Coherence between marine and land use planning policies: people's views of landscapes in placing a wind park along the Latvian coast of the Baltic Sea

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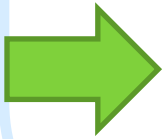
Background

- Latvia has a significant share of natural coastal areas exposed to the open Baltic Sea providing **obstacle free views up to horizon**
- Traditional sea uses (**fishery and shipping**) are seen as valuable cultural seascape elements
- **Energy production** - an emerging economic branch
  - a competitor for marine space and
  - a driver for changes in the coastal uses in terms of determining future landscape values for tourism.

A need for assessment of change

Background of the issue

- EC (2008) adopted a Road Map for Maritime Spatial Planning that set out 10 key principles for MSP
  - finding coherence between terrestrial and marine spatial planning
- Communication from EC (2010) on MSP in the EU—achievements and future development
  - reaffirmed that planning from land to sea is crucial and requires coherence between both planning domains



both EC policy documents do not emphasise that, in addressing adverse needs, marine spatial planners should match up their plans with other ones

Background of the issue

- EC's policy on ICZM, Recommendations 2002
  - One of the cornerstones of the ICZM was improved coordination in managing sea-land interaction
- EC (March 2013) published a proposal for the Directive on integrated coastal management and maritime spatial planning
  - support for land-sea connectivity by requiring coherence between maritime spatial planning and integrated coastal management

Objectives of the study

- Overall goal:
  - to contribute to finding **coherence** between marine- and land-use policies regarding space for energy production from the **coastal landscape perspective**.

Objectives of the study

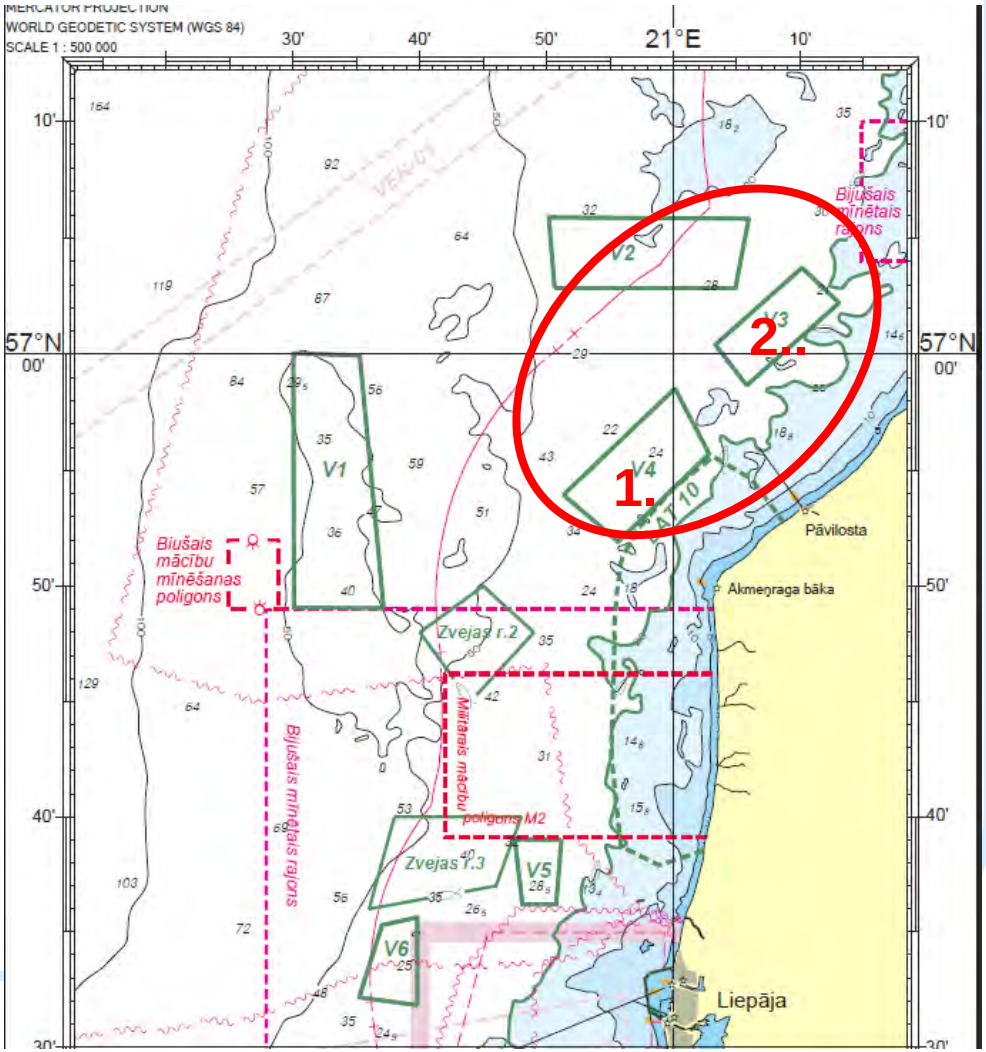
- Specific objectives:
  - Scientific relevance:
    - to explore the attitudes and preferences of two main coastal stakeholder groups (local inhabitants and tourists) towards the location of the potential wind parks in marine or terrestrial environment
  - Policy relevance:
    - Provide with landscape assessment to policy makers in development of a national maritime spatial plan of Latvia
    - Support environmental authorities in EIA procedure in evaluating the impact on landscapes

