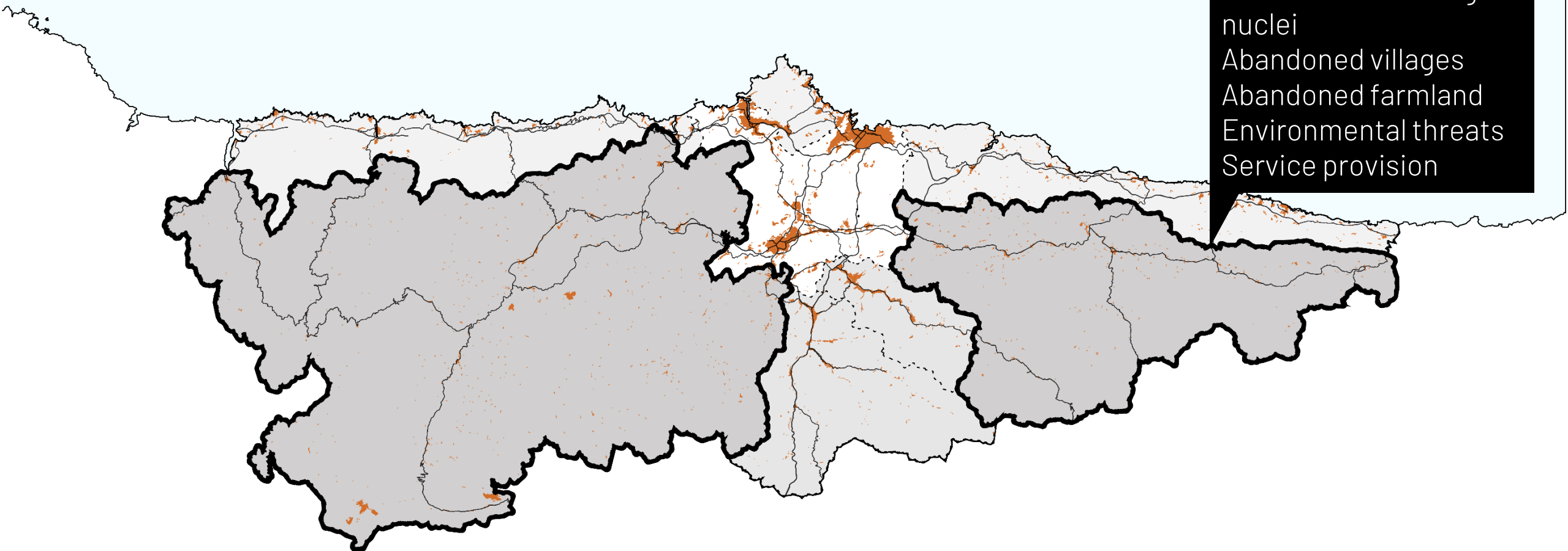
1. TERRITORIAL ANALYSIS



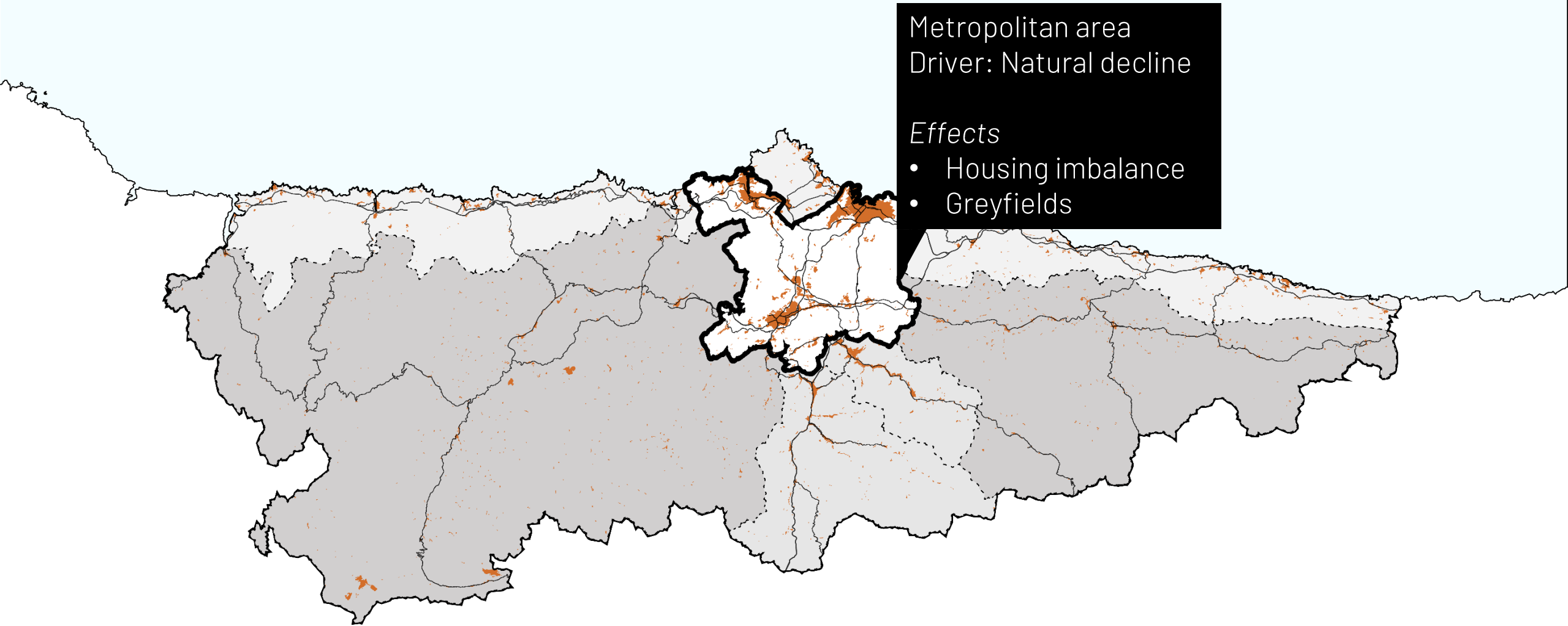
1. TERRITORIAL ANALYSIS

Rural wings
Driver: Rural
depopulation

Effects:
Consolidation in larger
nuclei
Abandoned villages
Abandoned farmland
Environmental threats
Service provision



