

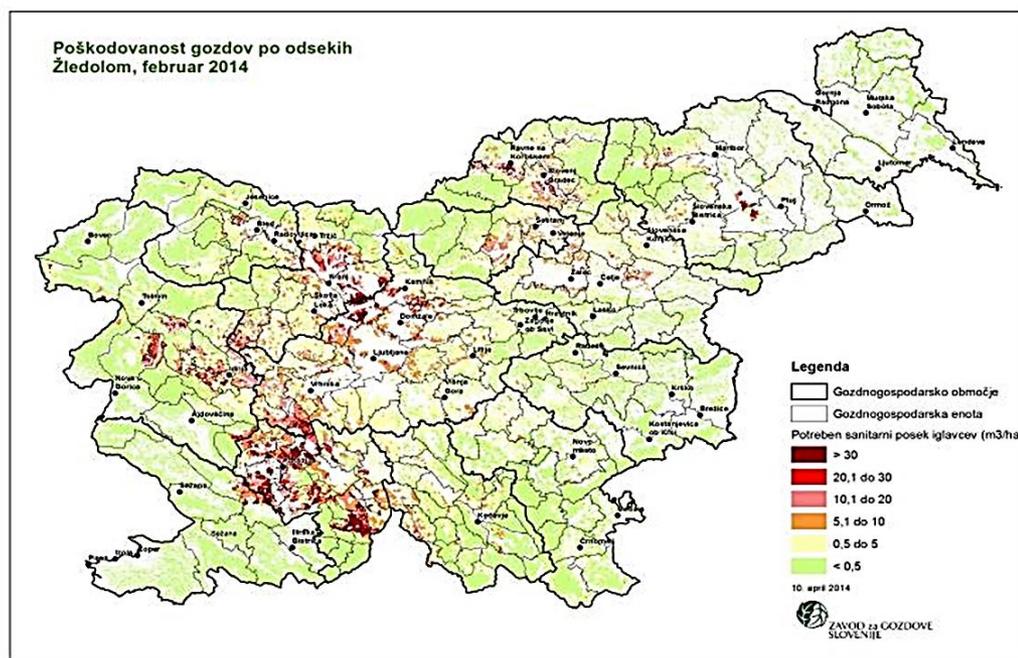
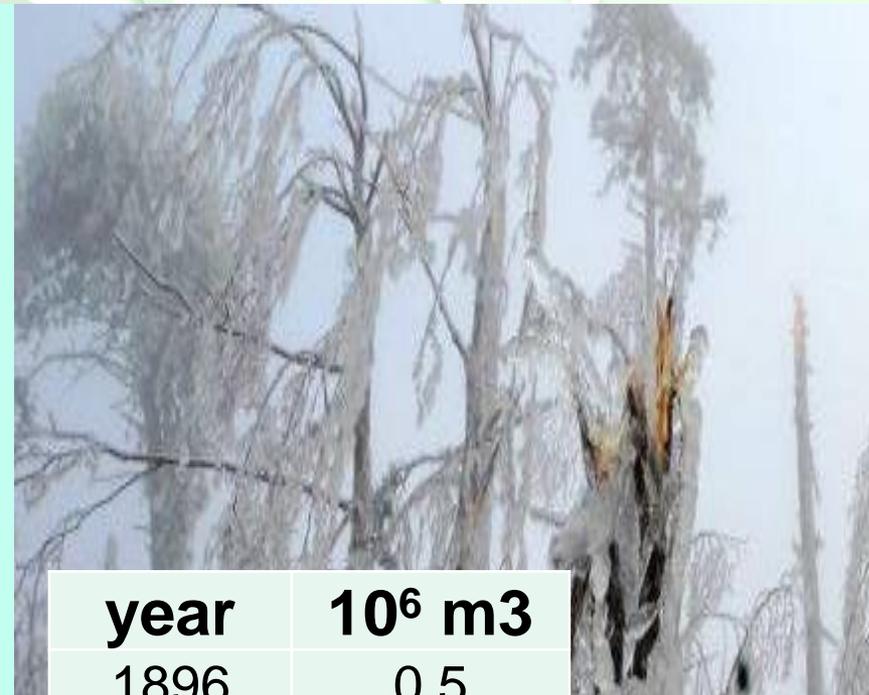
# Slovenian forests & disaster events

