



# Mainstreaming climate and energy policies into nature conservation

Mihaela Dragan, 14<sup>th</sup> September, Bonn

# Outline

- Who is WindEurope?
- Wind power across Europe
- WindEurope work on nature conservation
- WindEurope messages on nature conservation
- Case studies:
  - Golden Eagle case study,
  - Lesser kestrel case study.

# WindEurope: Representing the entire supply chain

450  
MEMBERS

Wind turbine manufacturers

e.g.



GE Renewable Energy

SIEMENS Gamesa  
RENEWABLE ENERGY

Vestas

Wind farm developers

e.g.



acciona



ERG RENEW



RES  
power for good



Statoil

Power utilities

e.g.

e.on



EDF  
energies nouvelles

enel  
Green Power



IBERDROLA

Supply chain

e.g.

ABB

ArcelorMittal



BASF  
We create chemistry

tpi COMPOSITES

Installation / Logistics

e.g.

Fred. Olsen

Seaway Heavy Lifting



Van Oord

Marine ingenuity

Financial services

e.g.

Allianz



Brookfield  
Renewable Energy Partners



Rabobank

Research institutes

e.g.

CATAPULT  
Offshore Renewable Energy



Fraunhofer  
IWES

TU Delft

+ National wind associations

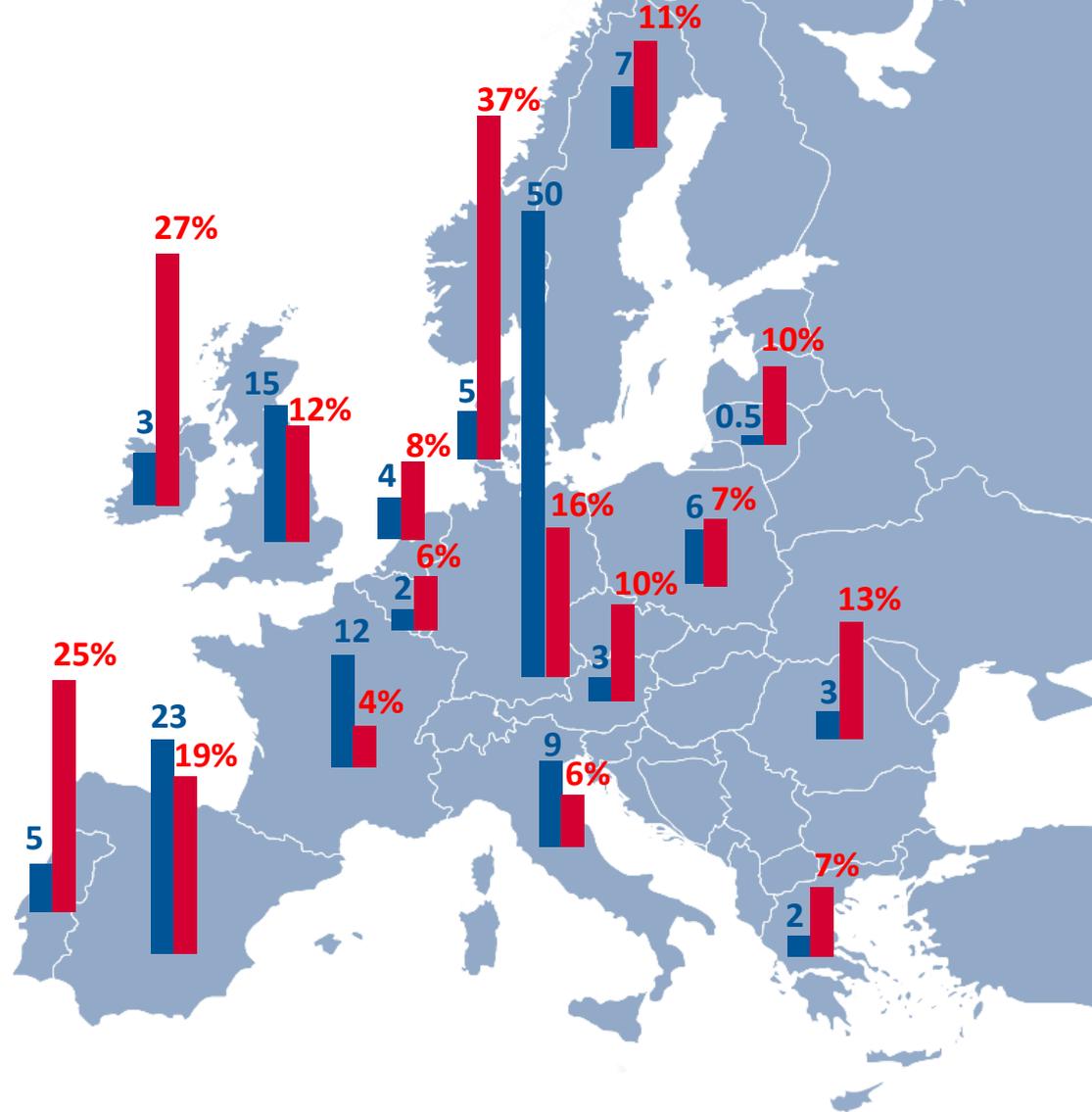
# Wind power across Europe

160 GW

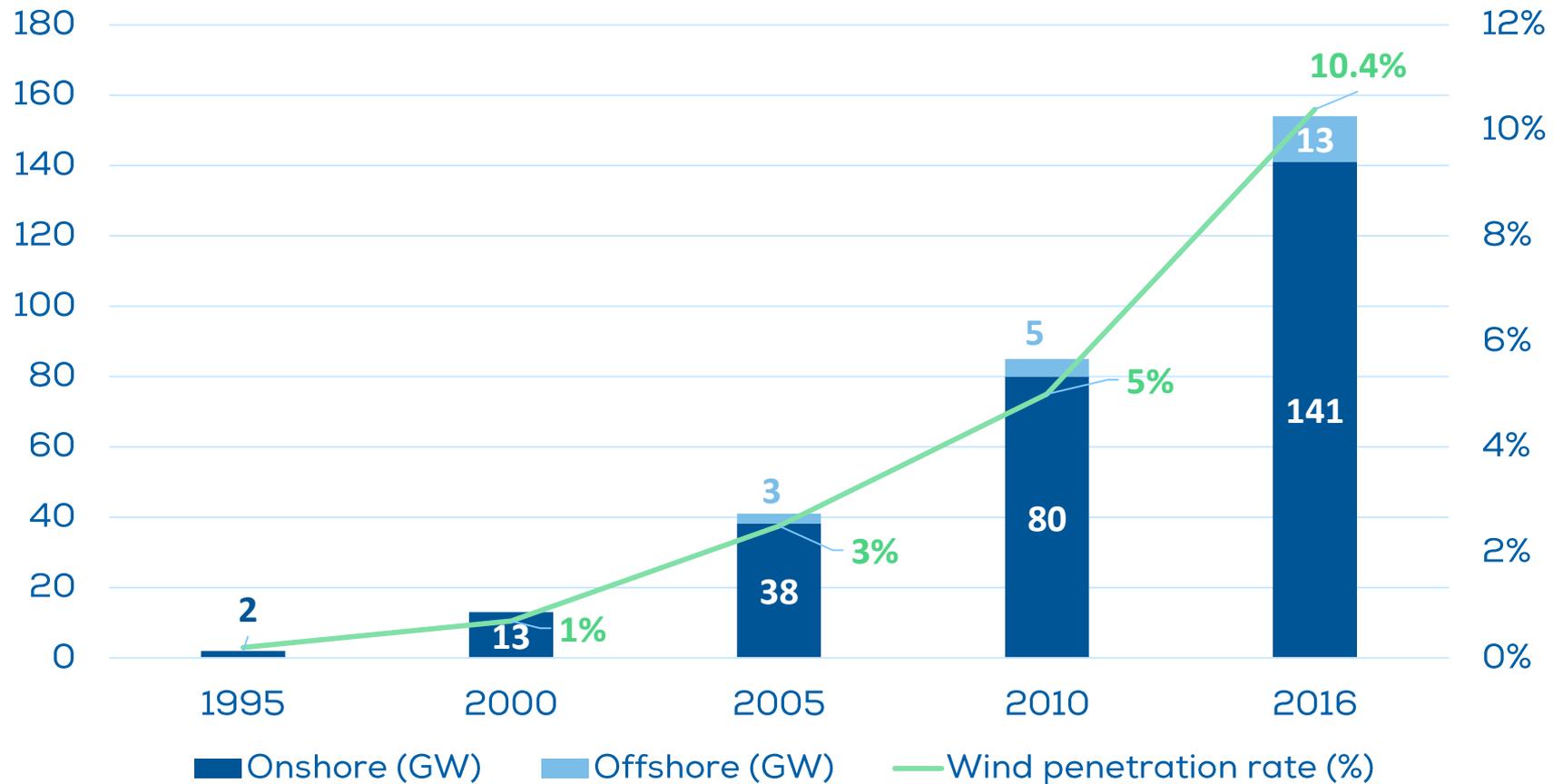