Study area

- **Open Baltic Sea coast of Latvia**
  - **2 coastal settlements:**
    - **Jurkalne (c.a.360 inh.)**
    - **Pavilosta (c.a.1100 inh.)**
- **Unique landscape forms**
  - **20m high cliff areas**

Study area: site selection

- Coastal areas where wind park development is investigated by developers:
  1. Distance to the coast – 7.8 km
  2. Distance to the coast – 10.1 km



Methods

- A questionnaire with partly-opened or scaled questions (in total 30)
- Face-to-face interviews:
  - Local inhabitants – at home, public places
  - Tourists and beach visitors - on beaches, parking lots, and accommodation sites in these settlements
- Use of visualisations: 4 photomontages (20 turbines, 100 m height)
- Interview time: 2011/2012
- Interview length 10-15 minutes

4 Scenarios

8 km from coastline

10 km from coastline

15 km from coastline

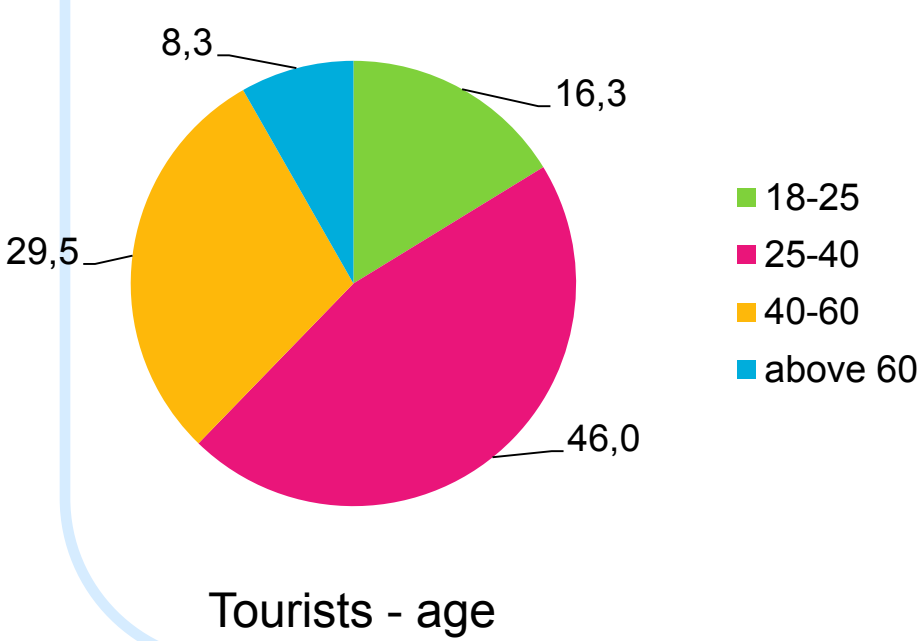
20 km from coastline

Questionnaire structure

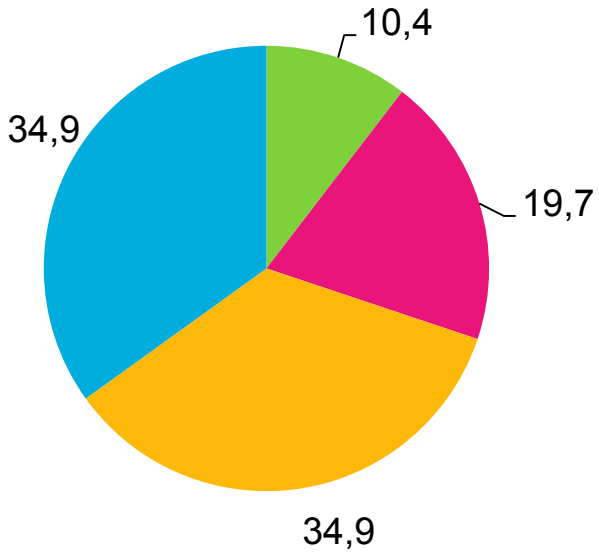
- Information about respondents' behaviour with respect to sea and beach use
- Experience with off-shore and terrestrial wind farms
- Support to construction of the wind farms
- Visitation probability in the coastal area depending on the location of a off-shore wind park.
- Potential impacts from wind parks and attitude towards protection of coastal landscapes.
- Expenditures of the trip, and social description.

