

# Land registry and environmental sustainability



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# Scope of the land register

## **Territorial information**

- Description of the physical features of the land
- Description of the type of use
- Environmental classification

**+**

- Geo-referencing (GPS coordinates)

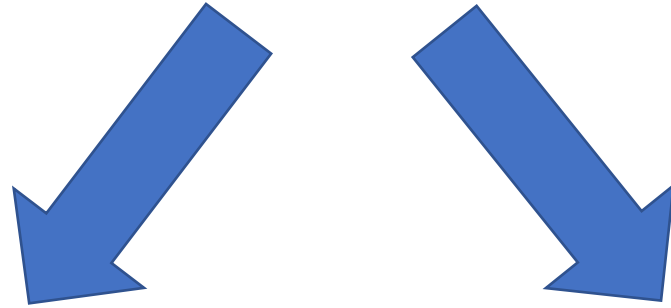
## **Legal status**

Property information related to:

- Ownership
- Rights
- Encumbrances
  
- Environmental burdens

# Main functions of Land Registry:

To publicize the legal situation of immovable properties



ownership

charges (mortgages, easements, attachments, etc)

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graph TD; B[ownership] --> D[Reinforcing the security of the real estate legal trade]; C["charges (mortgages, easements, attachments, etc)"] --> D
```

Reinforcing the security of the real estate legal trade

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graph TD; D[Reinforcing the security of the real estate legal trade] --> E[But... facts subject to registration are pre-determined by law]
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But... facts subject to registration are pre-determined by law

Territorial information  
usually or likely to be included



Territorial information  
associated with European  
environmental law



**WISE**  
WATER INFORMATION  
SYSTEM FOR EUROPE



**SYSTEM RISK**



**Critical Raw Materials for the EU**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20																																									
Li	Co	Ni	Y	La	Ge	Si	Al	Fe	Ca	Sc	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Cd	Ag	Sr	Ba	La	Ce	Pr	Nd	P	As	Sb	Te	Se	Mo	Ru	Rh	Pd	Ag	Cd	Sn	Pb	Bi	Po	At	Rn																	
Na	Mg	Al	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr	Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Pb	Bi	Po	At	Rn	Fr	Ra	Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr					
Li	Co	Ni	Y	La	Ge	Si	Al	Fe	Ca	Sc	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Cd	Ag	Sr	Ba	La	Ce	Pr	Nd	P	As	Sb	Te	Se	Mo	Ru	Rh	Pd	Ag	Cd	Sn	Pb	Bi	Po	At	Rn	Fr	Ra	Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr
Li	Co	Ni	Y	La	Ge	Si	Al	Fe	Ca	Sc	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Cd	Ag	Sr	Ba	La	Ce	Pr	Nd	P	As	Sb	Te	Se	Mo	Ru	Rh	Pd	Ag	Cd	Sn	Pb	Bi	Po	At	Rn	Fr	Ra	Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr

Legend: Yellow = Critical Raw Materials (CRM) in 2011; Orange = CRM in 2014; Red = CRM in 2017.



# The case of ecological compensation





DIRECTIVE 2011/92/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 13 December 2011  
as amended by DIRECTIVE 2014/52/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 16 April 2014 **On the assessment of the effects of certain public and private projects on the environment**

- Member States should ensure that mitigation and **compensation measures** are implemented, and that appropriate procedures are determined regarding the monitoring of significant adverse effects on the environment resulting from the construction and operation of a **project**, inter alia, to identify unforeseen significant adverse effects, in order to be able to undertake appropriate remedial action.
- [https://ec.europa.eu/environment/eia/pdf/EIA\\_Directive\\_informal.pdf](https://ec.europa.eu/environment/eia/pdf/EIA_Directive_informal.pdf)



# *Ex post* compensation: ecological remediation

Directive 2004/35/CE of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage



AZF TOULOUSE, 2001

**Remedying of environmental damage**, in relation to water or protected species or natural habitats, is achieved through the restoration of the environment to its baseline condition by way of primary, complementary and compensatory remediation, where:

- (a) "Primary" remediation is any remedial measure which returns the damaged natural resources and/or impaired services to, or towards, **baseline condition**;
- (b) "Complementary" remediation is any remedial measure taken in relation to natural resources and/or services to compensate for the fact that primary remediation does not result in **fully restoring** the damaged natural resources and/or services;
- (c) "Compensatory" remediation is any action taken to compensate for **interim losses of natural resources** and/or services that occur from the **date of damage occurring** until primary remediation has achieved its full effect;
- (d) "interim losses" means losses which result from the fact that the damaged natural resources and/or services are not able to perform their ecological functions or provide services to other natural resources or to the public until the primary or complementary measures have taken effect. It does not consist of financial compensation to members of the public.
- Where primary remediation does not result in the restoration of the environment to its baseline condition, then complementary remediation will be undertaken. In addition, compensatory remediation will be undertaken to compensate for the interim losses.
- Remedying of environmental damage, in terms of damage to water or protected species or natural habitats, also implies that any significant risk of human health being adversely affected be removed.

*Baseline condition*



*Before*

*After the accident*



*After*

**AZF TOULOUSE, 2001**

*Ex ante* compensation: habitat banking

# Private ecological restoration

