

Transmission Lines – Local Acceptance

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acceptance

- majority favors renewable energies
78 % (FORSA, 2010), 76 % (tns infratest, 2011)
- acceptance – from tolerance to active support
- acceptance – public | local
- different situations
 - existing conflicts
 - starting planning processes

acceptance of residents

- resistance against overhead lines
- frequent concerns
 - health
 - landscape
 - real estate prices
- differentiated evaluation
 - energy source
 - specific area
 - willingness to pay

online survey on net expansion 2010

(Hübner & Pohl, in Erneuerbare Energien, September 2011)

sample

- 937 participants
- average age 38 years (from 15 to 81)
- male 60 %, female 40 %
- countryside 33 %, city 30 %
- 39 % green electricity, 24 % owners of renewables

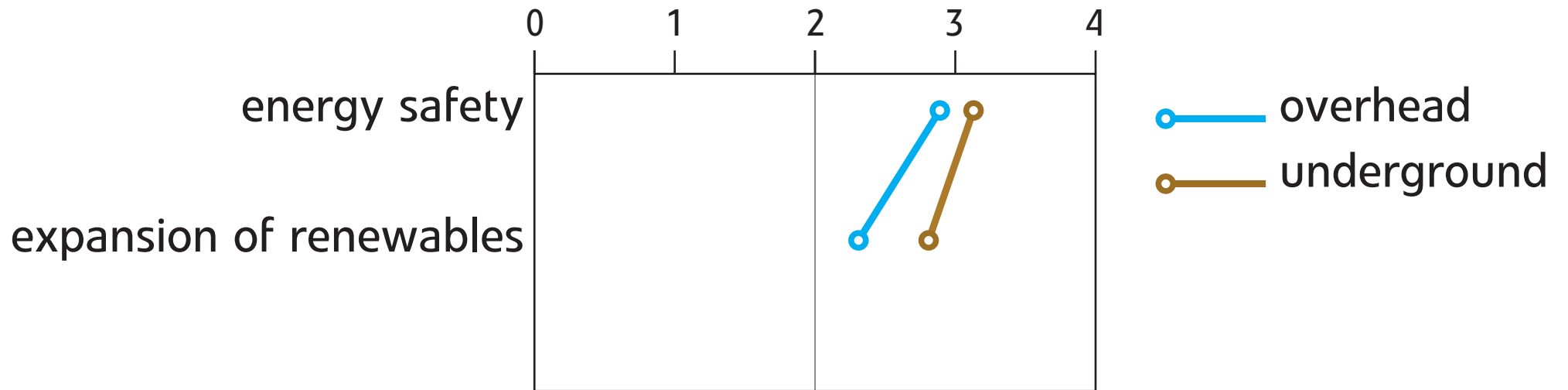
four groups of residents

- overhead line, $n = 212$ (25 %)
- underground cable, $n = 182$ (21 %)
- overhead and underground, $n = 136$ (16 %)
- non-involved, neither | nor, $n = 330$ (38 %)
- trend
 - residents of overhead lines more critical
 - visibility intensifies
 - but: small effect sizes only

