PUBLIC ACCEPTANCE

of Wind Energy and Infrastructure Projects: the Danish Experience

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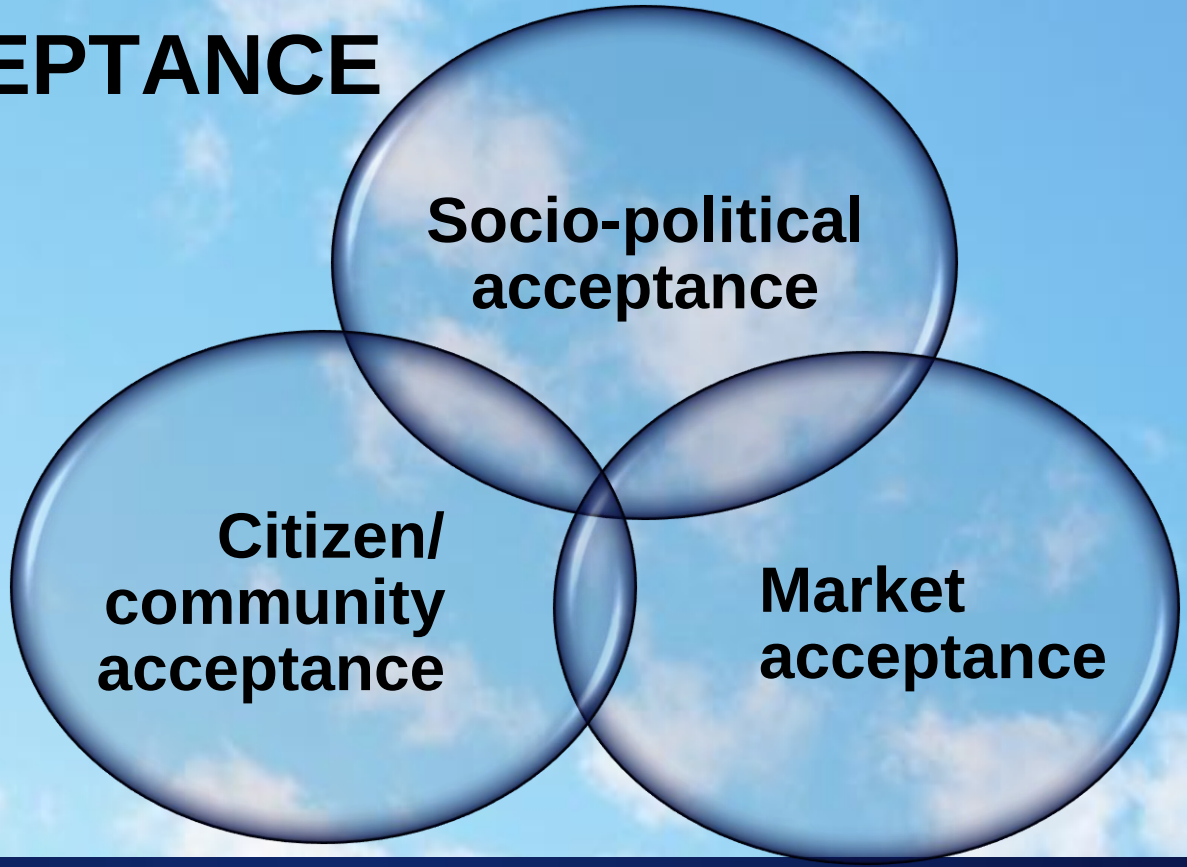
PROBLEM STATEMENT