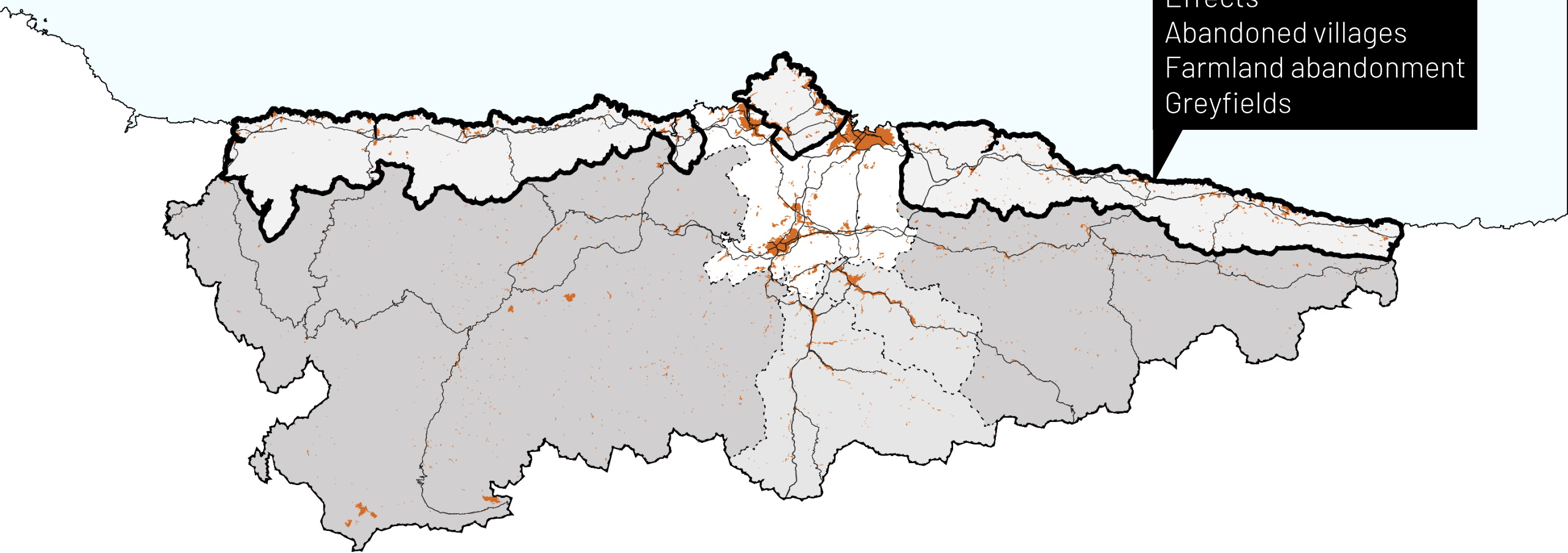
1. TERRITORIAL ANALYSIS



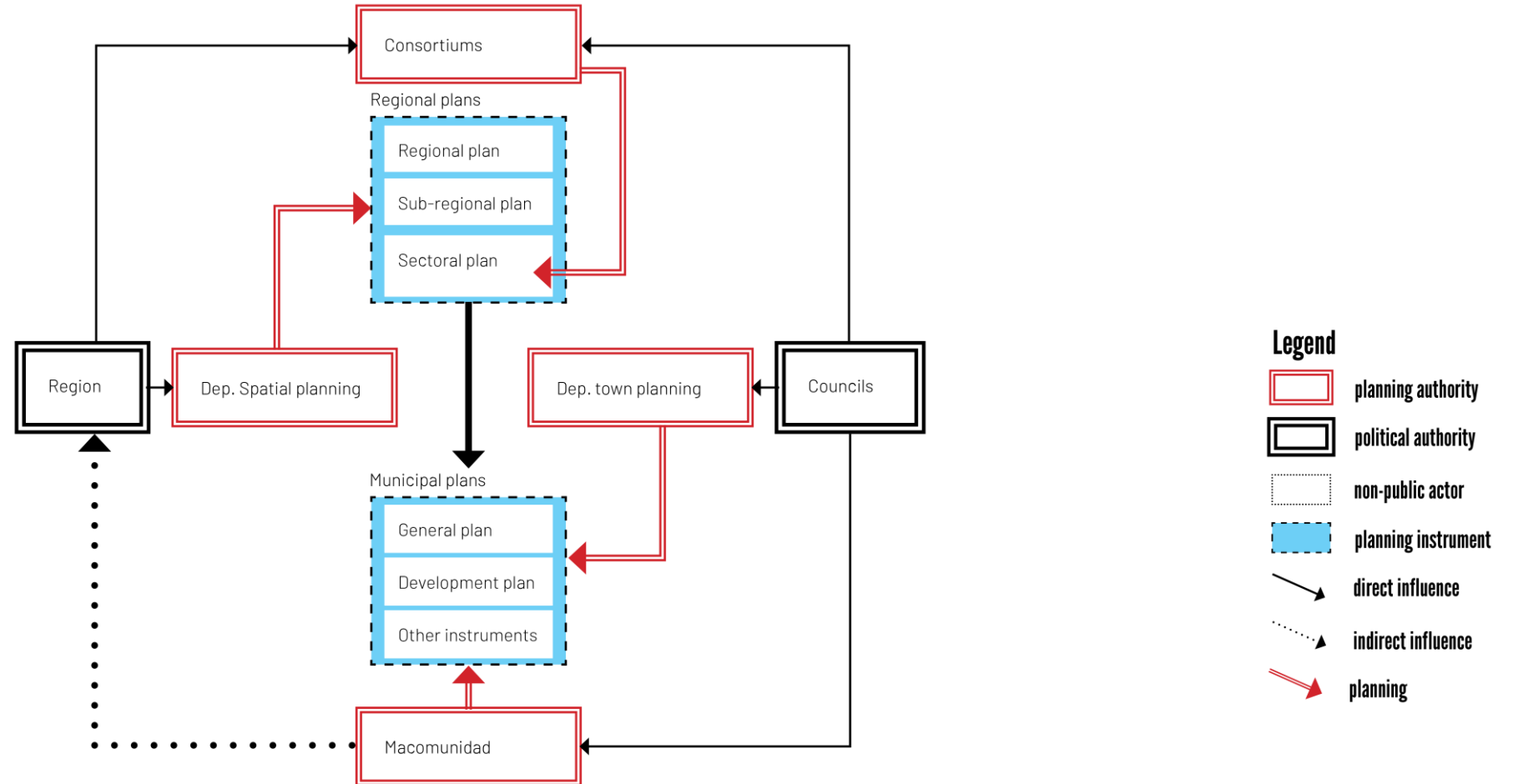
1. TERRITORIAL ANALYSIS

Coastal zone
Driver: Rural
depopulation & Natural
decline

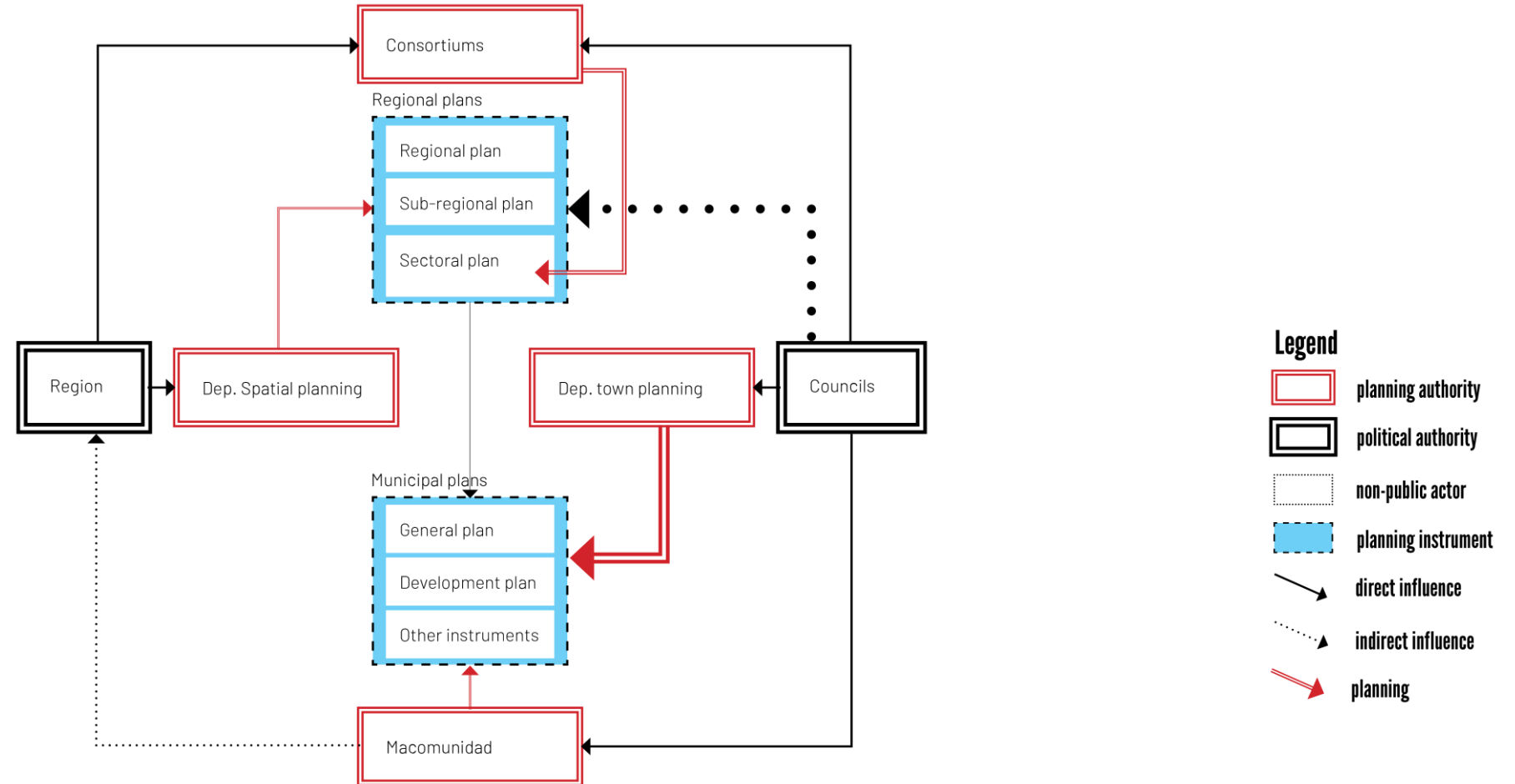
Effects
Abandoned villages
Farmland abandonment
Greyfields



PLANNING SYSTEM



PLANNING SYSTEM



PLANNING SYSTEM GROWTH PARADIGM



SWOT

Strenght	Weakness
<ul style="list-style-type: none"> C. Polycentric urban system as opportunity for economic development C. Natural and cultural landscapes as carriers of the regional identity and quality of life C. Strong protective instruments (once in place) C. Existing platforms and networks for collaboration 	<ul style="list-style-type: none"> A. Abandonment and vacancy A. Reduced liveability A. Social segregation A. Limited public budgets A. Reluctant growth paradigm B. Sprawled urban form B. In effective public transport system B. Qualitative and quantitative housing mismatch B. Compromised agricultural and natural systems B. Power disbalance in the planning system B. Lacking of data
Opportunity	Threat
<ul style="list-style-type: none"> A. Abandonment and vacancy A. Strengthened ecological systems A. Space for the diversification of the rural economy (eco-farming, sustainable forestry, nature conservation, tourism, and renewable energy) A. Consolidation of rural population A. EU and Spain as supra-regional supporters A. Greater preparedness to collaborate between councils and region due to dire circumstances A. Large companies as supporters of brownfield and mine restoration C. Polycentric urban system as a tool to proliferate Asturias in the international arena C. Innovation in renewable energy as opportunity to tap into new resources 	<ul style="list-style-type: none"> A. Loss of cultural and natural landscape B. Sprawl and speculation B. Environmental risks (soil and water pollution, flood risk, air pollution, forest fires, landslides, soil degradation, wildlife nuisance, invasive plant species)

Legend

- A. Directly related to shrinkage
- B. Indirectly related to shrinkage
- C. Unrelated to shrinkage

SWOT

Strenght	Weakness
<p>C. Polycentric urban system as opportunity for economic development</p> <p>C. Natural and cultural landscapes as carriers of the regional identity and quality of life</p> <p>C. Strong protective instruments (once in place)</p> <p>C. Existing platforms and networks for collaboration</p>	<p>A. Abandonment and vacancy</p> <p>A. Social segregation</p> <p>A. Limited public budgets</p> <p>A. Limited public budgets</p> <p>B. Sprawled urban form</p> <p>B. Sprawled urban form</p> <p>B. Qualitative quantitative housing mismatch</p> <p>B. Compromised agricultural and natural systems</p> <p>B. Power disbalance in the planning system</p> <p>B. Lacking of data</p>
Opportunity	Threat
<p>A. Abandonment and vacancy</p> <p>A. Strengthened ecological systems</p> <p>A. Consolidation of rural population</p> <p>(eco-farming, sustainable forestry, nature conservation, tourism and renewable energy)</p> <p>A. Consolidation of rural population</p> <p>A. EU and Spain as supra-regional supporters</p> <p>A. EU and Spain as supra-regional supporters</p> <p>(Greater regional councils and region due to dire circumstances)</p> <p>C. Polycentric urban system as a tool to proliferate Asturias in the international arena</p> <p>C. Innovation in renewable energy as opportunity to tap into new resources</p>	<p>A. Loss of cultural and natural landscape</p> <p>B. Sprawl and speculation</p> <p>B. Environmental risks (soil and water pollution, flood risk, air pollution, forest fires, landslides, soil degradation, wildlife nuisance, invasive plant species)</p>

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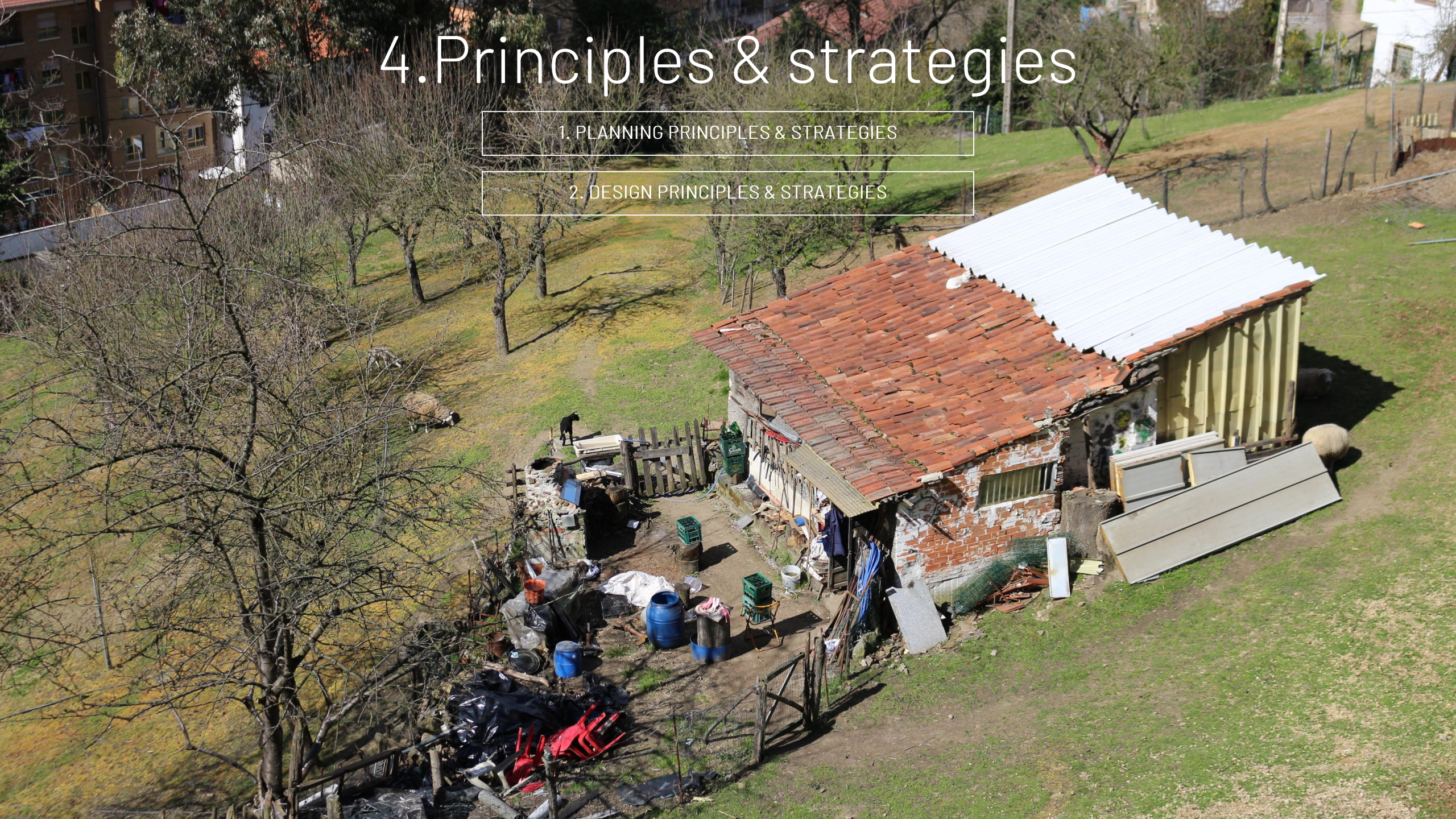
Legend

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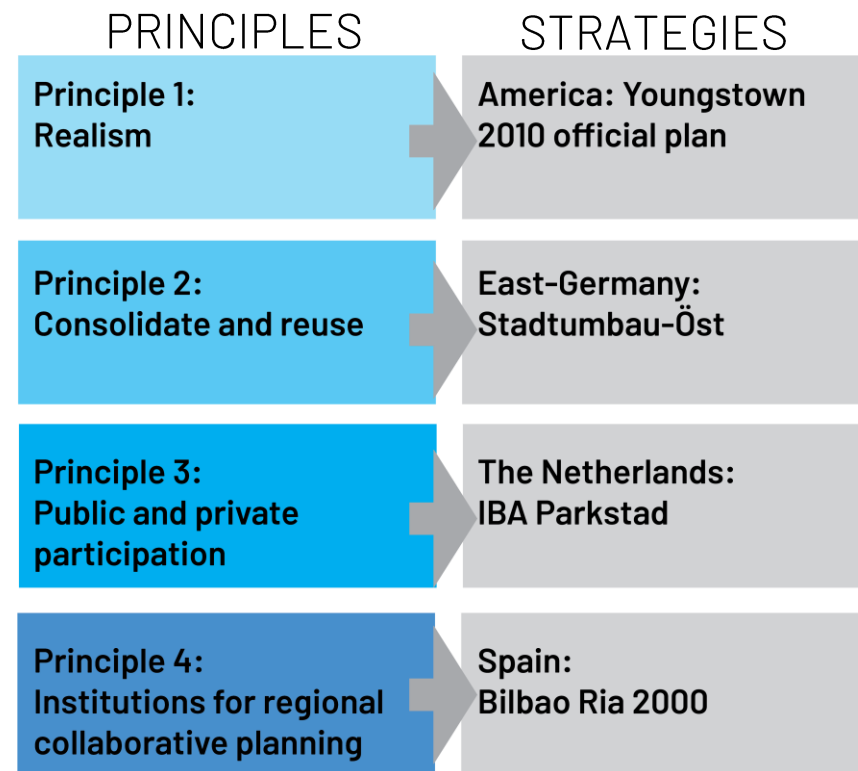
4. Principles & strategies