selected results on acceptance of net expansion

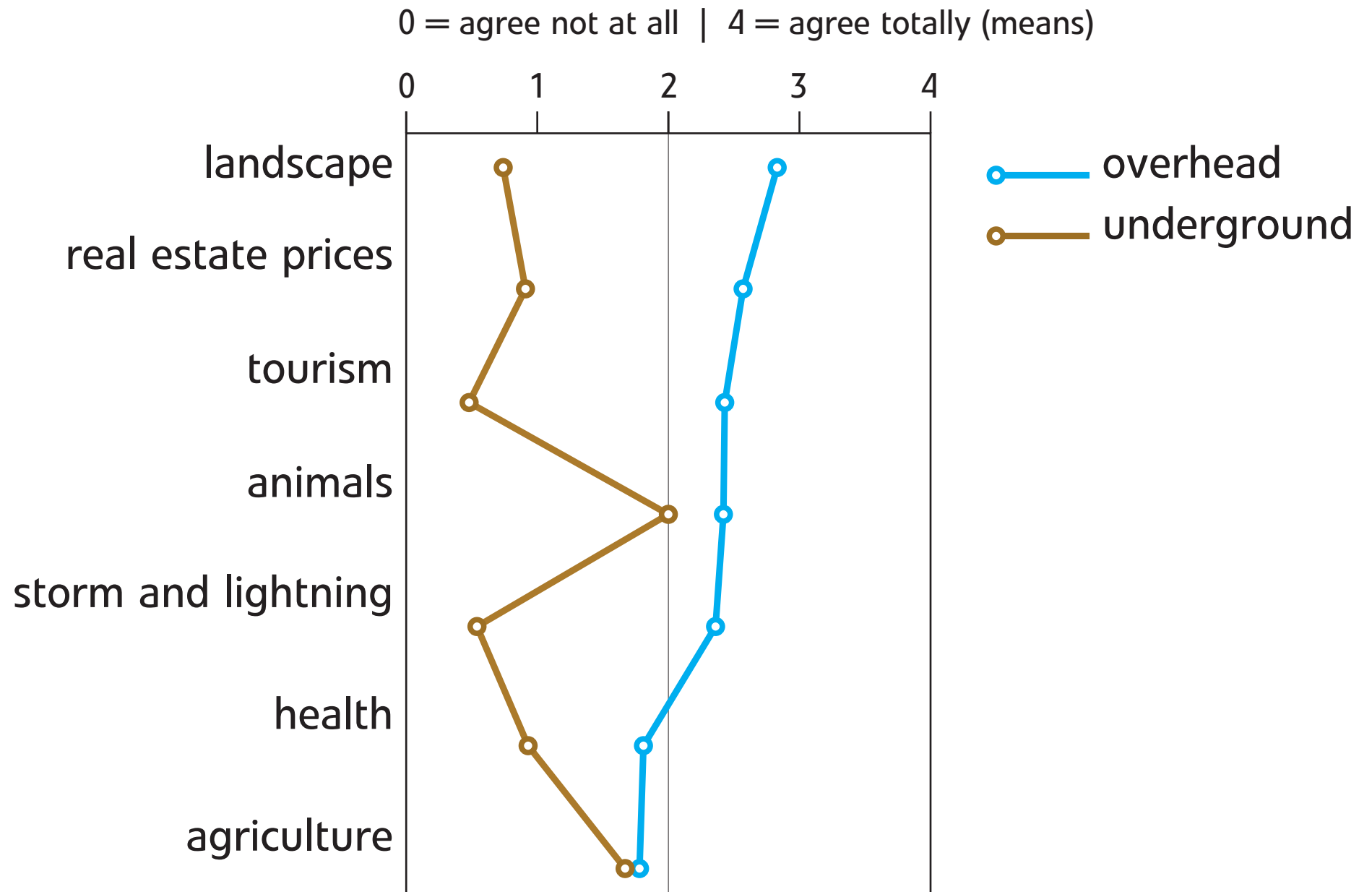
positive consequence concerning ...

0 = agree not at all | 4 = agree totally (means)