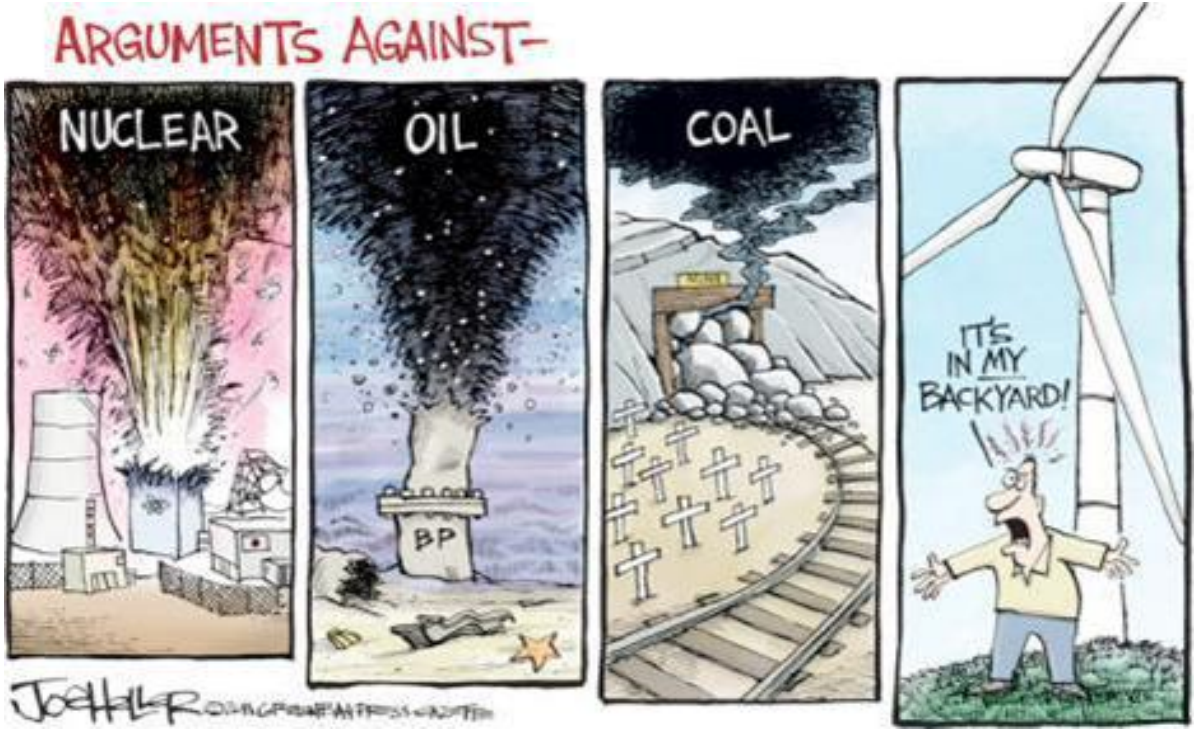
- ”To identify the key problems of citizen/community acceptance of offshore wind projects and to identify the main legal measures to stimulate engagement and promote acceptance based on the Danish experience with regulating public acceptance of wind energy and infrastructure projects”

SOCIAL ACCEPTANCE

(Wüstenhagen et al. 2007)