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Slovenia Forest Service

EFI Think Forest  
Prague (CZ), 4<sup>th</sup> of April, 2019



# Icebreak in Slovenian forests (30<sup>th</sup> Jan.– 10<sup>th</sup> Feb. 2014)



| year | 10 <sup>6</sup> m <sup>3</sup> |
|------|--------------------------------|
| 1896 | 0,5                            |
| 1953 | 0,1                            |
| 1975 | 0,3                            |
| 1980 | 0,7                            |
| 1985 | 0,5                            |
| 1995 | 0,7                            |
| 1996 | 0,9                            |

- 602.000 ha (51 %) of forests damaged
- 1/3 conifers, 2/3 broadleaves
- 15.000 km of blocked forest roads
- 14.000 ha need reestablishment of new forest
- 900 ha to be planted
- 214 mio EUR = financial damage

**2014 9,3**

**Wood removed**  
**75%: 2014-2017**  
**Restoration**  
**completed:**  
**2020**





# ... bark-beetle outbreak in 2014 – 2018...

2014: 400.000 m<sup>3</sup>

2015: 2.150.000 m<sup>3</sup>

2016: 2.200.000 m<sup>3</sup>

2017: 1.720.000 m<sup>3</sup>

2018: 740.000 m<sup>3</sup>

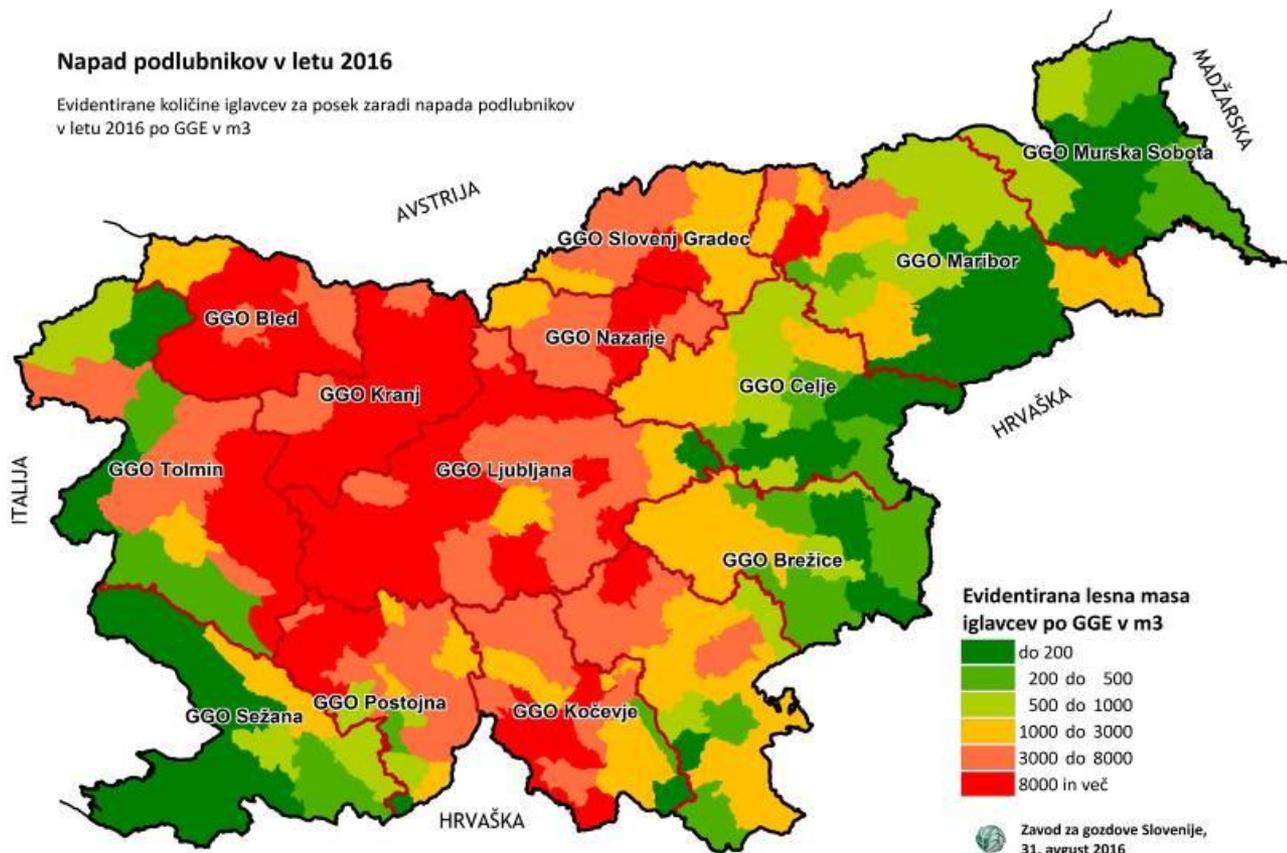
**SUM 2014 - 2018:  
7 mio m<sup>3</sup>**