1. PLANNING PRINCIPLES & STRATEGIES

2. DESIGN PRINCIPLES & STRATEGIES



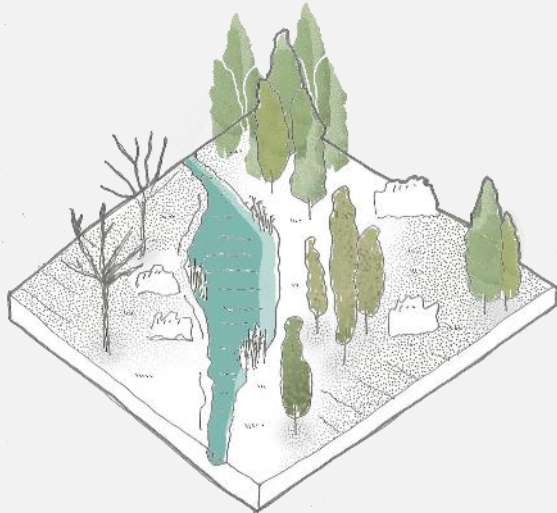
1. PLANNING



2. DESIGN (for alternative land use)

ECOSYSTEM SERVICES

Example
Rewilding



09/07/2018

ADAPTIVE REUSE

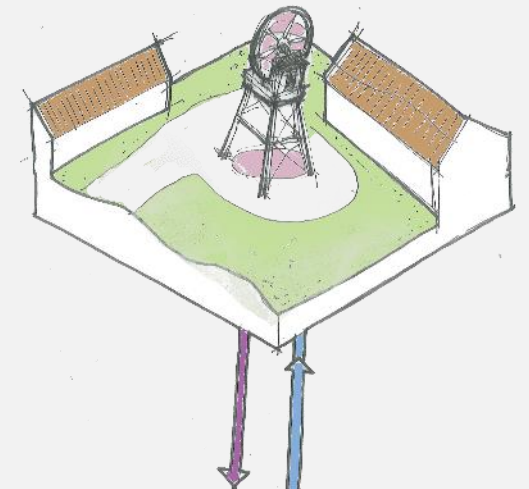
Example
Reuse of industrial
buildings



Reimagining the European periphery

ENERGY LANDSCAPES

Example
Utilizing energy potential
of abandoned mine shafts



30



5. Regional design

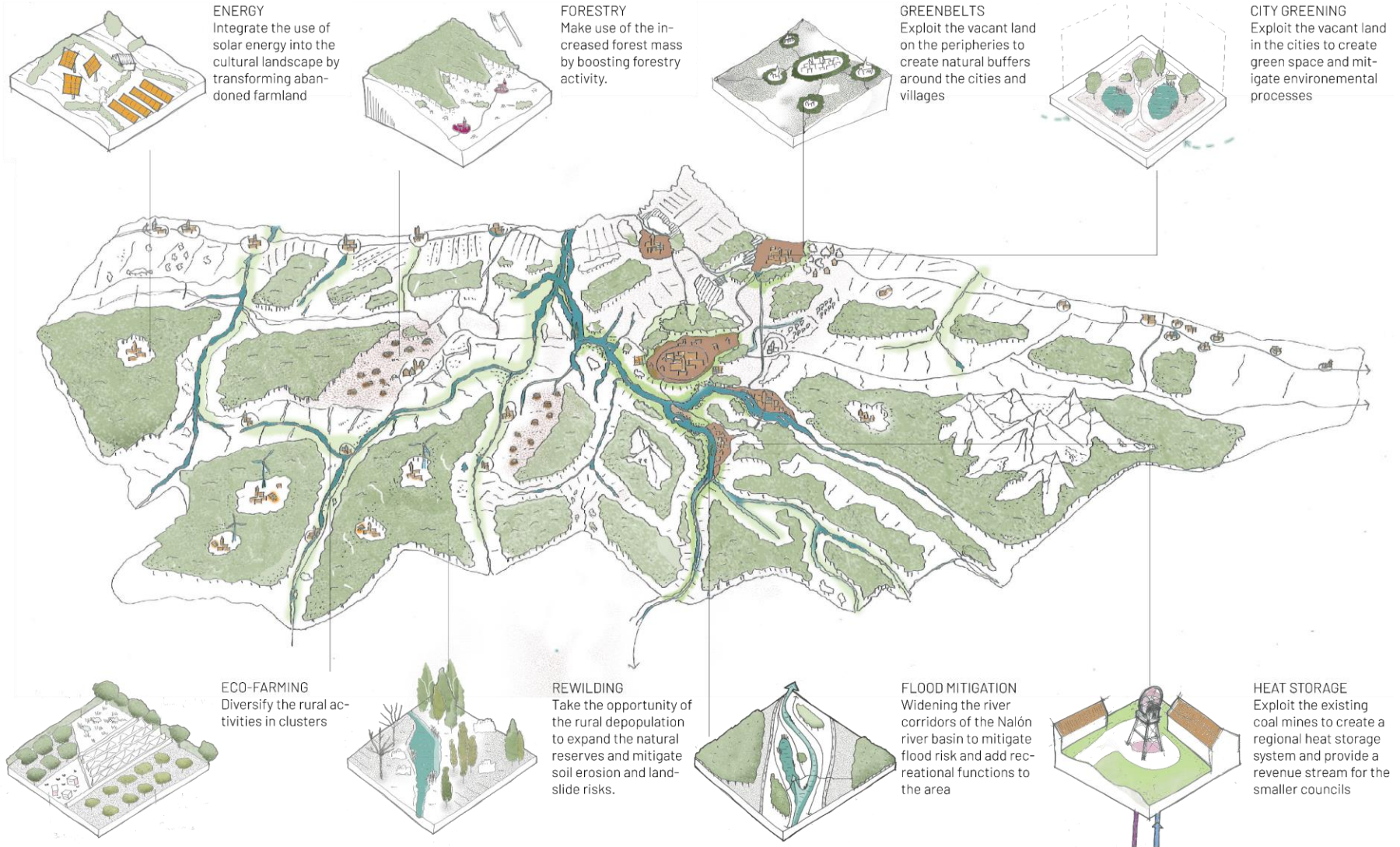
1. VISION

2. REGIONAL SPATIAL AGENDA

3. LOCAL ILLUSTRATIONS

4. IMPLEMENTATION STRATEGY

1. VISION



2. REGIONAL SPATIAL AGENDA

1

Opportunities for the advancement of the regional energy transition

2

The enhancement of the natural landscape

3

Liveability and the urban environment

4

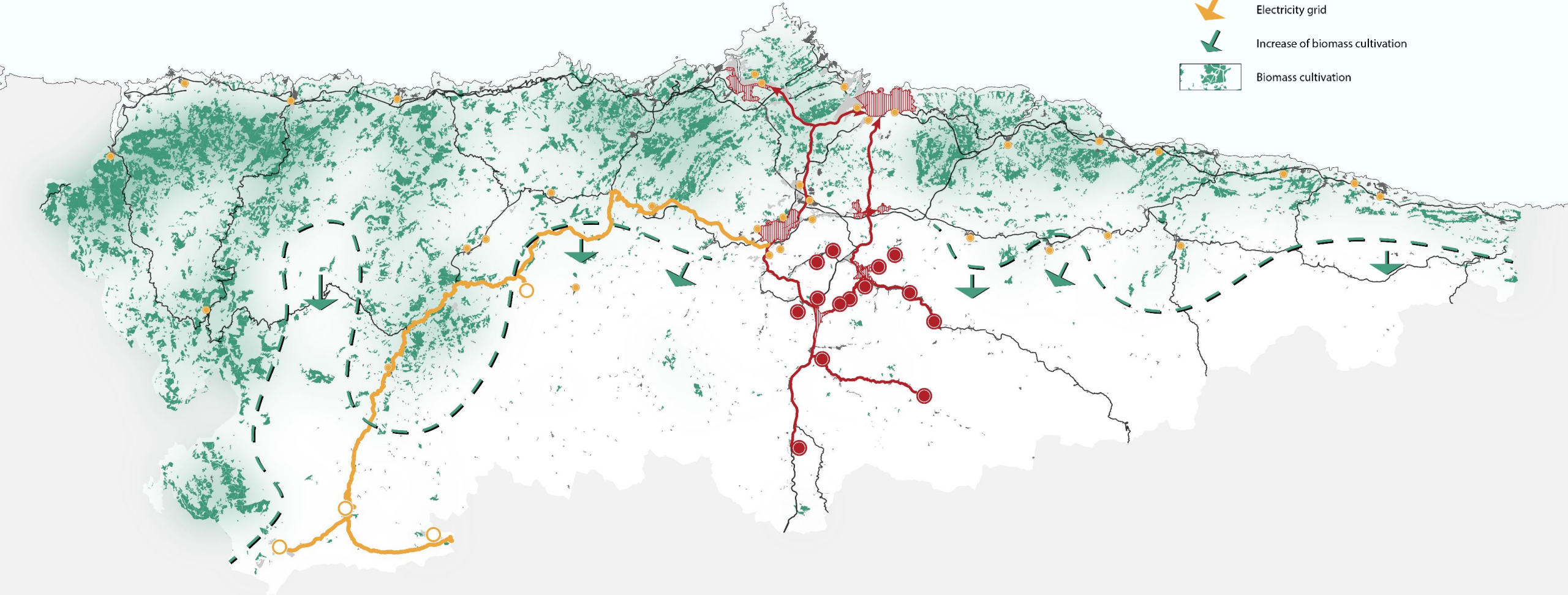
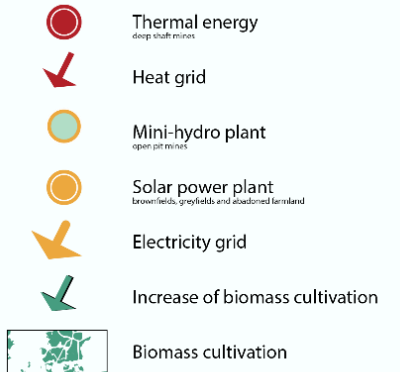
The allocation of economic activity

5


Mobility

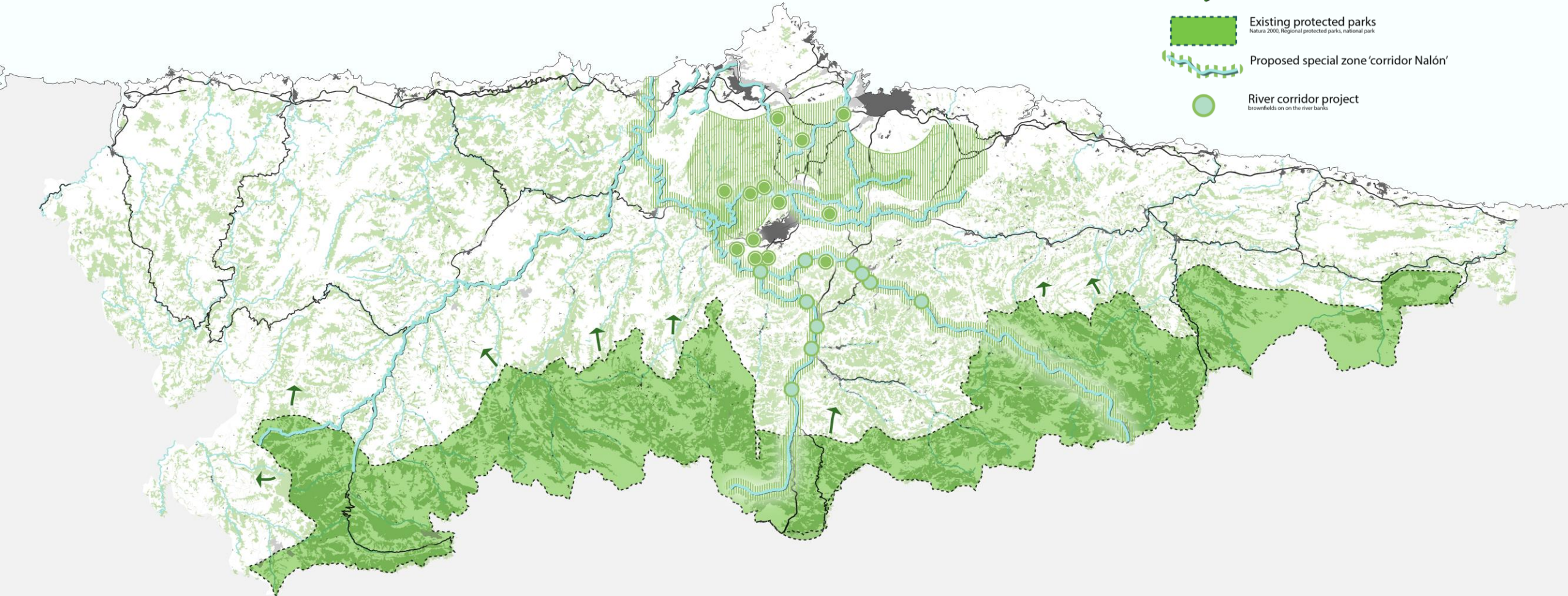
Agenda point 1:

Opportunities for the advancement of the regional energy transition

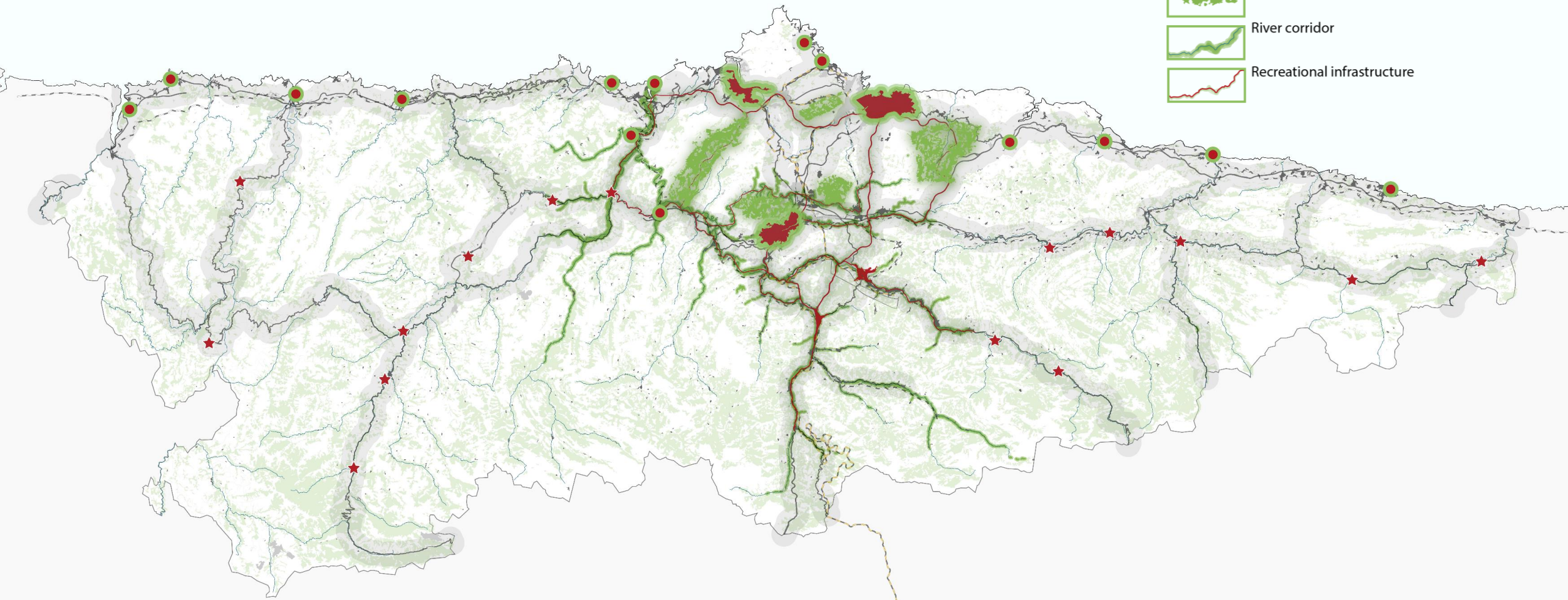


Agenda point 2:
Development and
safeguarding of the
natural landscape

-  **Brownfield transformations**
brownfields, greyfields and mines
-  **Proposed landscape zone 'regional park'**
-  **Existing landscape zones**
Cuencas minerales, Coast
-  **Expansion of protected parks**
-  **Existing protected parks**
Natura 2000, Regional protected parks, national park
-  **Proposed special zone 'corridor Nalón'**
-  **River corridor project**
brownfields on on the river banks

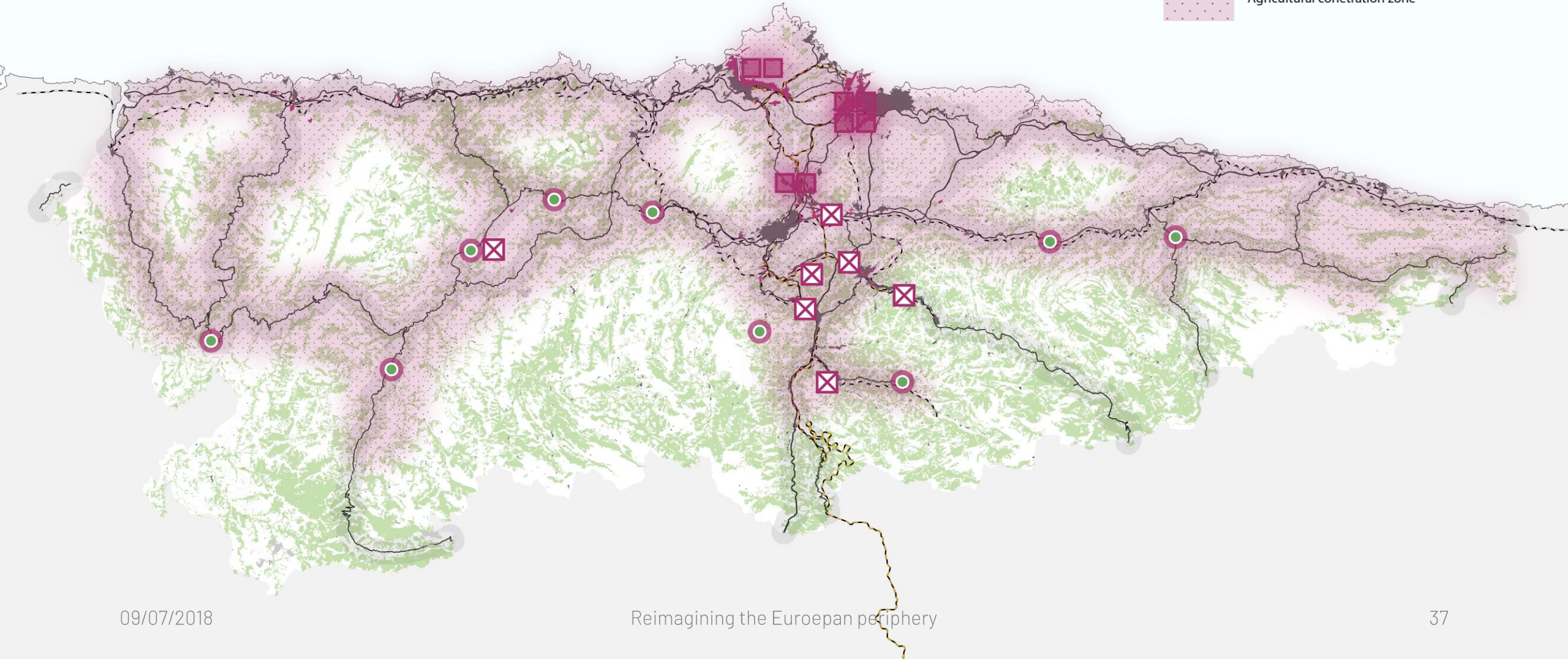


Agenda point 3: Urban environment & liveability




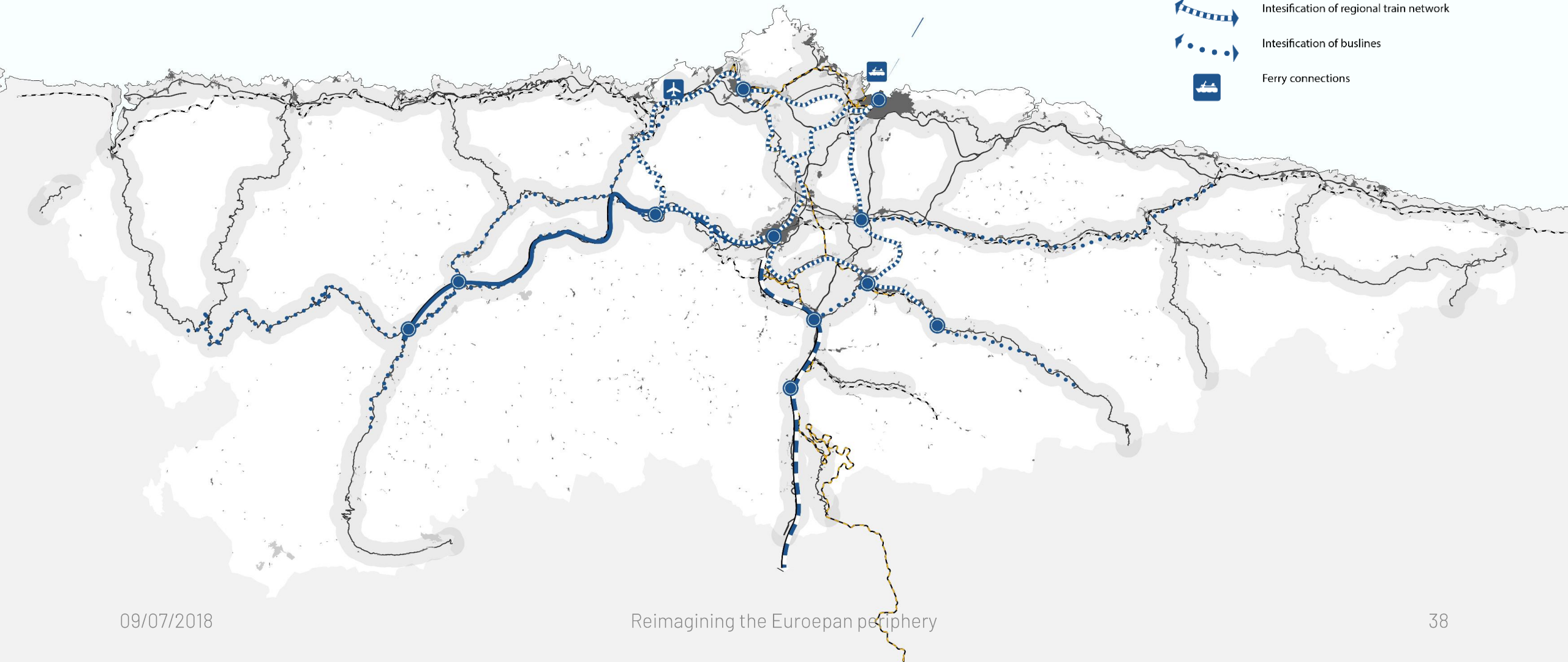
Agenda point 4: Clustering of economic activity

- Industrial cluster
- Proposed out-phasing of industrial land
- Rural incubator centre
- Agricultural concentration zone