CITIZEN/ COMMUNITY OPPOSITION



JAMMERLAND BAY PROJECT
RØSNÆS HAVN
DISTANCE 4.3 KM

PlanEnergi

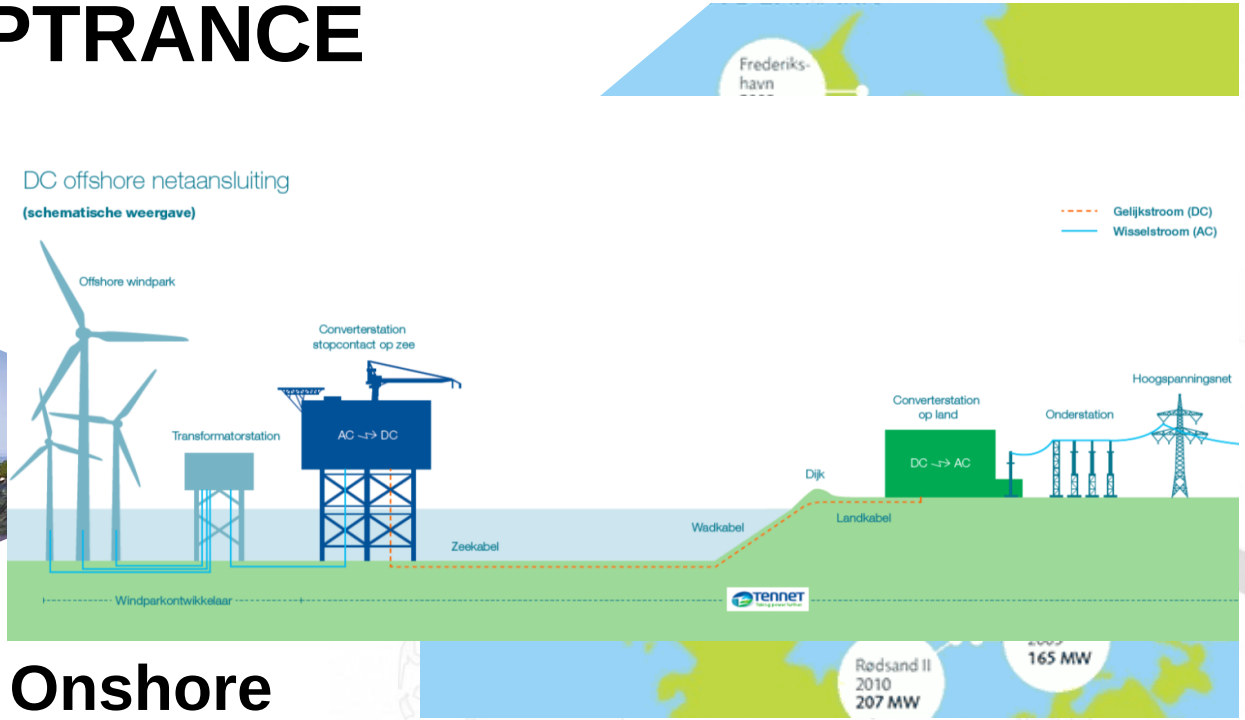
JAMMERLAND BAY VEJRHØJ

DISTANCE 19 KM

PlanEnergi

COMMUNITY PERCEPTION …

THE IDENTIFICATION OF KEY ISSUES OF CITIZEN ACCEPTRANCE



Onshore

OFFSHORE WIND PARK CITIZEN ACCEPTANCE - KEY FACTORS

Visual and aesthetic impacts

Competition for marine space

Impacts on nature

Distributional fairness

Information, trust and transparency

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NEAR-SHORE WIND PARK CITIZEN ACCEPTANCE - KEY FACTORS

Visual and aesthetic impacts

Impacts on property and competition for space

Impacts on nature

Distributional fairness