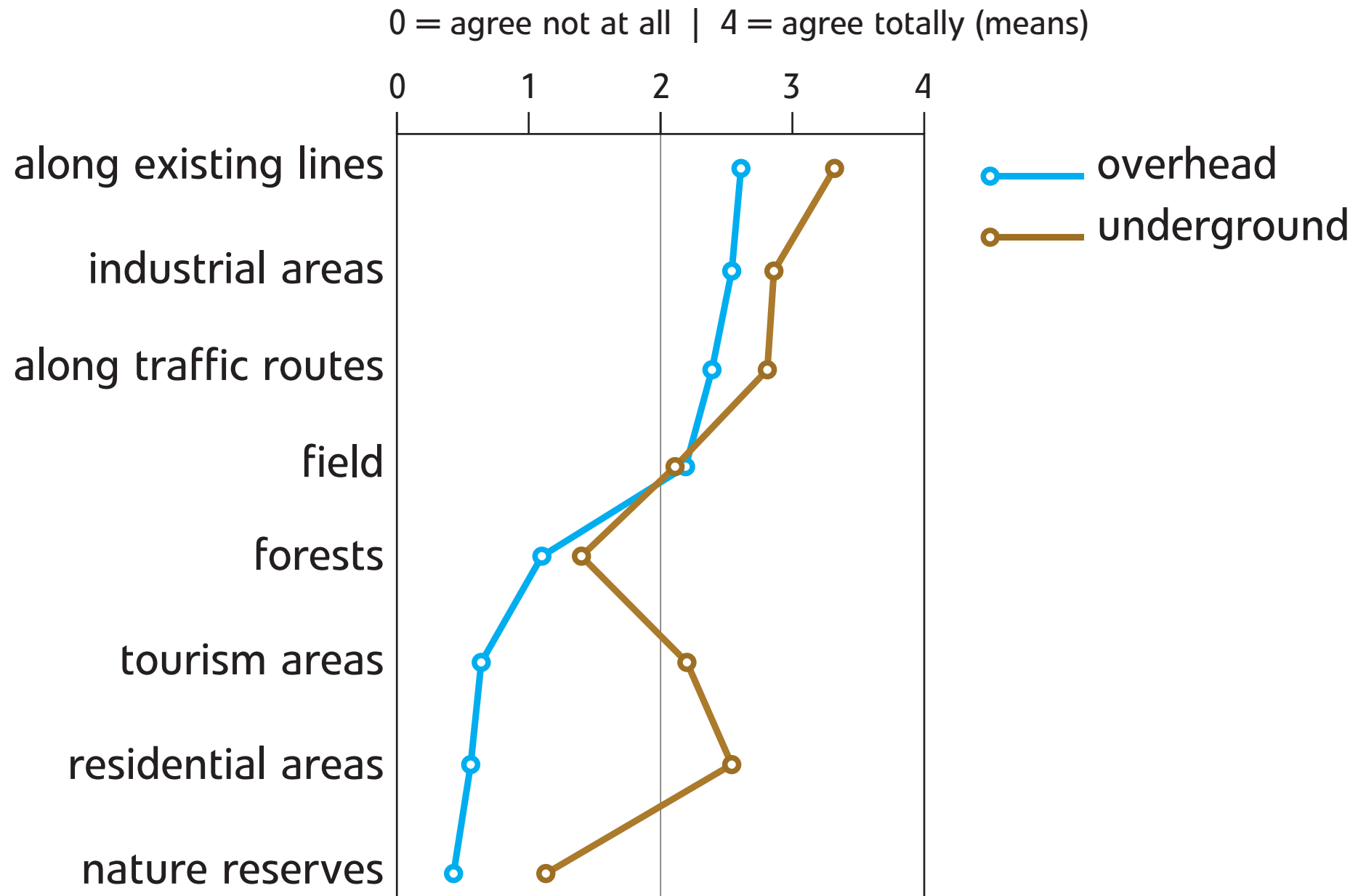


open question: local benefit

negative consequences concerning ...