Descriptive statistics

- Inhabitants – 270; Tourists – 400
- 44-46% of respondents –were male.



Tourists - age

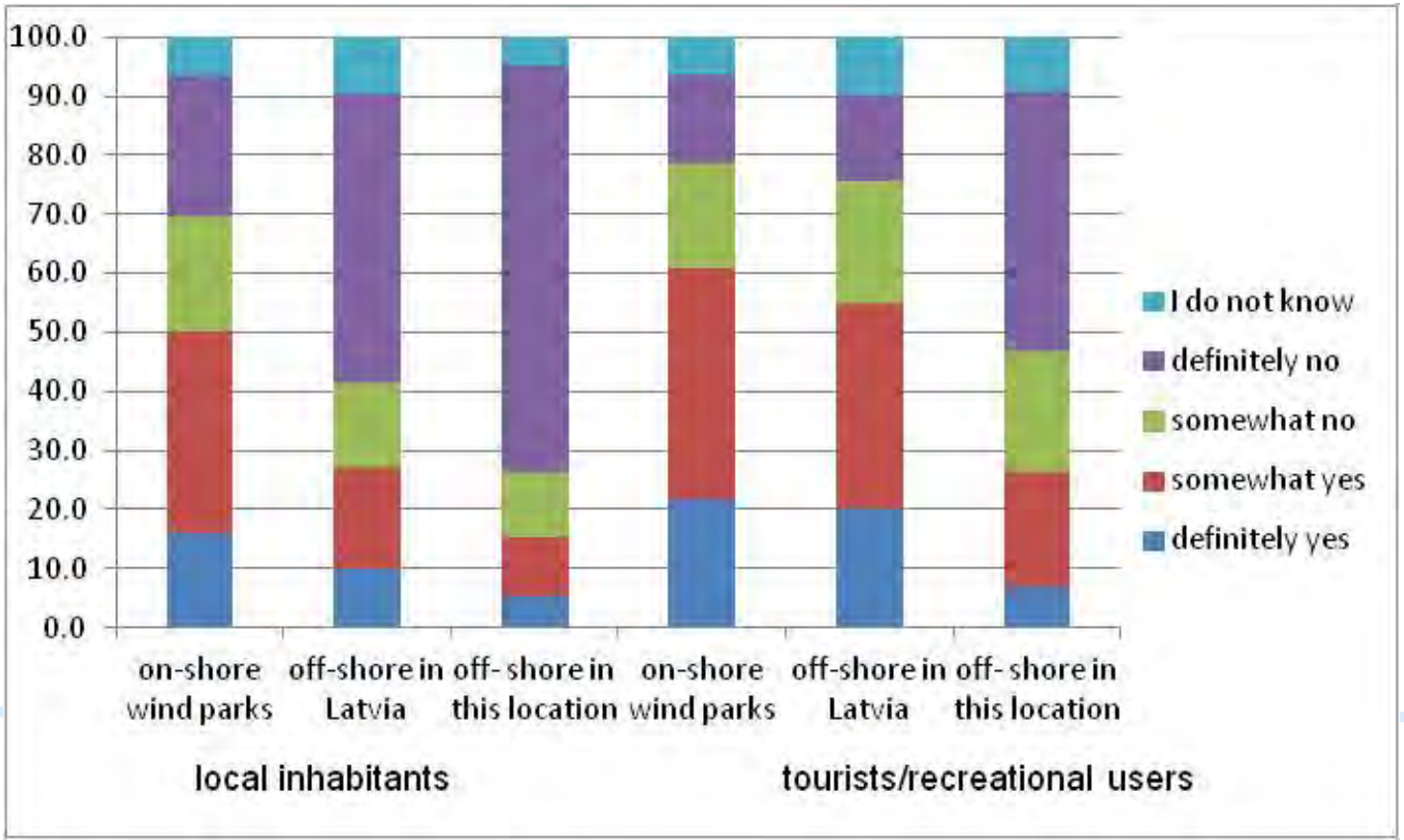


Inhabitants - age

Results

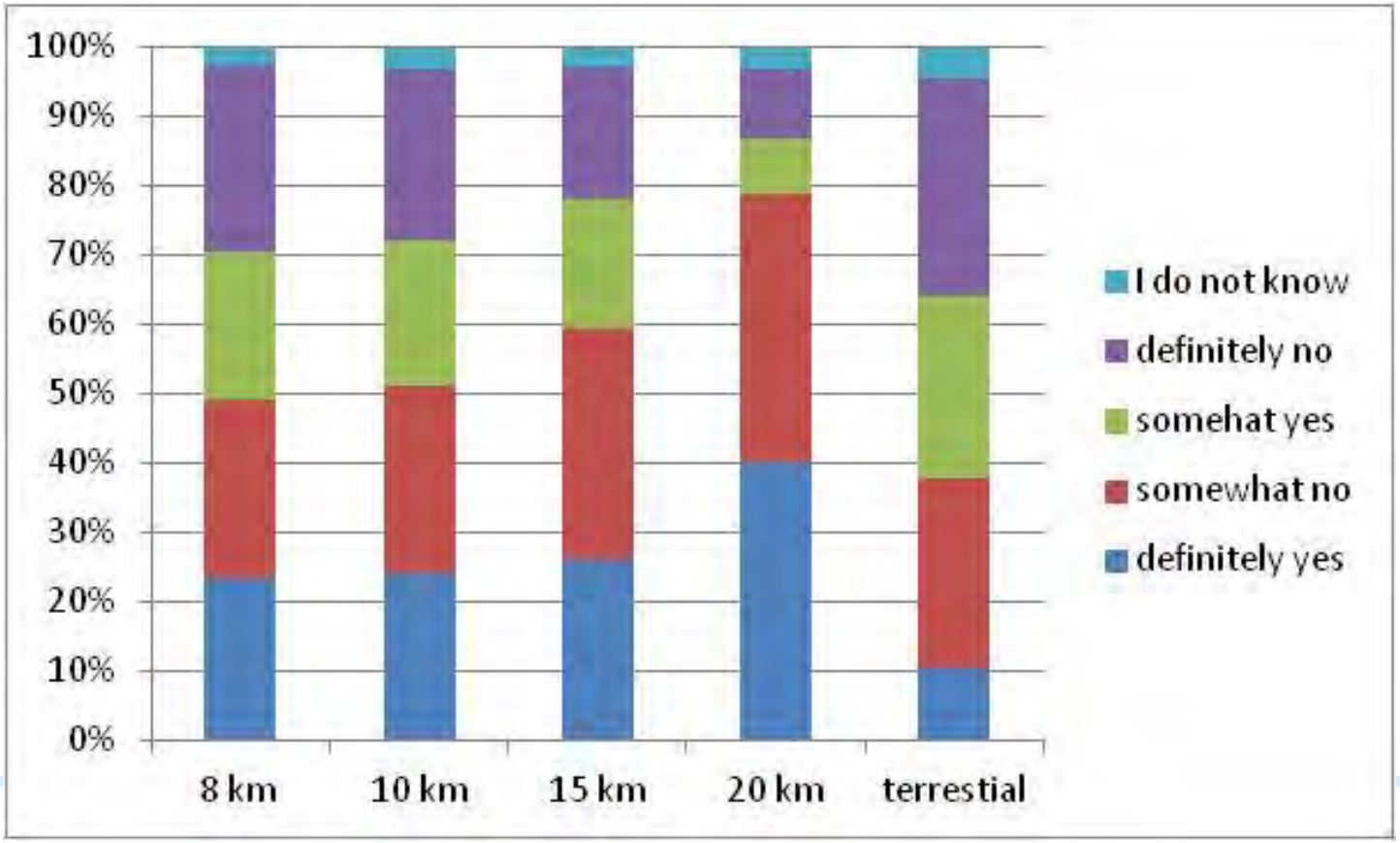
Off-shore versus terrestrial

- The respondents rather support wind park development in other locations - either off-shore or coastal terrestrial than in the waters near to this particular site.