Environmental and health impacts

Information, trust and transparency

ONSHORE INFRASTRUCTURE CITIZEN ACCEPTANCE - KEY FACTORS

Visual and aesthetic impacts

Environmental and health impacts

Impacts on nature

Impacts on property or land-use

Information, trust and transparency

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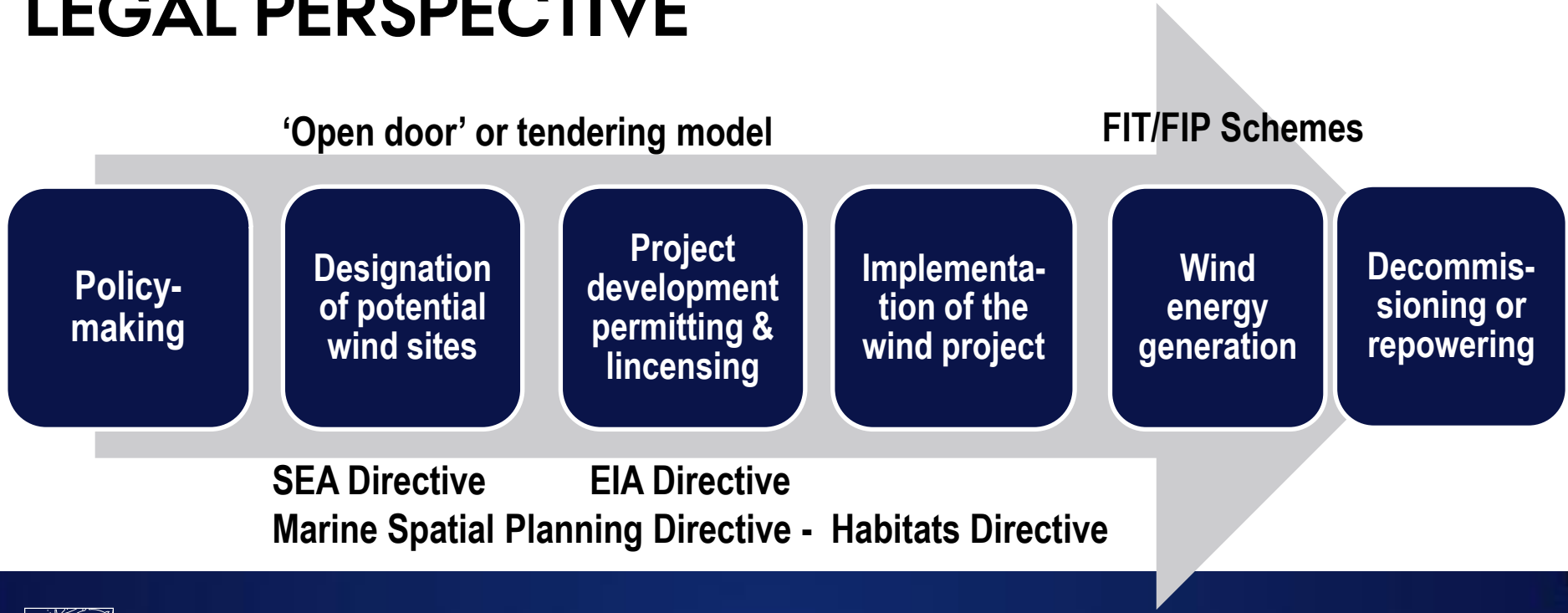
TECHNICAL ADJUSTMENTS, INFORMATION, ECONOMIC DEVELOPMENT …

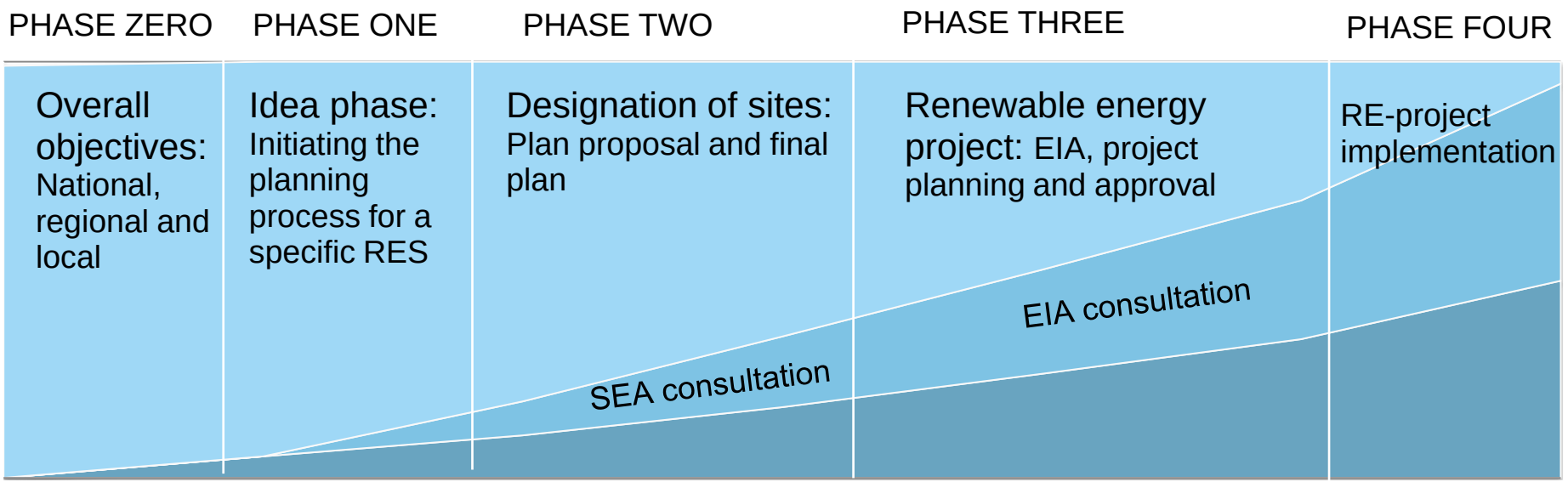
EXAMPLES:

- Additional landscape works and screening to mitigate views of infrastructure
- Increase setbacks or reduce number and height
- Education and information campaigns
- Visiting centers, boat trips
- Local development, local jobs
- ...