10.4%

of 2016 EU power demand

- GW installed
- Penetration



# Growth of wind energy in Europe

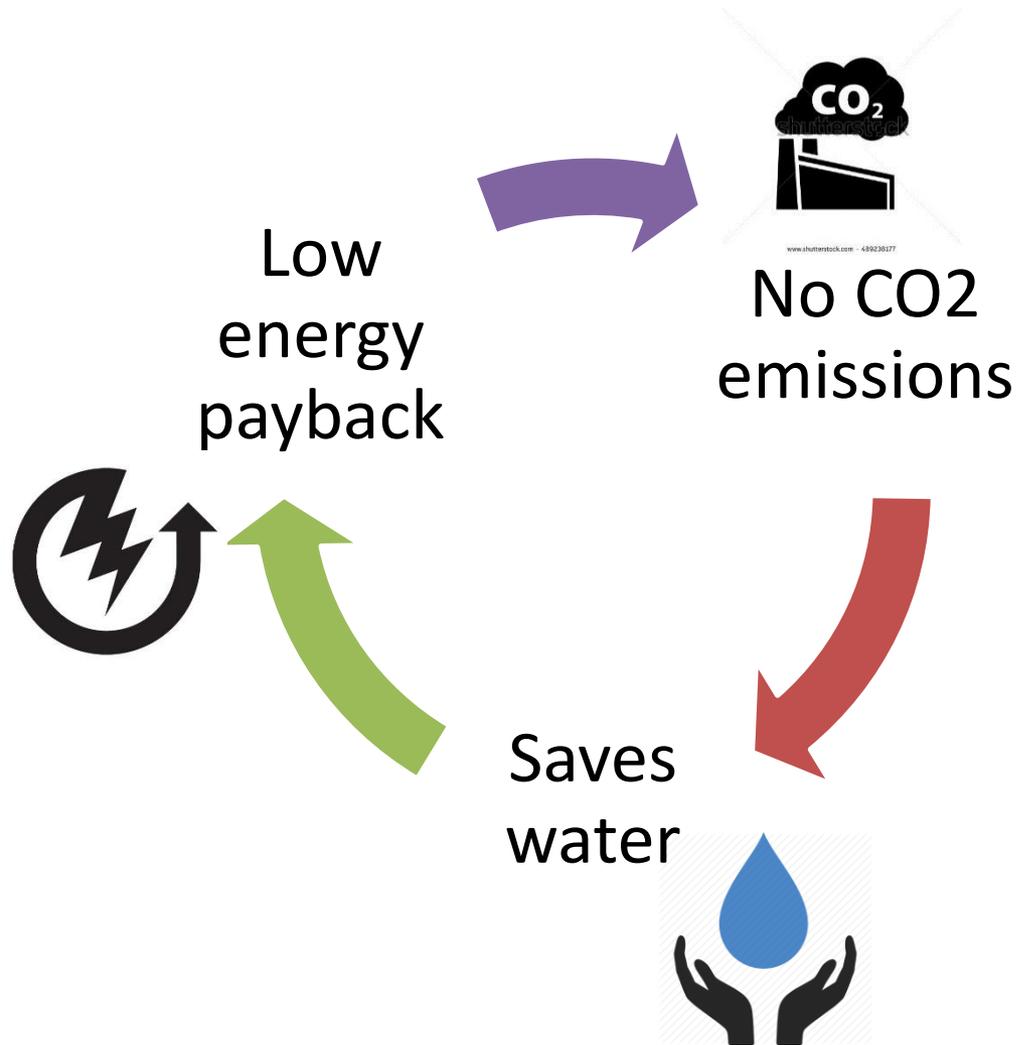


# Wind industry messages on nature conservation

Messages supported by case studies

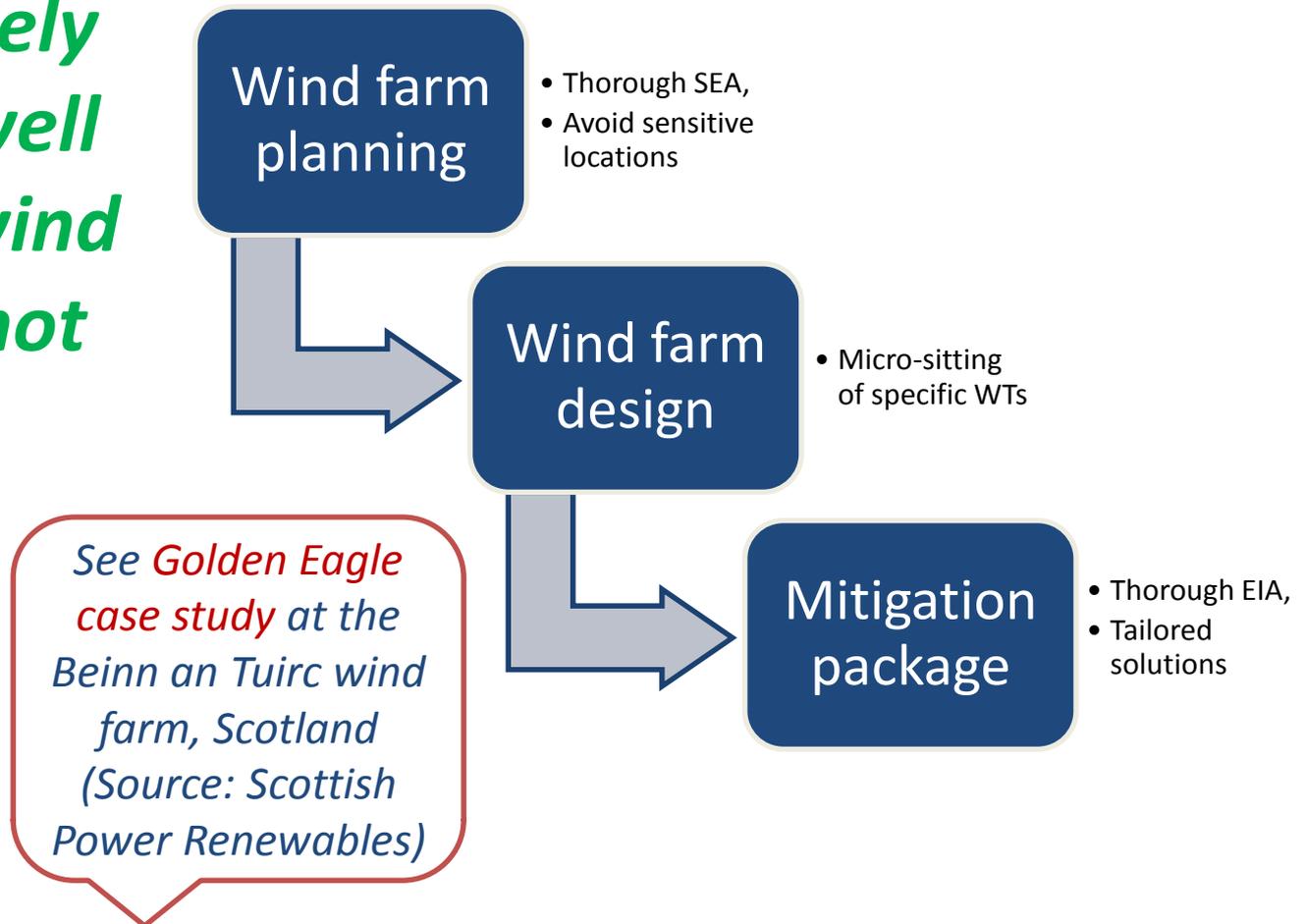
# Wind power benefits

*Wind power helps mitigate climate change – the single largest threat to birds and habitats*