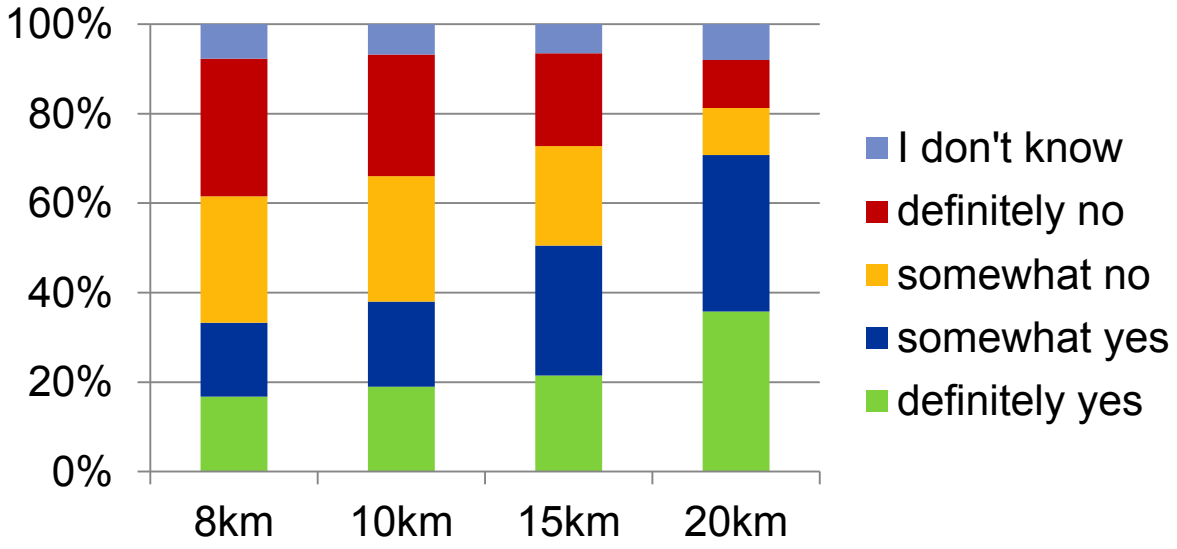
To visit or not to visit

- Visitation probability increases with growing distance of the off-shore wind park from shoreline

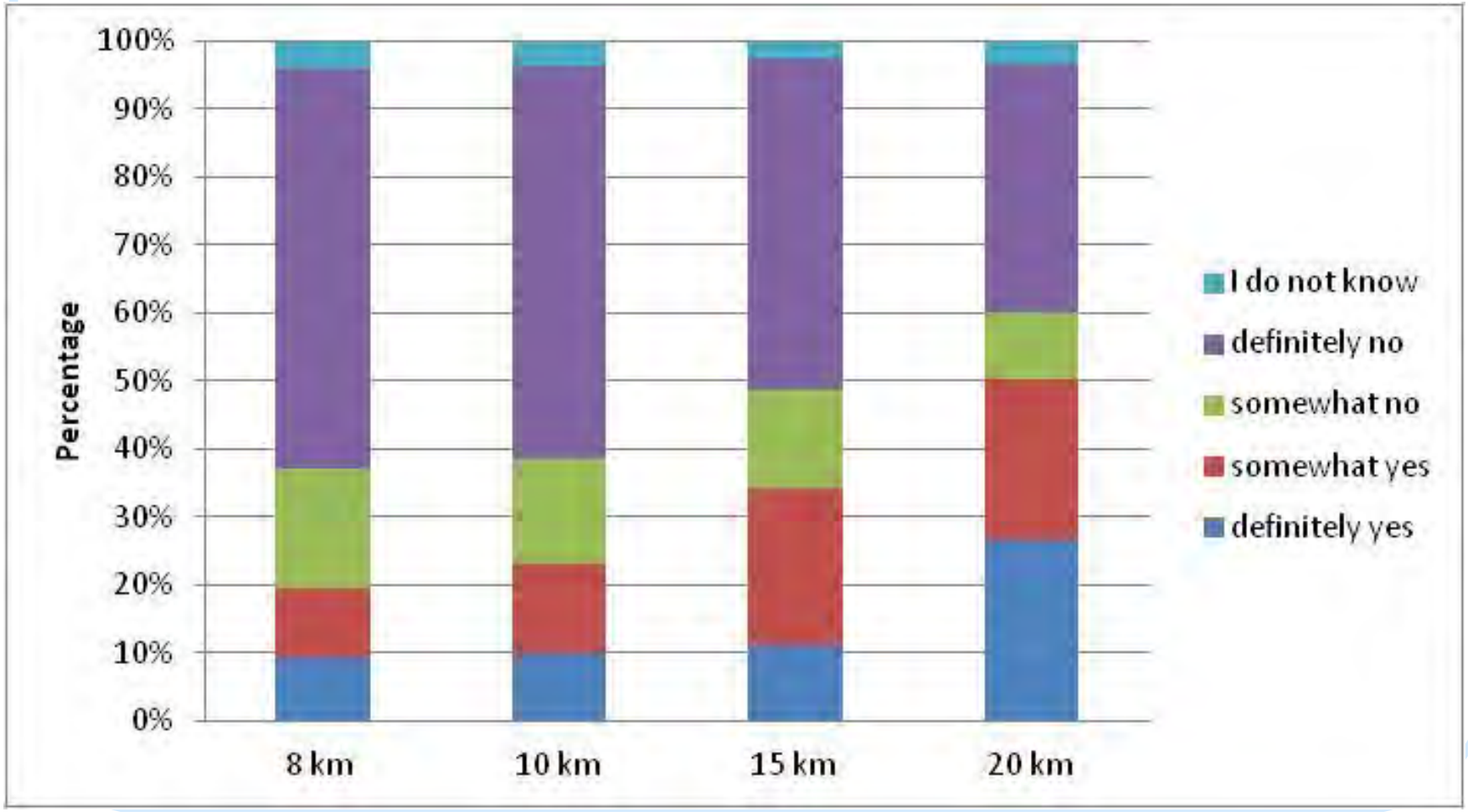


To stay longer or not

- Willingness for longer stay increases with distance
- There is statistically significant medium close correlation between being in favour to visit the site and staying longer ; weaker correlation is in a case of 8 km.