KEY STAGES OF A WIND FARM – FROM A LEGAL PERSPECTIVE

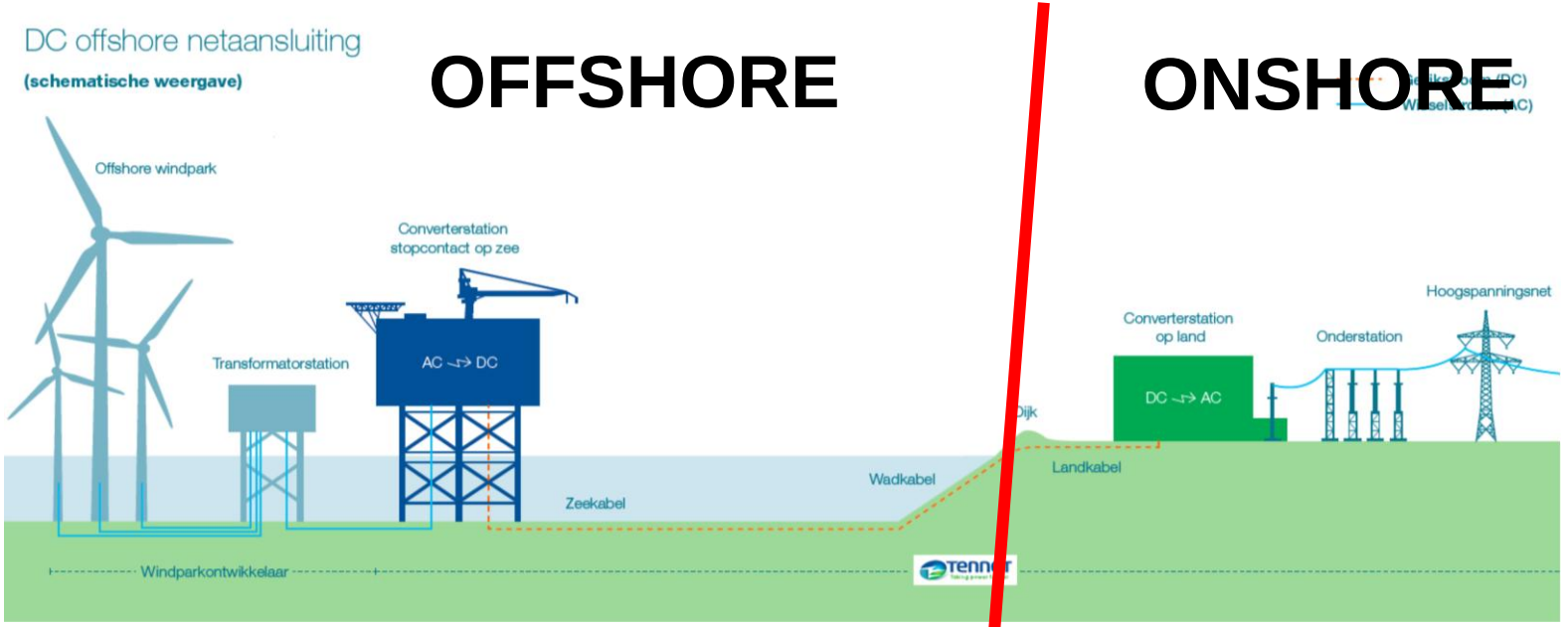


EARLY CITIZEN INVOLVEMENT



Developer Citizens Authority

AN INTEGRATED PROCESS



”SITE PREPARATION” – AN INTEGRATED, CONCURRENT EIA (AND PLANNING PROCESS)