# Wind industry key messages (I)

*Appropriately sited and well designed wind farms are not a threat to birds and habitats*



# Wind industry key messages (II)

*Effects of wind farms on ecosystems should be assessed on a case by case basis.*

*A similar approach should be established for mitigation solutions envisaged by the permitting authorities.*



See *Lesser Kestrel case study* at the Cerro del Pao, Cerro Calderon and La Muela I, Spain.  
(Source: Iberdrola)

# Wind industry key messages (III)

***Further collaboration with the local and regional permitting authorities in order to avoid any retroactive changes that might endanger the integrity of the business plans of the project developers.***



See *Pioneer Trail case study*, Paxton, Illinois, North America.  
(Source: E.ON Climate & Renewables)

# The golden eagle case study (*Aquila chrysaetos*) - I



**Study area:** Beinn an Tuirc windfarm, located near Carradale, Argyll, Scotland received planning permission in 1999 and is formed of 46 660kW wind turbines.

**Main risks** associated with wind farm development: collisions and displacement.

**Mitigation:** during the EIA a golden eagle territory had been identified nearby, which led to a **relocation of the site further south.**

The developer was required to implement a **Habitat Management Plan (HMP)** as a form of mitigation.

# The golden eagle case study (*Aquila chrysaetos*) - II

## Results

- **The objective of the eagle monitoring** was to identify whether the construction and operation of Beinn an Tuirc windfarm had an effect on the golden eagle territory.
- **The eagles have not collided with the turbines, nor have they been displaced due to disturbance**, as they have shown no detectable change in the territory occupied.
- **The removal of forestry from the area and subsequent restoration to heathland/blanket bog** may have contributed to the eagle's success by expanding available habitat within their preferred hunting territory.

# The lesser kestrel case study (*Falco naumanni*) - I



**Study area:** for 133 turbines in three wind farms: Cerro Del Palo, Cerro Calderón and La Muela I, located in Cuenca province (Spain)

**Main risks:** collisions and displacement.

**Mitigation:** one measure used referred to superficially till the base of certain turbines. After the implementation of mitigation, monitoring was conducted during two years (2015-2016).

# The lesser kestrel case study

## *(Falco naumanni) - II*

### Results

- The mitigation measure wanted to **reduce the attraction of birds to these areas. By limiting the presence of vegetation, we reduce the abundance of potential prey.**
- **Positive correlation** between the decrease in the prey frequency in the tilled turbines and the decreased of lesser kestrel collisions with these turbines.
- After monitoring the mitigation measure, **data showed that turbine collisions with the lesser kestrels were reduced by 75% to 100%.** In fact, in all wind turbines with active mitigation measures there has been no collision registered in the last two years.

# Potential opportunities for collaboration

Visibility of ETF activities during WindEurope events:

- WindEurope Conference & Exhibition, 28-30 November 2017, Amsterdam
- Joint RGI-WindEurope event : “Grids meet RES”, 20/21 February 2018, Brussels
- WindEurope Conference & Exhibition, 25-28 September 2018, Hamburg
- Invitation to one of the WindEurope Sustainability TF meetings



NEXT YEAR, THE **WIND INDUSTRY**  
WILL BE MEETING IN

**AMSTERDAM**

28 - 30 NOVEMBER 2017

Amsterdam RAI Exhibition and Convention Centre

**Wind**<sup>•</sup>  
**EUROPE**

**CONFERENCE  
& EXHIBITION  
2017** 28-30 NOVEMBER  
AMSTERDAM

[windeurope.org/confex2017](http://windeurope.org/confex2017)