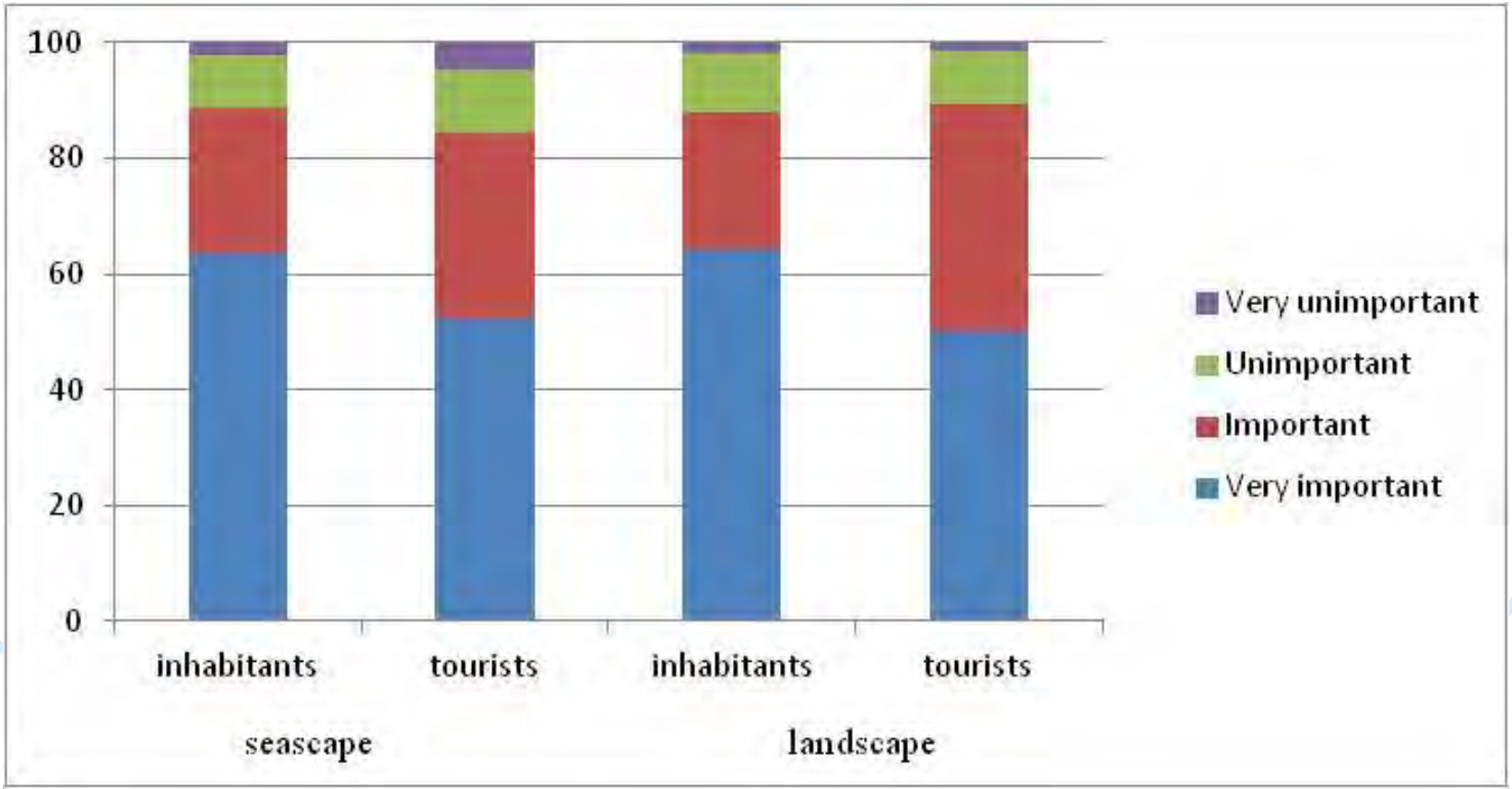


Importance of the distance for local people

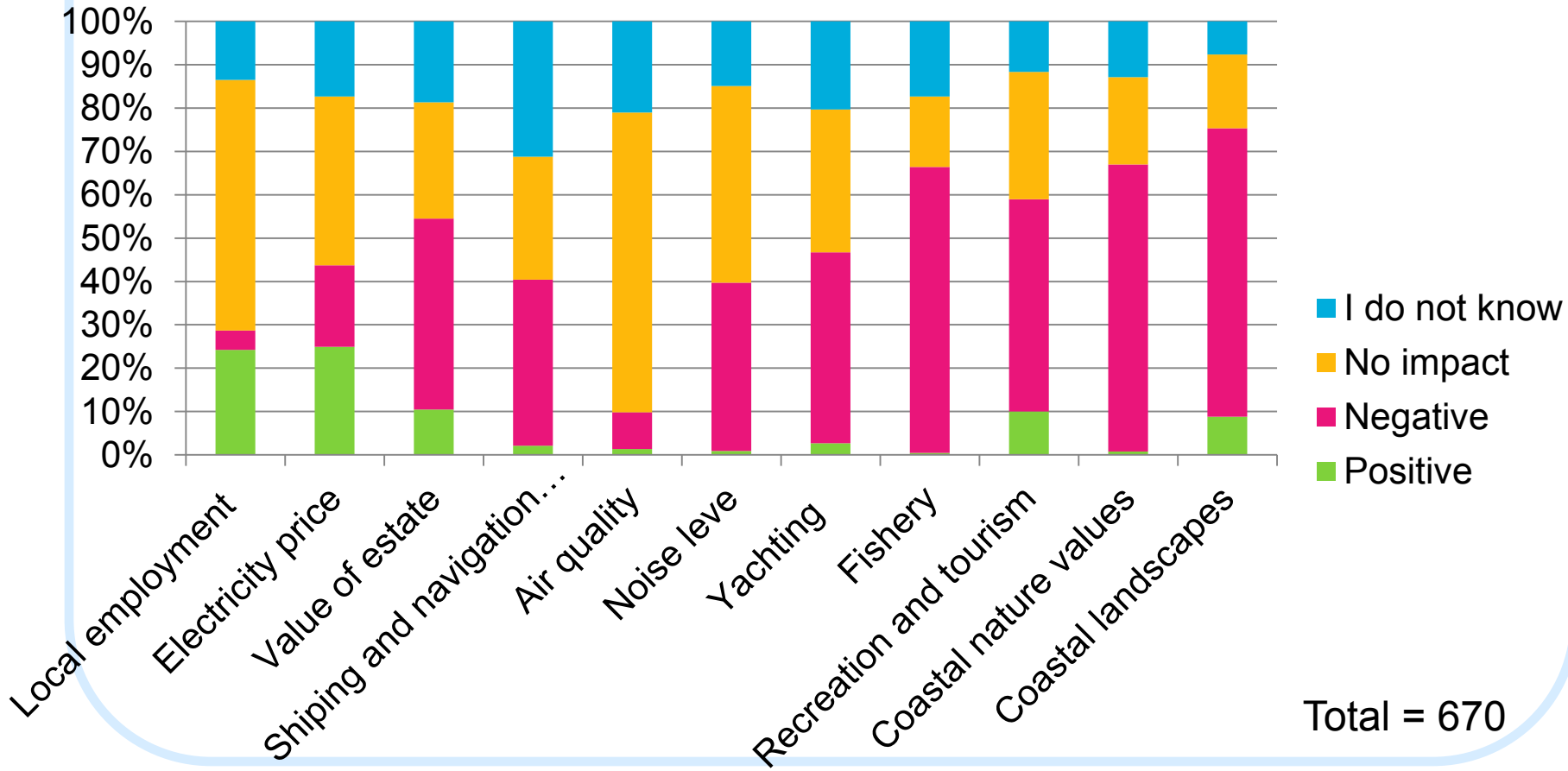


Importance of landscape

- For almost every interviewed person the maintenance of the coastal marine and terrestrial landscapes was important