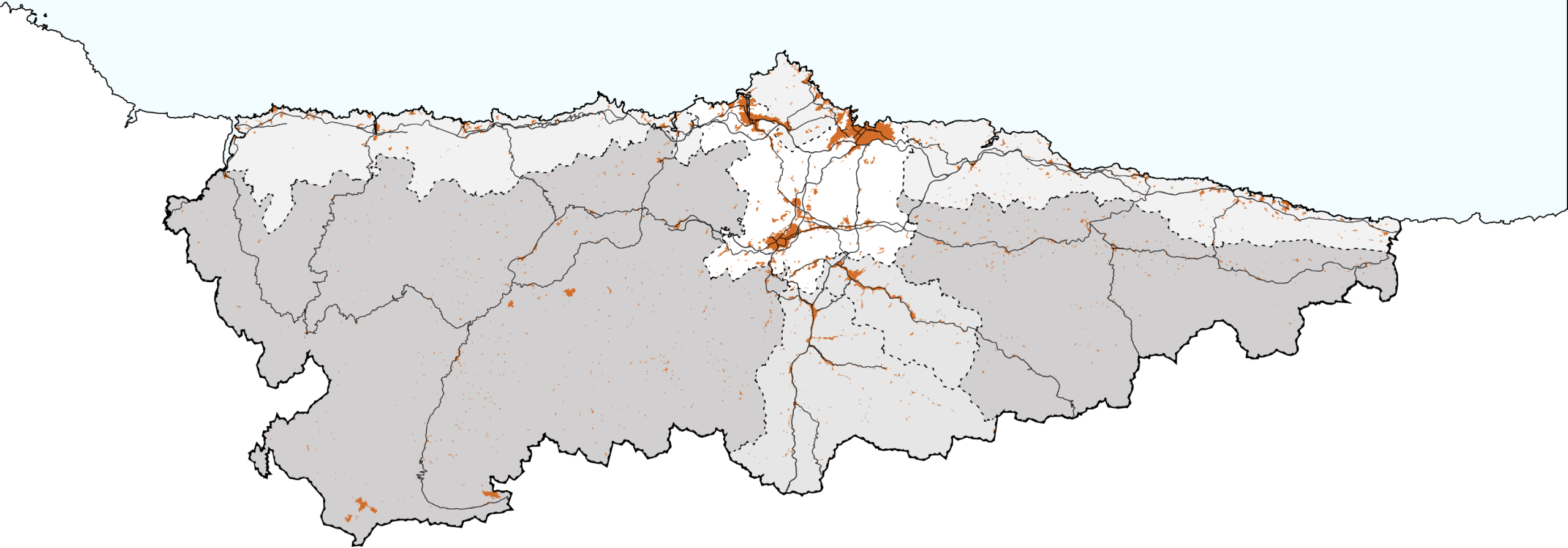


Agenda point 5: Mobility

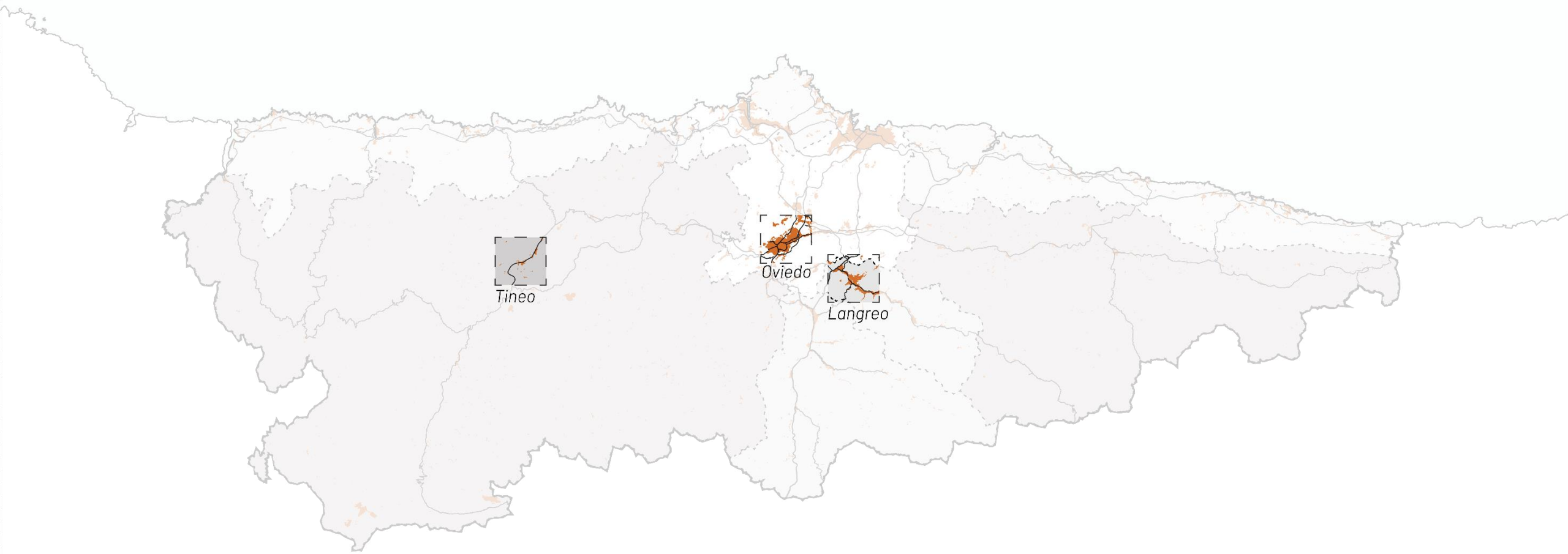
-  Airport
-  Transport hub
-  HSR to Madrid
in construction
-  Proposed highway
PAE, Dep. of Infrastructure
-  Intesification of regional train network
-  Intesification of buslines
-  Ferry connections