- Introduced with the Horns Rev III project
- Projects subject to tender (near-coastal and large-scale offshore)
- Carried out by Energinet.dk, but eventually paid by the developer
- Integrated and concurrent planning by the 3 affected municipalities
- …

DISTRIBUTIONAL EQUITY

- **The fair sharing of the costs and benefits of projects**

Tool-box of incentives:

- Individual compensation
- Community benefits
- Ownership measures

INDIVIDUAL COMPENSATORY MEASURES

- Good Neighbor Payments
- Property Value Guarantees
- Local Tariffs
- Compensation scheme
- …

COMPENSATION FOR LOSS OF VALUE TO DWELLINGS

- Imposes an obligation to compensate neighbors for loss of value to dwellings
- Covers onshore projects, off-shore open door projects and near-shore projects subject to a tender

- <1 percent loss in value, the owner is ensured full compensation
- The size of the loss of value determined by an impartial valuation authority
- The duty of the developer to pay the compensation
- Criteria for calculating loss of value
  - The characteristics of the area
  - The visual interference
  - The distance to the wind park
  - Property value and type

DOES THE COMPENSATION SCHEME LEAD TO AN INCREASED ACCEPTANCE?

- The size of the compensation is of some importance
- Immense difficulties of adapting expectations
- An increased focus on the nuisance
- When onshore projects, it may give indulgences to local governments for making ‘unpopular’ decisions But offshore projects are not regulated by local governments. The one-stop-shop-authority is the national energy authority
- Offshore – very difficult to make workable in practice!

COMMUNITY BENEFITS

- Tax or tax-inspired measures:
- Tax on property
- Tax on the income (e.g. Germany: Wind Energy Trade Tax)
- Fixed annual payment pr. MW installed for the lifetime of the wind project
- Fixed one-off payment pr. MW installed

OWNERSHIP MEASURES

- Citizen-based ownership
- Community-ownership
- Co-ownership scheme (Option-to-buy-shares)

LOCAL CITIZENS' OPTION TO PURCHASE WIND TURBINE SHARES

- The co-ownership scheme imposes an obligation on all new wind energy projects - onshore and near-shore - to offer a minimum of 20 percent ownership to local citizens (only private individuals)

- The co-ownership scheme covers:
- Citizens with a permanent residence in the municipality - or with regard to near-shore projects municipalities with a coast line within a 16 km from the nearest wind turbine
- Citizens living less than 4.5 km from the site have a preferential right to purchase shares (max. 50 shares)

THE OBLIGATION TO OFFER WIND TURBINE SHARES

- The tender is conducted by the developer
- It has to be completed after the project approval but before the onset of grid connection
- It is open for a period of at least 8 weeks
- The developer is obliged to prepare a prospectus, which upon approval of Energinet.dk is presented at public meetings

- Additional voluntary incentive for near-shore projects:
- If at least 30 percent of the project is locally owned from the onset of grid connection, the wind project will receive an extra price supplement (DKK 0.01/kWh)
- In calculating the 30 percent local ownership, the developer can include shares sold to local citizens as well as shares otherwise acquired by local citizens or local enterprises

DOES LOCAL CO-OWNERSHIP LEAD TO AN INCREASED ACCEPTANCE?

- It is said to stimulate local citizens' engagement
- Experiences from onshore wind projects show that there are often less opposition when local investors install the wind power

- But the scheme has not been a success in all cases
- In some projects very few shares have been sold
- The problem of professional investors
- The problem of 'wind energy nomads' – pro forma neighbors
- An in-build conflict with the interests of the developer

THE DANISH EXPERIENCE OF REGULATING CITIZEN ACCEPTANCE OUTSIDE THE EXISTING REGULATORY FRAMEWORK

The tool box:

- Early citizen engagement and involvement
- A concurrent, integrated offshore and onshore EIA process
- An integrated planning process
- Individual compensatory measures
- Community benefits
- Ownership measures: Local citizens' option to purchase wind turbine shares
- ….

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