

Short rotation plantations on arable land: forest policy and legislation framework in Slovenia

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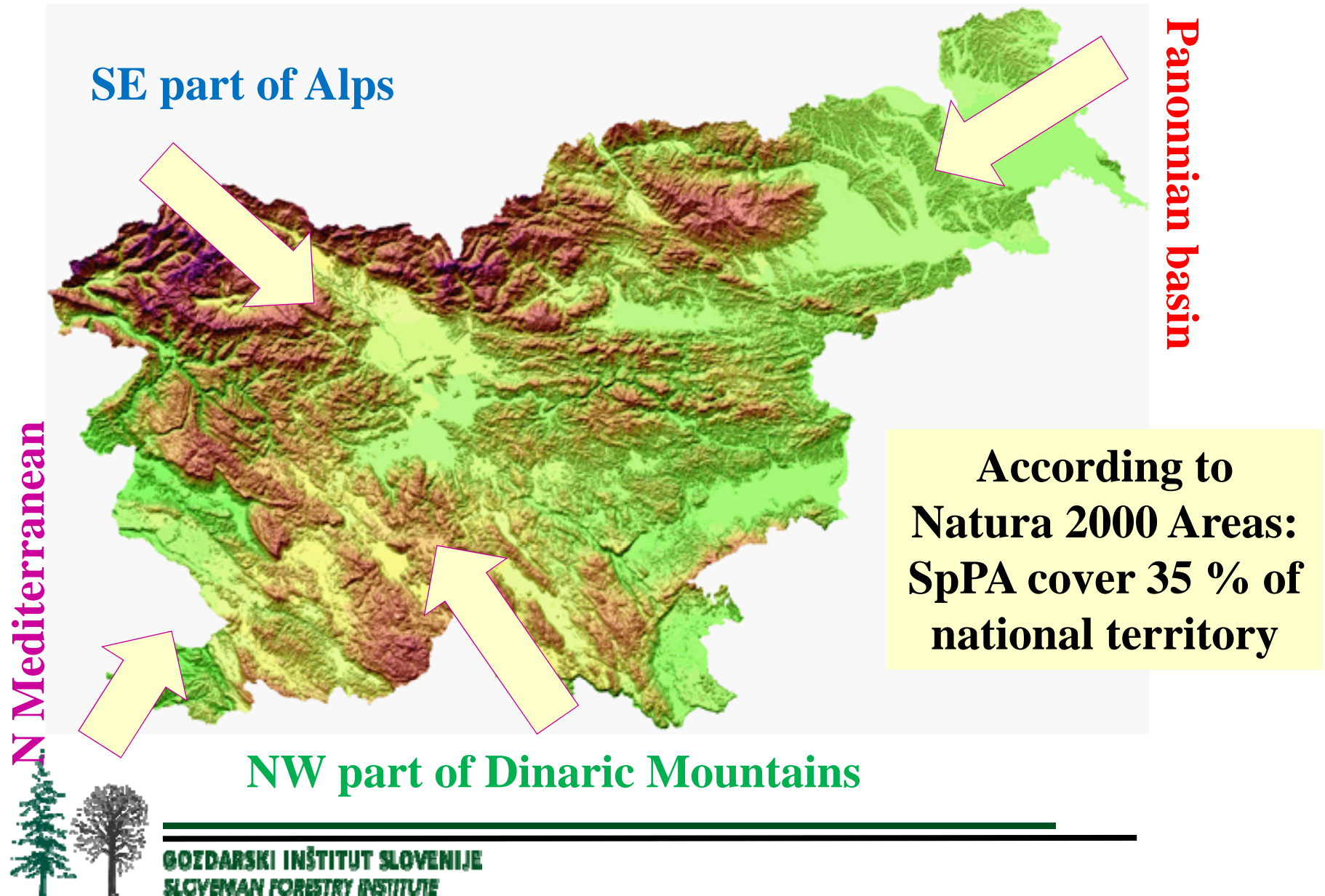
National forest policy is the set of **orientations** and **principles** of actions adopted by public authorities in harmony with national socio-economic and environmental policies in a given country **to guide and determine future decisions** in relation to the sustainable use and conservation of forest and tree resources for the benefit of society (FAO 2012).

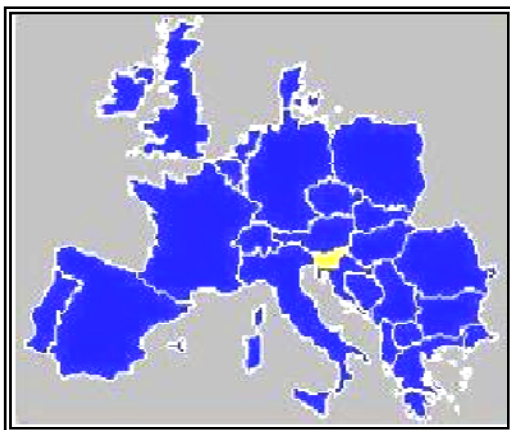
Forest policy is a prerequisite for legislation and action plan.