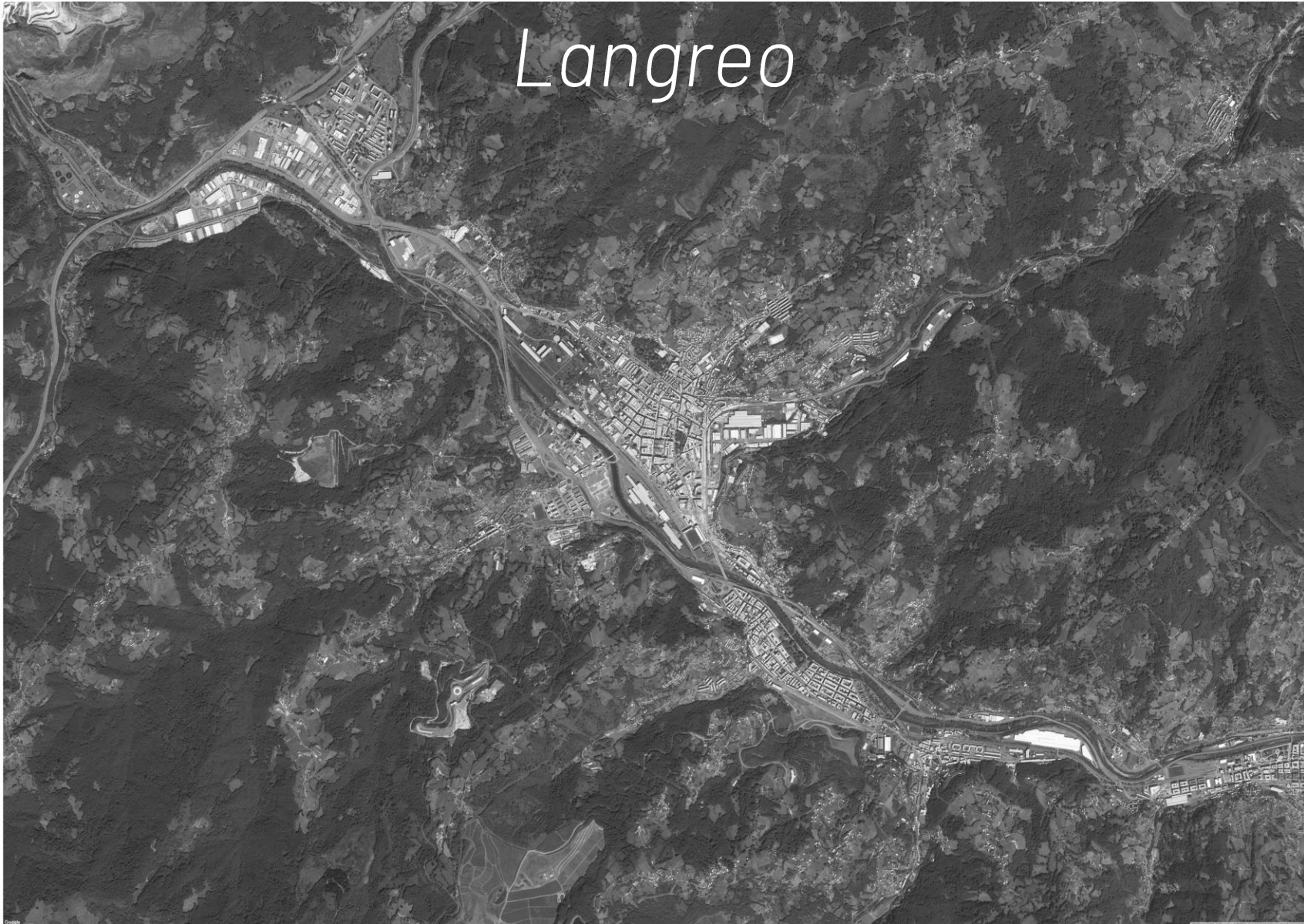


3. LOCAL ILLUSTRATIONS



3. LOCAL ILLUSTRATIONS









09/07/2018

Reimagining the European periphery



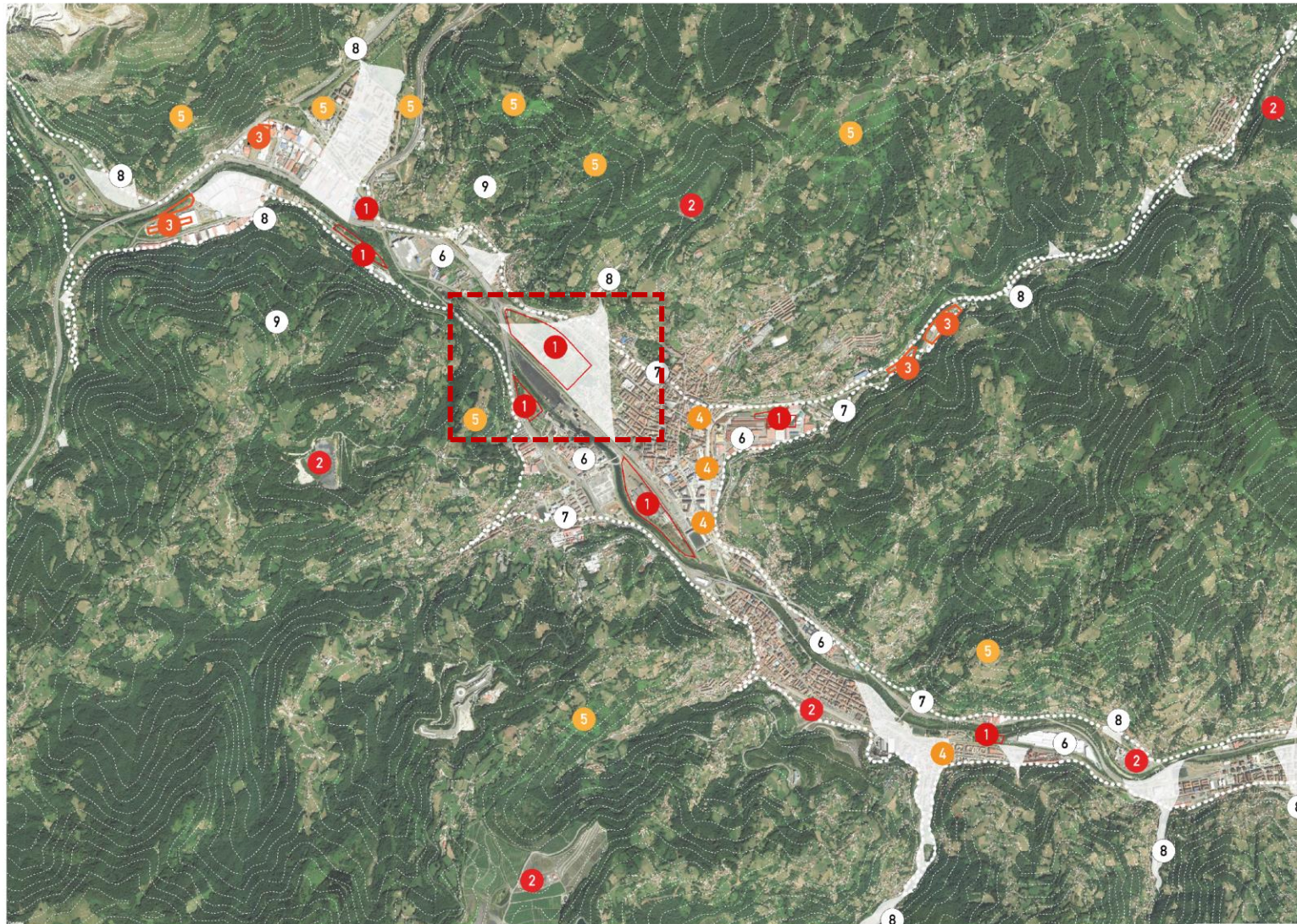






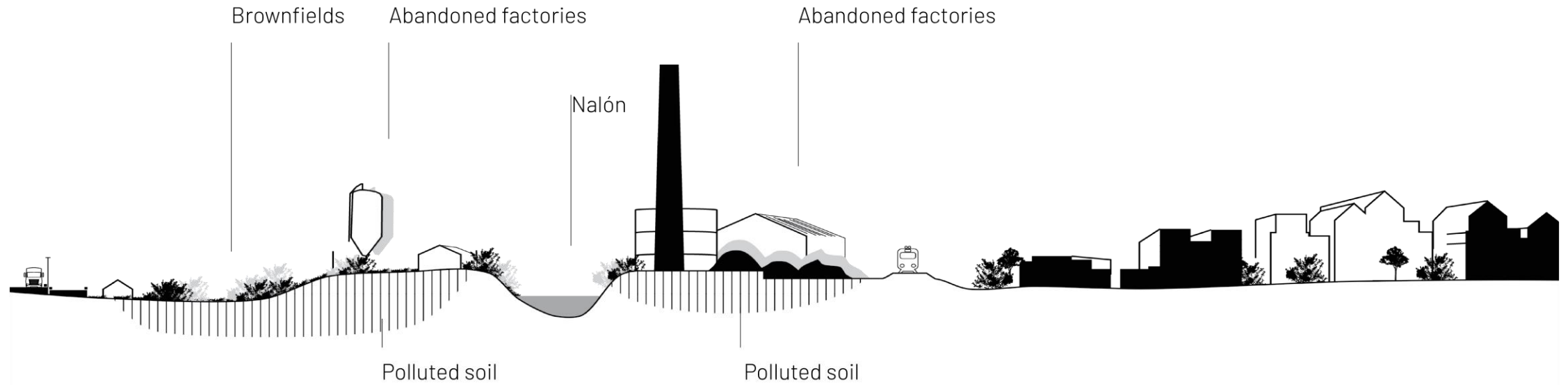


Langreo: Analysis

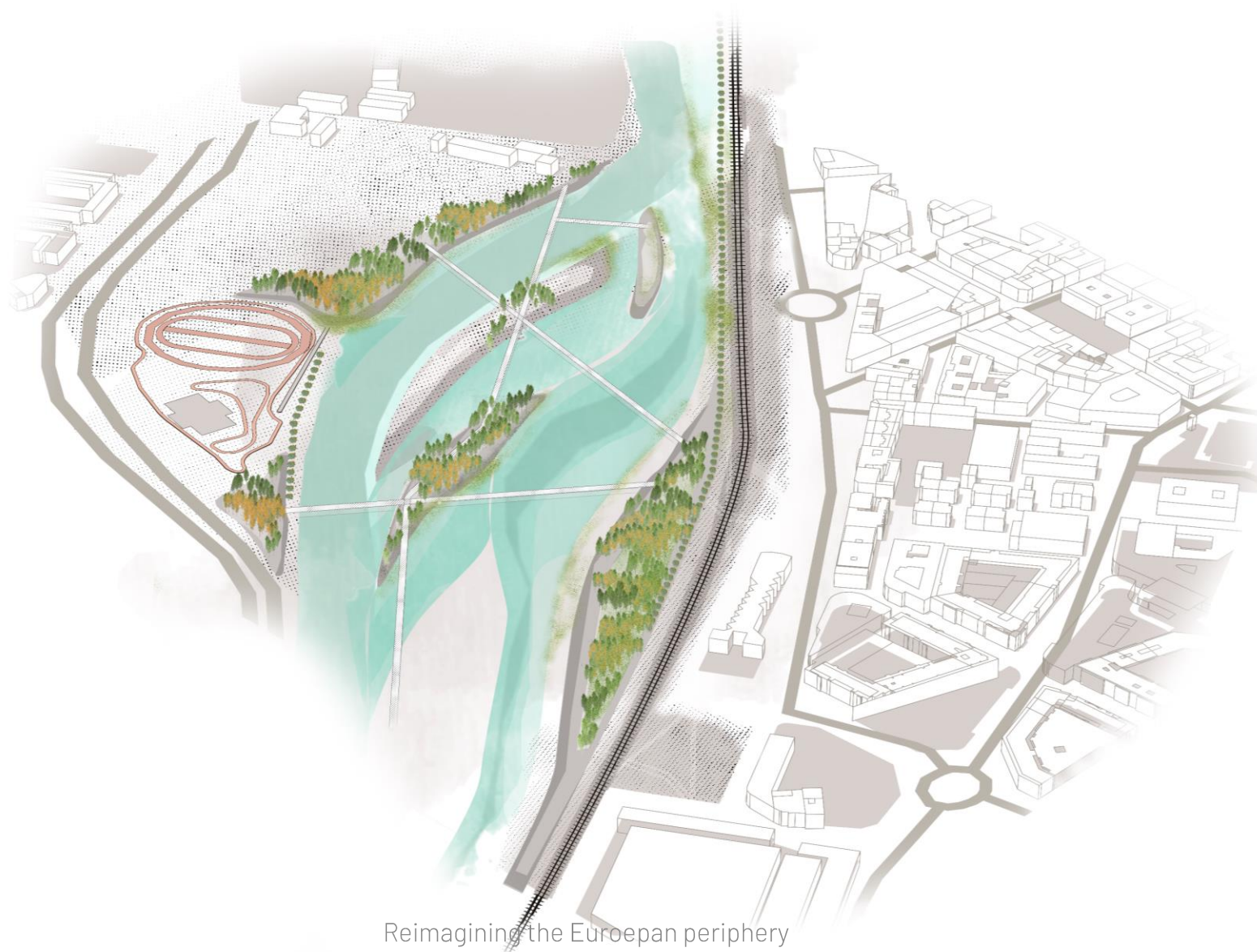


- SHRINKAGE
- 1 BROWNFIELDS
 - 2 CLOSED MINES
 - 3 GREYFIELDS
 - 4 URBAN BLIGHT
 - 5 ABANONED FARMLAND
 - 6 REMAINING INDUSTRIAL ACTIVITY
 - 7 FLOODRISK ZONE
 - 8 TORRENTIAL FLOODING
 - 9 LANDSLIDE RISK ZONE