120 mio EUR =  
financial damage

Previous year record  
bark-beetle  
outbreak in last 100  
years: 750.000 m<sup>3</sup>  
(2005)

## Napad podlubnikov v letu 2016

Evidentirane količine iglavcev za posek zaradi napada podlubnikov  
v letu 2016 po GGE v m<sup>3</sup>



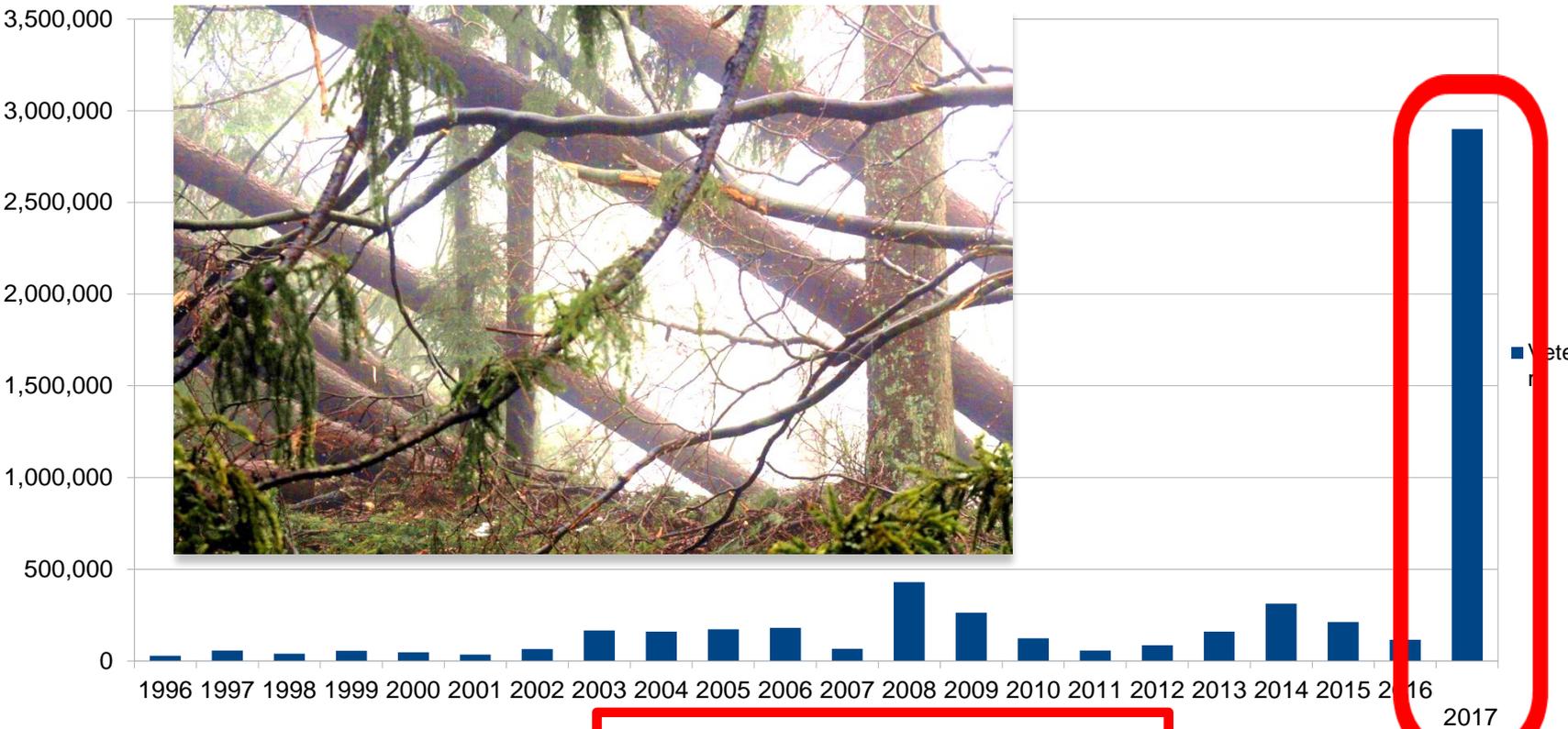
Wood removed 100%: 2014-2018  
Restoration completed: 2021