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Slovenia is characterised by a great natural diversity





FORESTS IN SLOVENIA

(FRA 2010):

Forest cover: 62 %

Growing stock: 332 m³ / ha

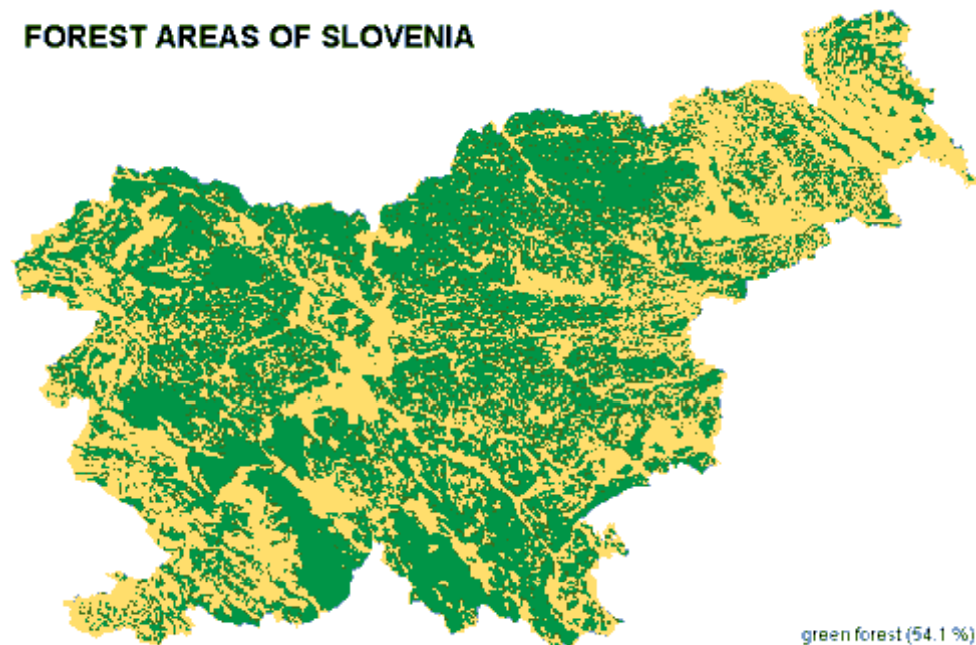
Broadleaves: Conifers = 55 % : 45 %

Number of naturally growing tree species: 71

ECO-REGIONS OF SLOVENIA



FOREST AREAS OF SLOVENIA



green forest (54.1 %)



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In comparison to the most EU countries the forests in Slovenia are rather well preserved as sustainable, co-natural and multifunctional management has been traditionally and legally incorporated into the forestry practice.

Slovenia has a responsibility to preserve biodiversity in relation to the sustainable use and conservation of forest genetic resources for the benefit of society.



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According to the National Renewable Energy Action plan (2010-2020) Slovenia must achieve at least **25 % share** in the balance of final energy consumption by 2020.

The wood biomass is the most important renewable source of energy (REW).

The main sources are round wood from **forest**, wood waste and wood residues from wood industry.



Forests are of high economic importance for Slovenia since it does not possess many other natural resources. Strategic need for the country should be preservation with further development of forestry sector.

Resources are limited.

The only additional sources for production of wood biomass for energy are Short-Rotation Coppice (SRC) plantations on arable land.



Arable land is in the agricultural marginal soils or poor soils where is too much or too less water for agriculture production.

Tree species mainly used in SRC plantations:

- poplars x ssp.
- willows x ssp.
- black locust
- birch.

No subvention policies for SRC cultivation and production were adopted in Slovenia.



As the main species used in SRC plantations are mainly non-native clones of different **poplar and willow species or artificial hybrids** – the permanent risk factors exist:

- by **biotic damages** from not yet pathogenic harmful organisms in the area;
- by **genetic pollution of autochthonous gene pools** of native poplars and willow species with spontaneous crossing.



The main weakness for the development of SRC plantations are environmental issues.

For environmental risk assessment (ERA) is advisable that every short-rotation plantation is regarded as an individual case and not according to its minimum surface area.



Legislation framework (I)

By the Forest Act (1993) forest tree plantations on arable land are not considered as forest.

- **No afforestation authorization is required for establishment forest plantations outside forest land.**
- **The area can also be converted back for food production at any time** without having to apply for clearing and conversional authorization.



Legislation framework (II)

The Act on Forest Reproductive Material FRM (2002) also apply to short-rotation plantations outside forest:

- a) by its provisions which applies to **all reproductive material** of forest tree species and artificial hybrids which are mainly used for **establishment and maintaining forest tree plantations.**



b) By the list of tree species and artificial hybrids (2009) for which the regulations of FRM are obligated for.

On the list are included **77 forest tree species** with *Populus* x spp.* and *Salix* x spp.



c) By the Rules:

- on the conditions for the **approval forest seed object** in the category “source of origin” and “selected” (2003);
- on the conditions and procedures for the **approval forest seed object** for production of forest reproductive material in the category “qualified” and “tested” (2004).