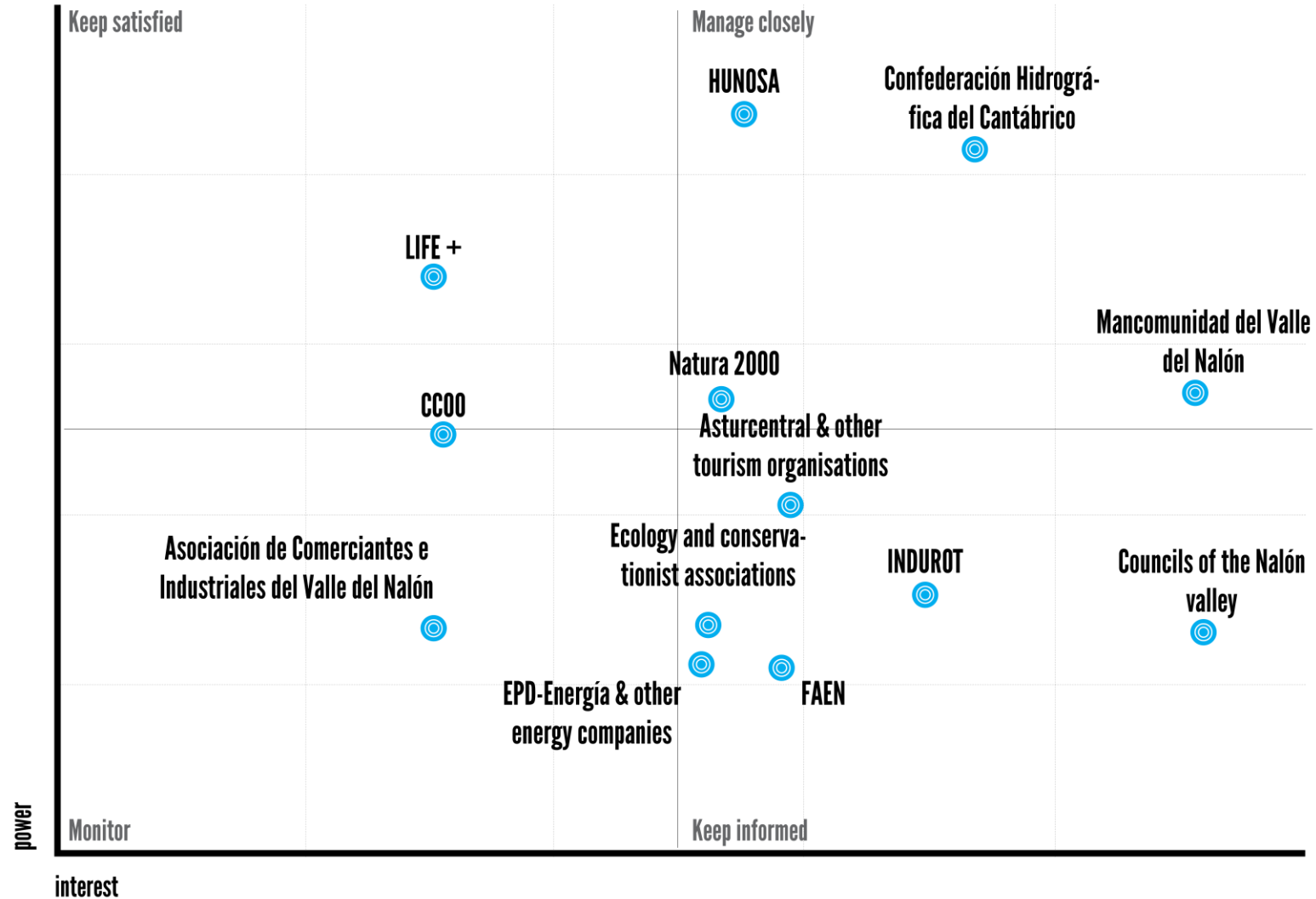
IMPRESSIONS



IMPRESSIONS



LOCAL STAKEHOLDERS



Oviedo



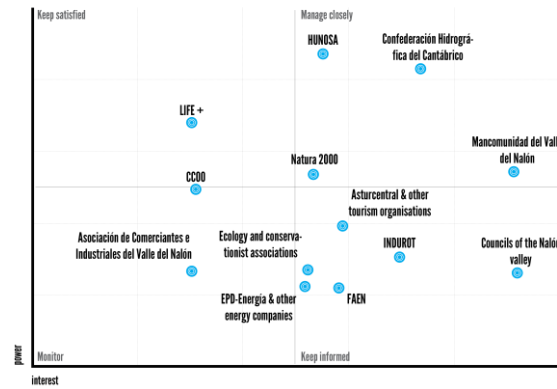
Tineo



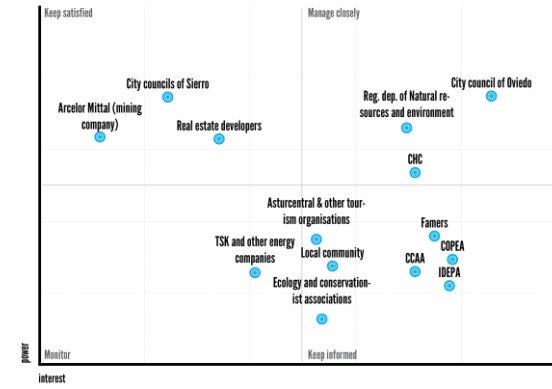
IMPLEMENTATION STRATEGY

Engagement strategies

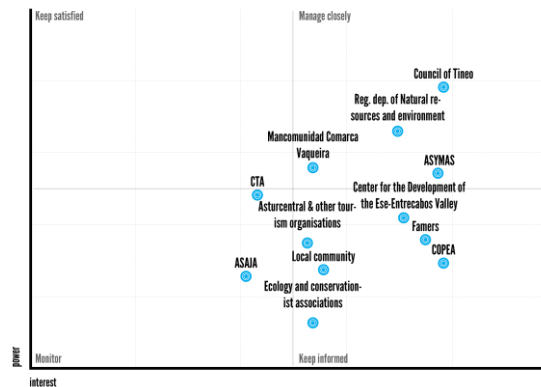
LANGREO



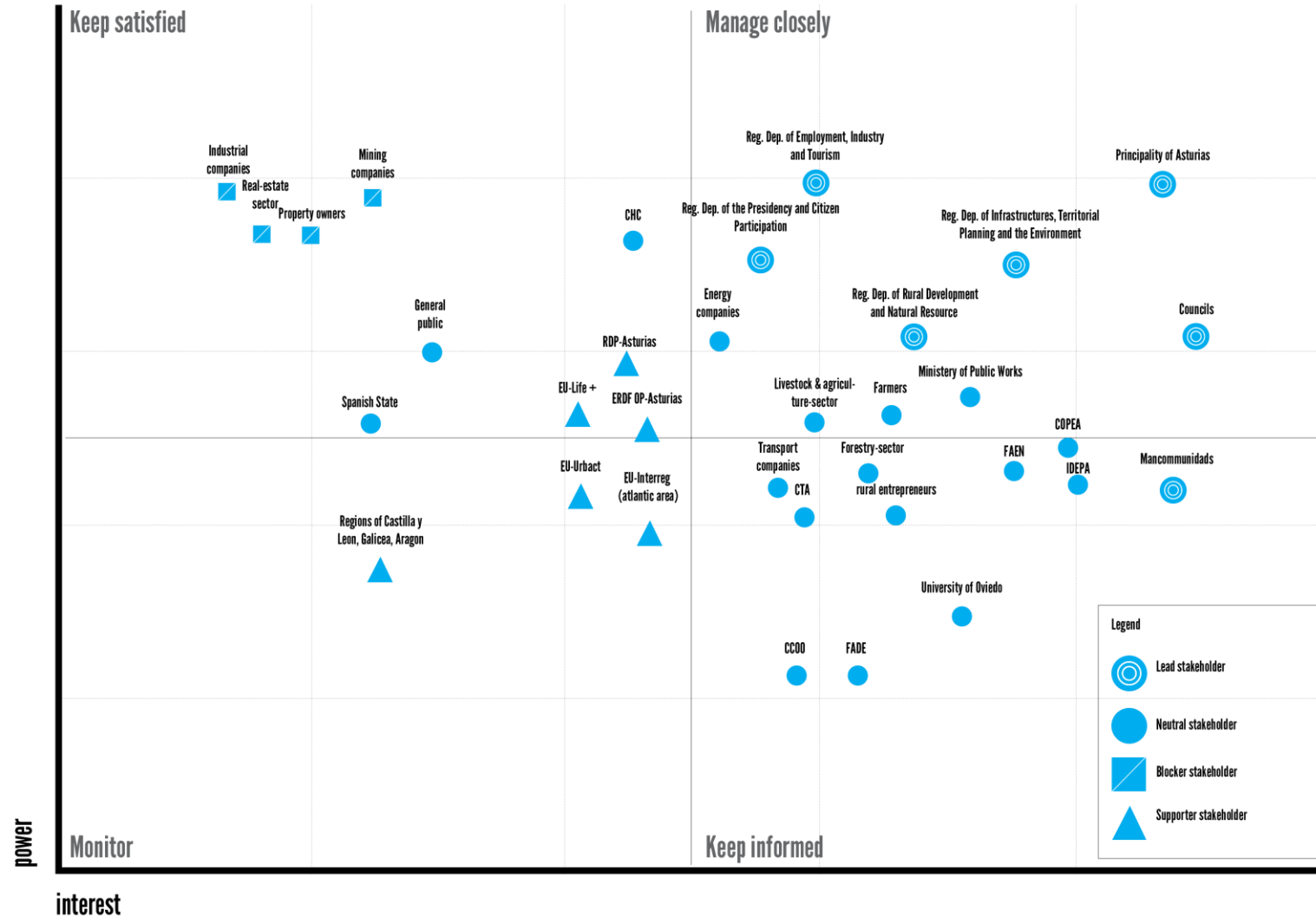
OVIEDO



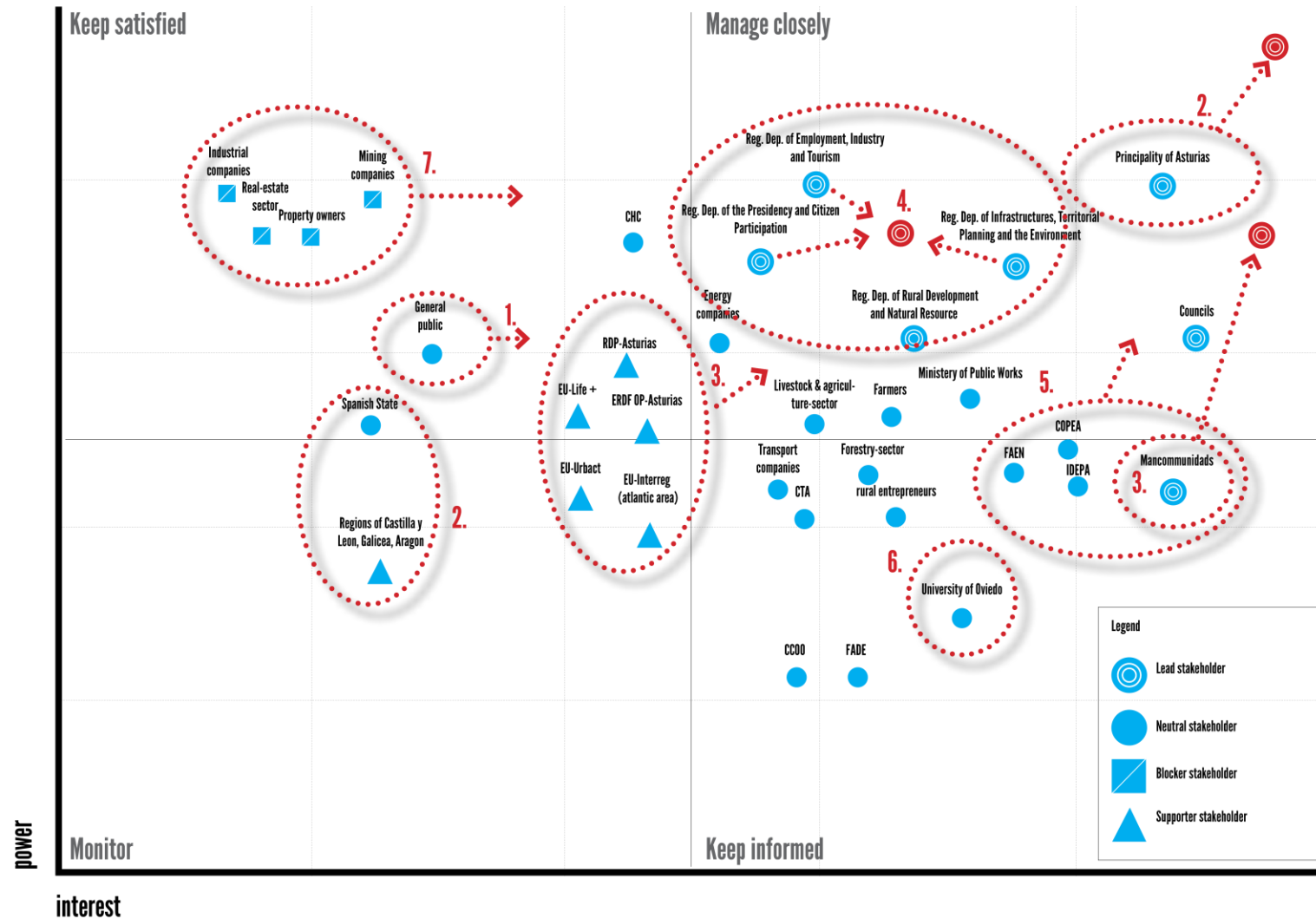
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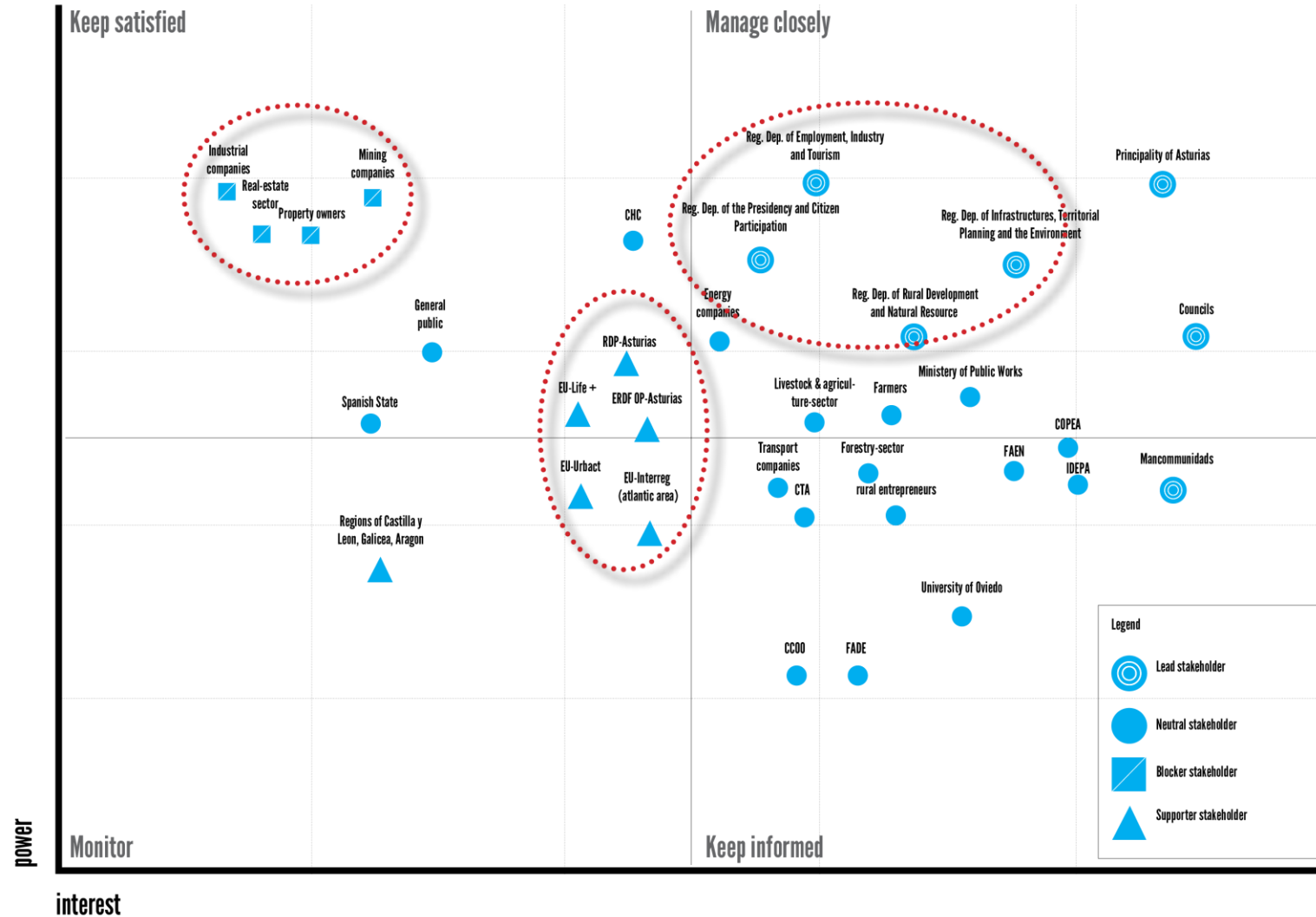
Engagement strategies