Impacts by wind parks

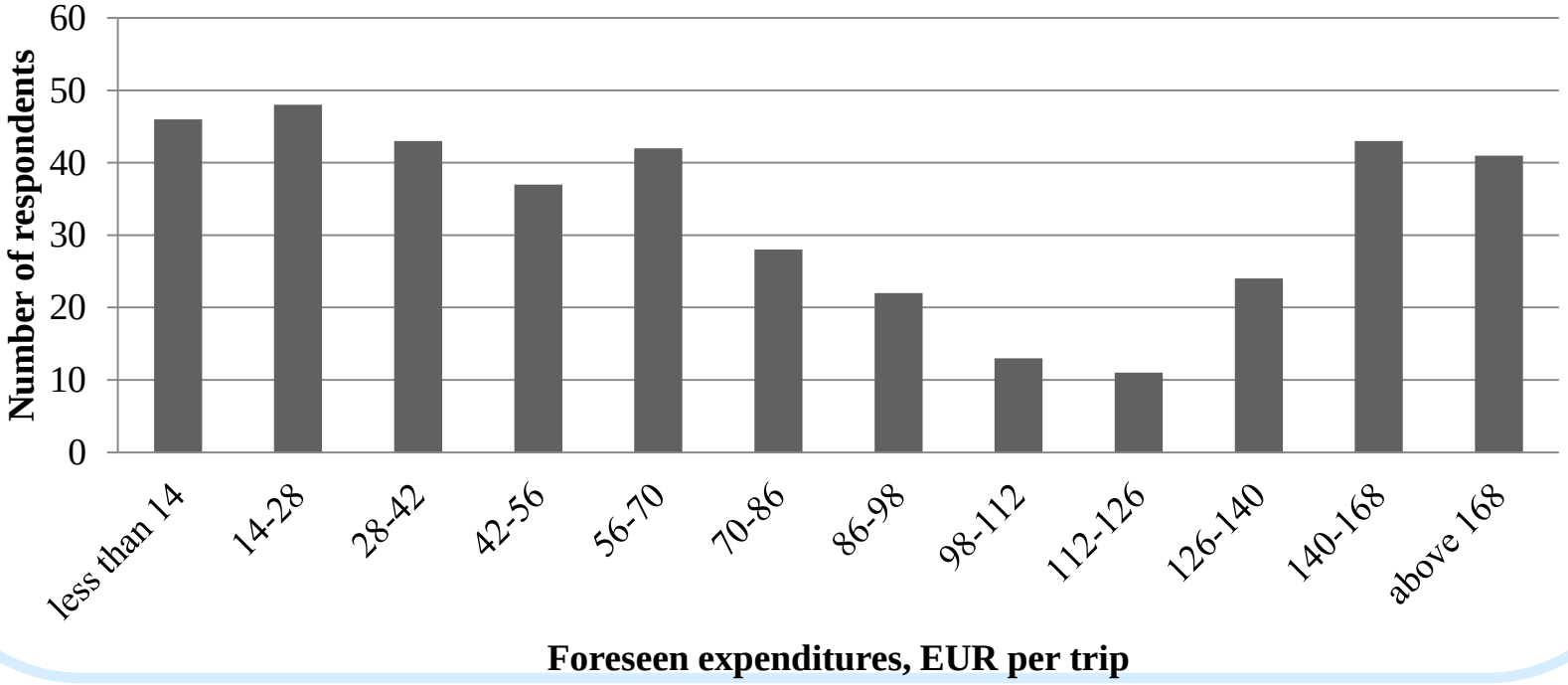


Role of experience

- Having earlier seen off-shore wind park does not impact the decision on the in favour of having off-shore wind park
  - 31% of the respondents have seen off-shore wind parks
- Having heard earlier about the potential of construction of off-shore wind park does not correlate with responce on the visitation probability by tourists or attutude of locals
  - 43% have heard before about the plans for off-shore wind parks

Economic impact

- Average expenditures: 22 EUR/person,/ one day trip, 51 EUR/person/stay of few days; 104 EUR/ person/longer stay



Economic impact

- Estimated income for tourism (statistics)
  - Local settlement Pavilosta – 489 600 EUR (15% of municipal budget – c.a. 3.2 MEUR)
  - Region Kurzeme – 1 092 300 EUR
- Potential loss (foregone income) due to the change in behaviour of tourists depending on the location: 121 500- 582 414 EUR/year

Conclusions

- The attitude to towards wind park development has the same pattern in both user grups – preferece to terrestial versus offshore windparks .
- The locals are more negative then tourists.
- The distance of an off-shore wind park might have an significant impact on the tourism/recreation in the region;
  - Having a wind park of the 8-10km from the coastline might have impact on the majority of the target group.
  - Having a wind park in 20 km distance still might have an impact about 20% of the target group.
- Length of stay of the tourists is even more dependent on the distance to the coast.

Recommendations

- Maritime spatial planning
  - Balancing the needs for renewable energy production and landscape protection as the resource for tourism;
- EIA for site location –
  - the opinion of the user groups should be considered when assessing social aspects
- During the revising the national coastal zone development planning management :
  - Defining the landscape protection zone;
- Implementing the European Landscape Convention:
  - Importance to protect the sea and coastal landscapes.

THANK YOU FOR ATTENTION!