Legislation framework (III)

According to the Law on FRM by 2002

the reproductive material of artificial hybrids in Slovenia **should be registered in category:**

- **Selected,**
- **Qualified or**
- **Tested.**

For cultivation of perennial crop in SRC for production of wood chips is highly important:

- selection of suitable species and varieties for the local site conditions;
- supply of the appropriate planting material.

The testing procedure should be applied.

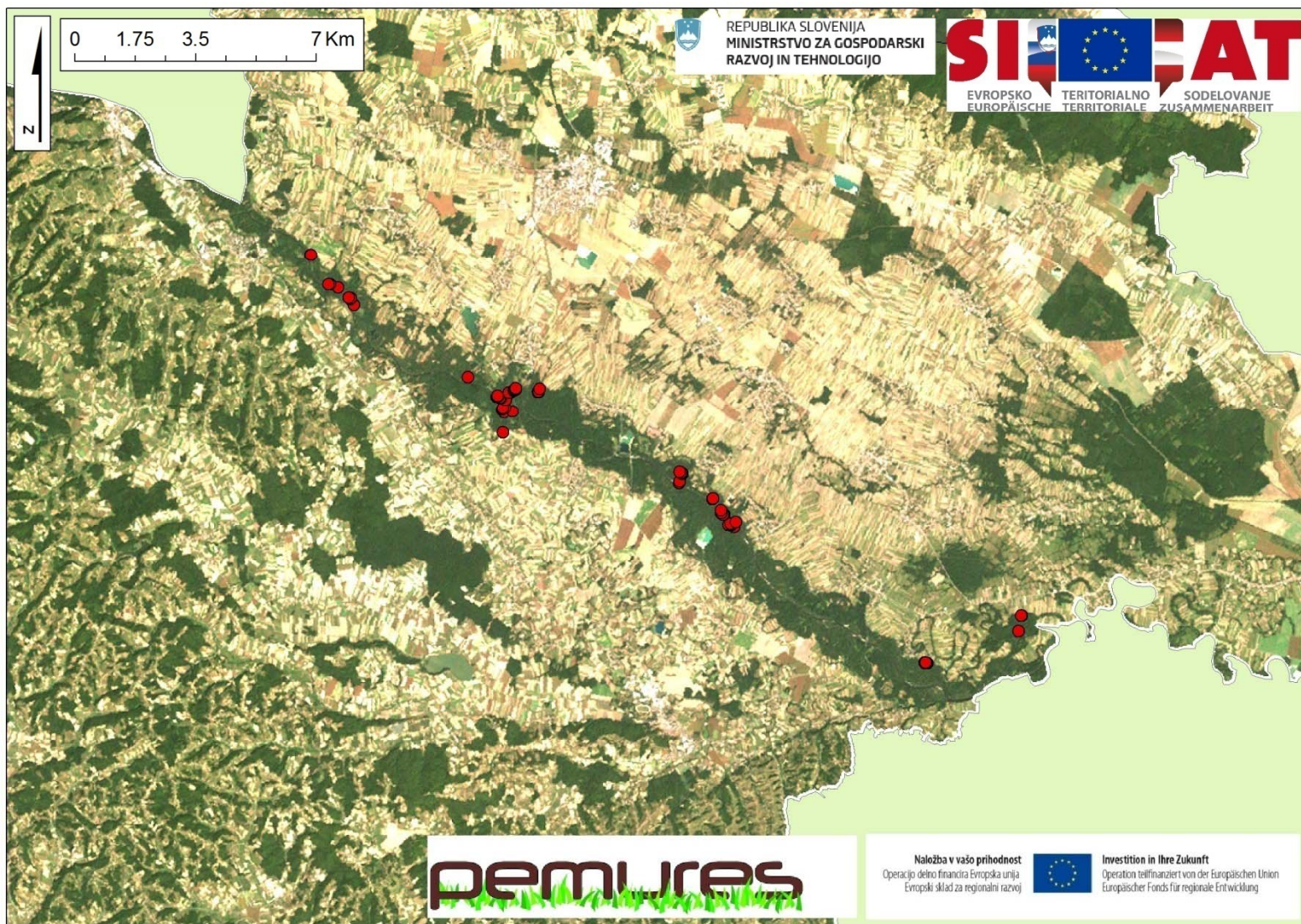


Within the PEMURES project we have established in Slovenia for the first time:

- **experimental SRC plantation with 9 poplar clones (PN-6, 457, 618, S1-8, Pannonia, Koreana, Matrix, AF2, Monviso), CBD.**
- **gene bank and stoolbed of autochthonous European Black poplar for conservation and future selections of new genotype candidates.**



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Naložba v vašo prihodnost
Operacijo delno financira Evropska unija
Evropski sklad za regionalni razvoj



Investition in Ihre Zukunft
Operation teilweise finanziert von der Europäischen Union
Europäischer Fonds für regionale Entwicklung



pemures
Penetrating the Energy Market by up to now Unused Renewable Energy Sources



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MINISTRSTVO ZA GOSPODARSKI
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