# ...and a wind-break in December 2017



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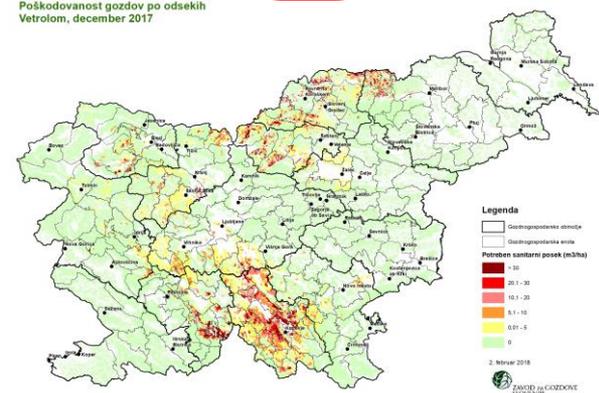


Damage: 2,9 mio m3  
 Financial damage: 48 mio €  
Wood removed 100%: 2018  
Restoration completed: 2022

**SUM:**

- 65 % of forests affected
- 400 MIO € damage
- 30.000 ha to be renewed, of which 1.700 ha by planting (23 species)
- Increment, stock: „survived“

Poškodovanost gozdov po odsekih Vetrolom, december 2017



**Legenda**

- Geografska občina
- Območje poplavljenosti voda
- Povprečni kvadrantni posek (m3/ha)
- 0-10
- 10.1-20
- 20.1-30
- 30.1-40
- 40.1-50
- 50.1-60
- 60.1-70
- 70.1-80
- 80.1-90
- 90.1-100
- 0

2. februar 2018  
 ZAVOD za GOZDOVE SLOVENIJE

## Main **positive** features of response on disturbances:

- ✓ **Good and fast estimation of volume & widespread**
- ✓ **Actions done by priorities and according to the plans** (access to the villages, infrastructure, conifers, valuable timber, tourist places, the rest etc.)
- ✓ **Customized approach to each type of disturbance**
- ✓ **Complete response plan with financial consequences made in 2 months after events** (= forest-law demand)
- ✓ **Decisions for actions that have worked and money provided from the state budget**
- ✓ **During the response many small steps made with the same general target** (about 150 internal instructions, procedures, PR messages etc.)
- ✓ **One institution** (Slovenia Forest Service) **took the overall lead of the whole process coordination and media communications**
- ✓ **Good work with forest owners, politicians, media, NGO's**
- ✓ **Rise of positive awareness of the public on the importance of the forests and professional work with forests**

## Main **negative** features of response on disturbances:

- ✓ (Rare) some actors jumping out of the scope of their powers and tasks
- ✓ Partly too weak work with employees

## Results would have been much poorer without external expertise:

- ✓ **dr. Christoph Hartebrodt (FORST, FRISK, SURE) came soon after ice sleet to Slovenia and had a lecture on forest disturbances approaches ...**
- ✓ **... + main forestry players (ministry, forest service, institute, inspectors etc.) were invited to Freiburg (D) where we saw in practice, how Germans have done work on their wind-breaks**

## ✓ To us the most important experience from external expertise was among the others in getting precious knowledge (experience) on:

- What kind of measures and subsidies were (not) effective in German case
- How to avoid the bottlenecks in the response to disturbances
- How to work with media & politicians and what kind of messages to give them
- How to work with employees.

**Without all this above also the „professional work“ would have much less success. That's also why we're ready to help with advise to anybody in such situation.**

## With the external experience we:

- ✓ avoided many unnecessary costs,
- ✓ got media, public opinion, politicians and most of forest owners on our side
- ✓ forest administration and forest owners got the necessary money and the materials for the restoration of disturbances



ZAVOD za GOZDOVE  
SLOVENIJE

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# Thank you for your attention

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EFI Think Forest, Prague (CZ), 4<sup>th</sup> of April, 2019