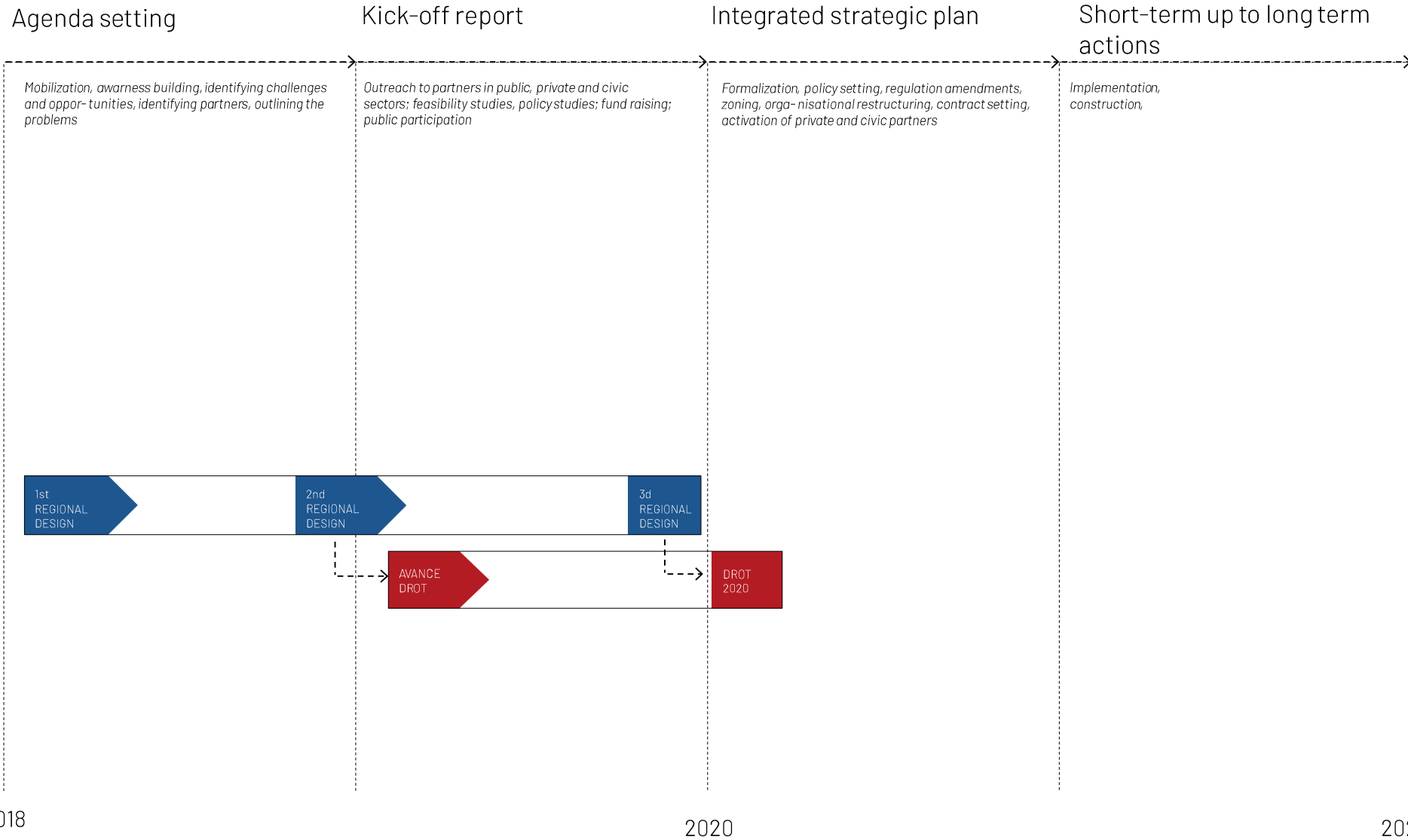
Engagement strategies



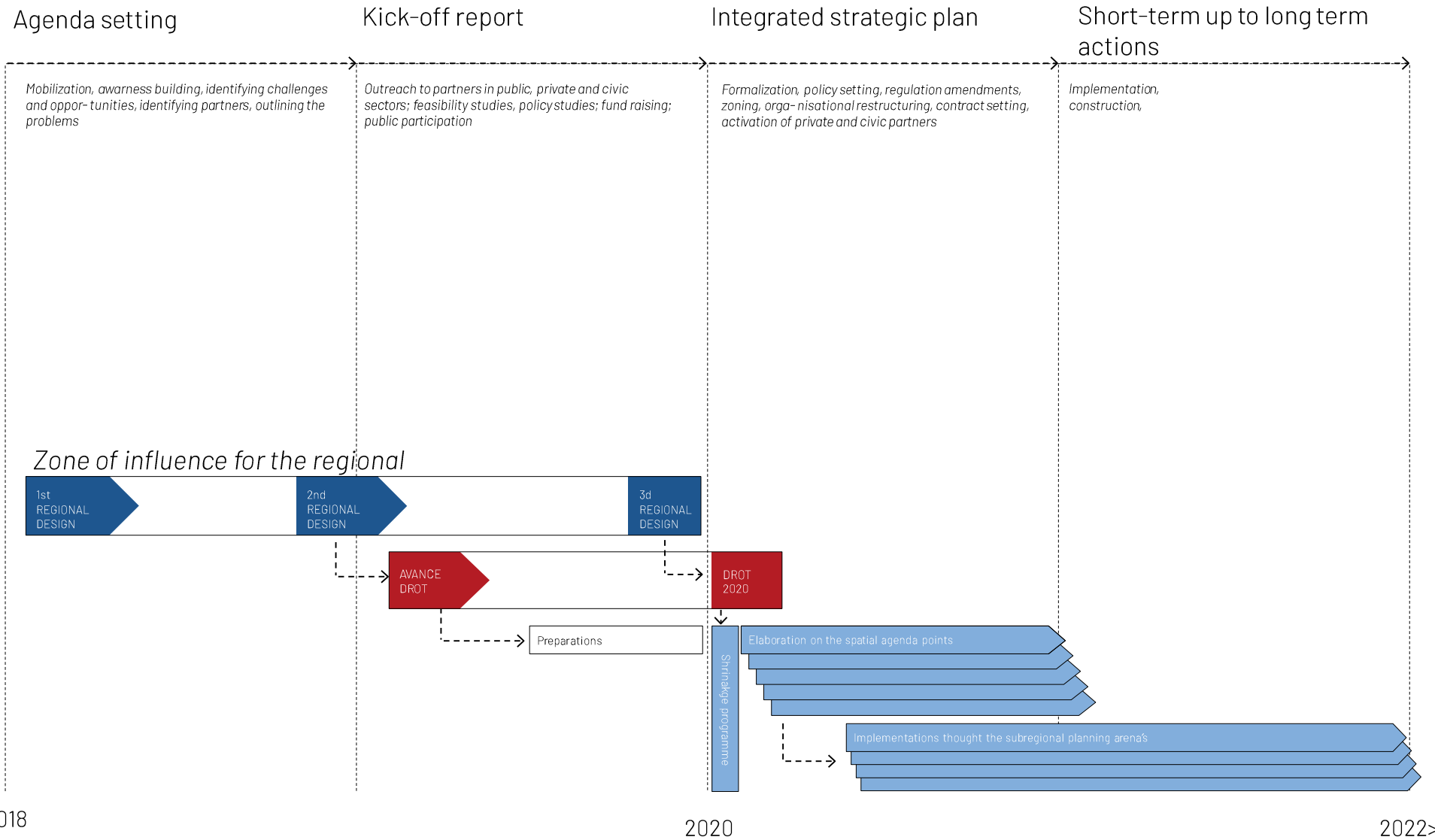
Engagement strategies



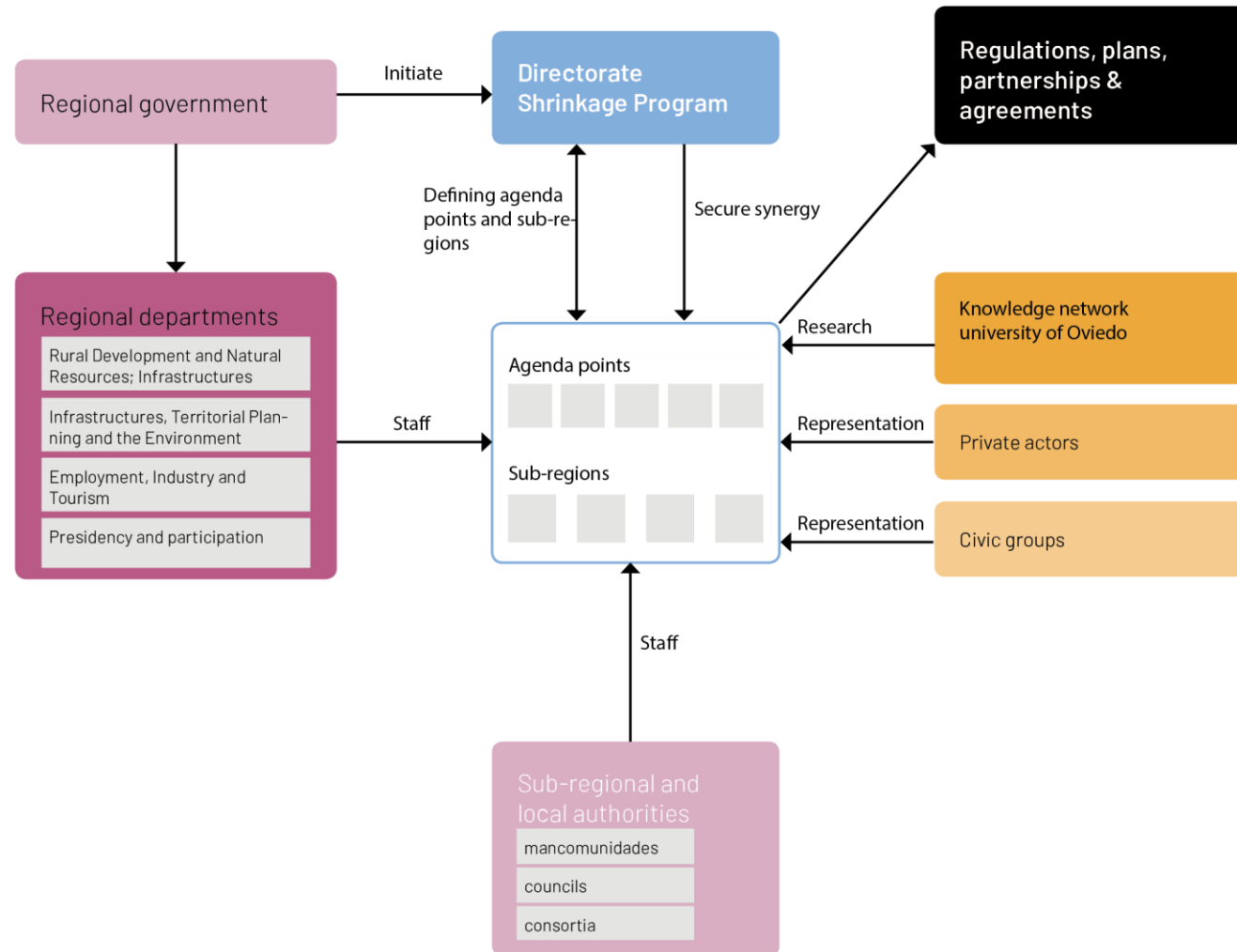
Phasing



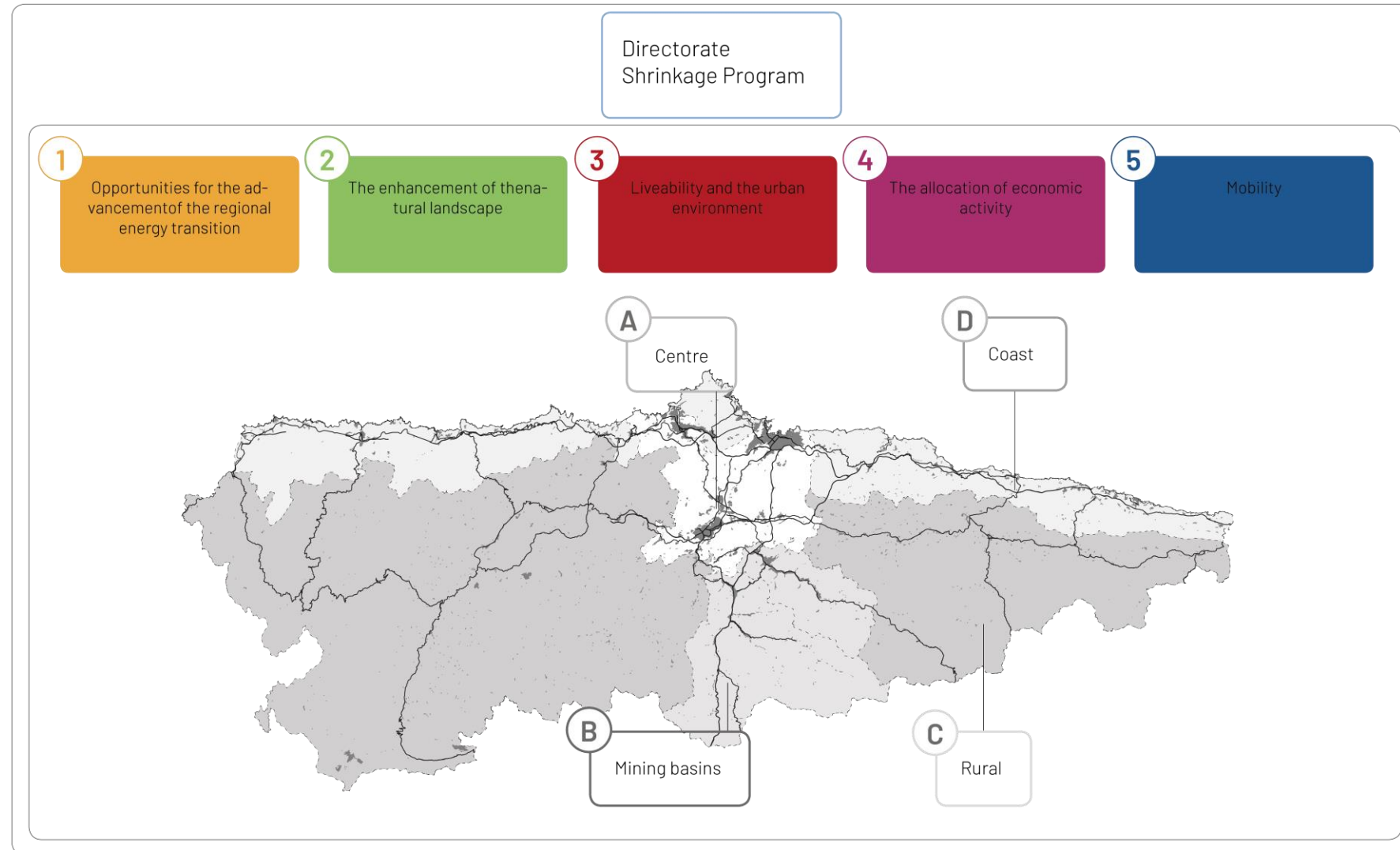
Phasing



Institutional framework



Institutional framework





6. Conclusions and discussion

Contributions to literature

1. What are the manifestations of shrinkage in the territory and planning system of Asturias?
 - *relationship between shrinkage and the rise of certain environmental threats*
 - *complex relationship between shrinkage and the internal dynamics of the regional planning system*

2. What are principles and strategies for design and planning that can be used to exploit the opportunities in shrinkage?
 - *potential of alternative land use to address regional environmental issues*
 - *tool to break the planning deadlock*

3. How can these principles and strategies be integrated in to a regional design that guides regional spatial development?
 - *one holistic approach*
 - *regional platforms for cooperation*

Conclusion

The opportunities of shrinkage go way beyond urban greening. There are actual opportunities to provide new productivity and employment and address environmental risks

Planning system and the actors in it are the biggest hurdle

Regional design process can be useful to direct regional spatial development to exploit the opportunities that stem from shrinkage.

But should be tested in reality.

Further research

How can the higher level governments provide incentives for regions and cities to employ smart shrinkage strategies?