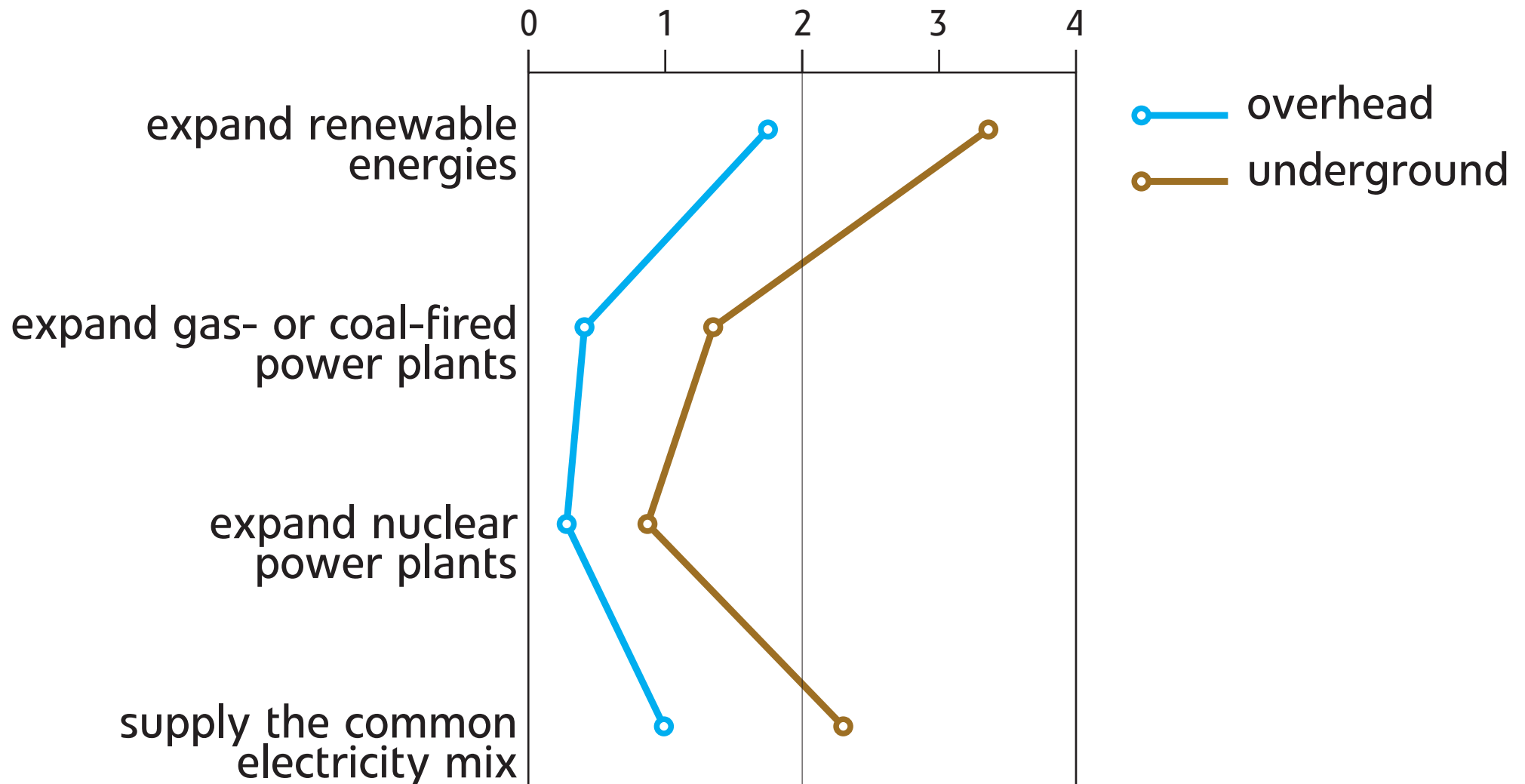


I agree to build overhead/underground lines ...



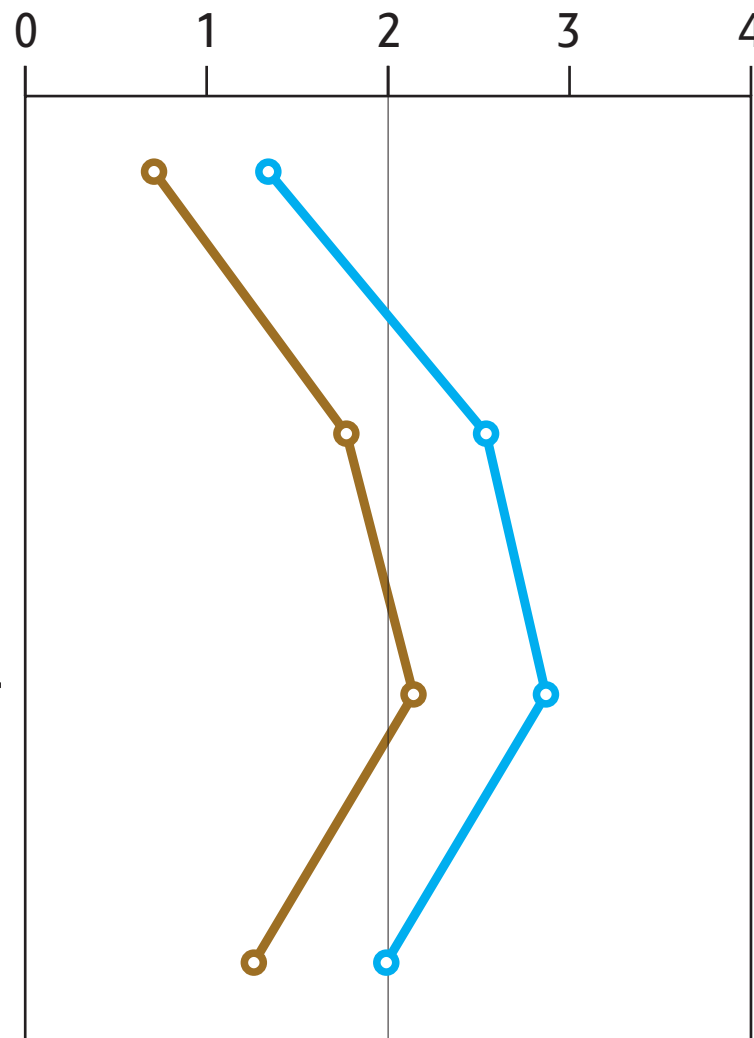
I would acceptance the construction of a transmission line close to my home if it is used to ...

0 = agree not at all | 4 = agree totally (mean)



I would get active against the construction of a transmission line close to my home if it is used to...

0 = agree not at all | 4 = agree totally (mean)



○ — overhead
○ — underground

expand gas- or coal-fired
power plants

expand nuclear
power plants

supply the common
electricity mix

expand renewable
energies

willingness to pay

Are you willing to pay higher energy fees if ...

- more underground than overhead lines are build: $M = 2.12$
- more overhead than underground lines are build: $M = 0.78$

(0 = no, not in any case | 4 = yes, definitely)

breaking new ground – the example of Schleswig-Holstein

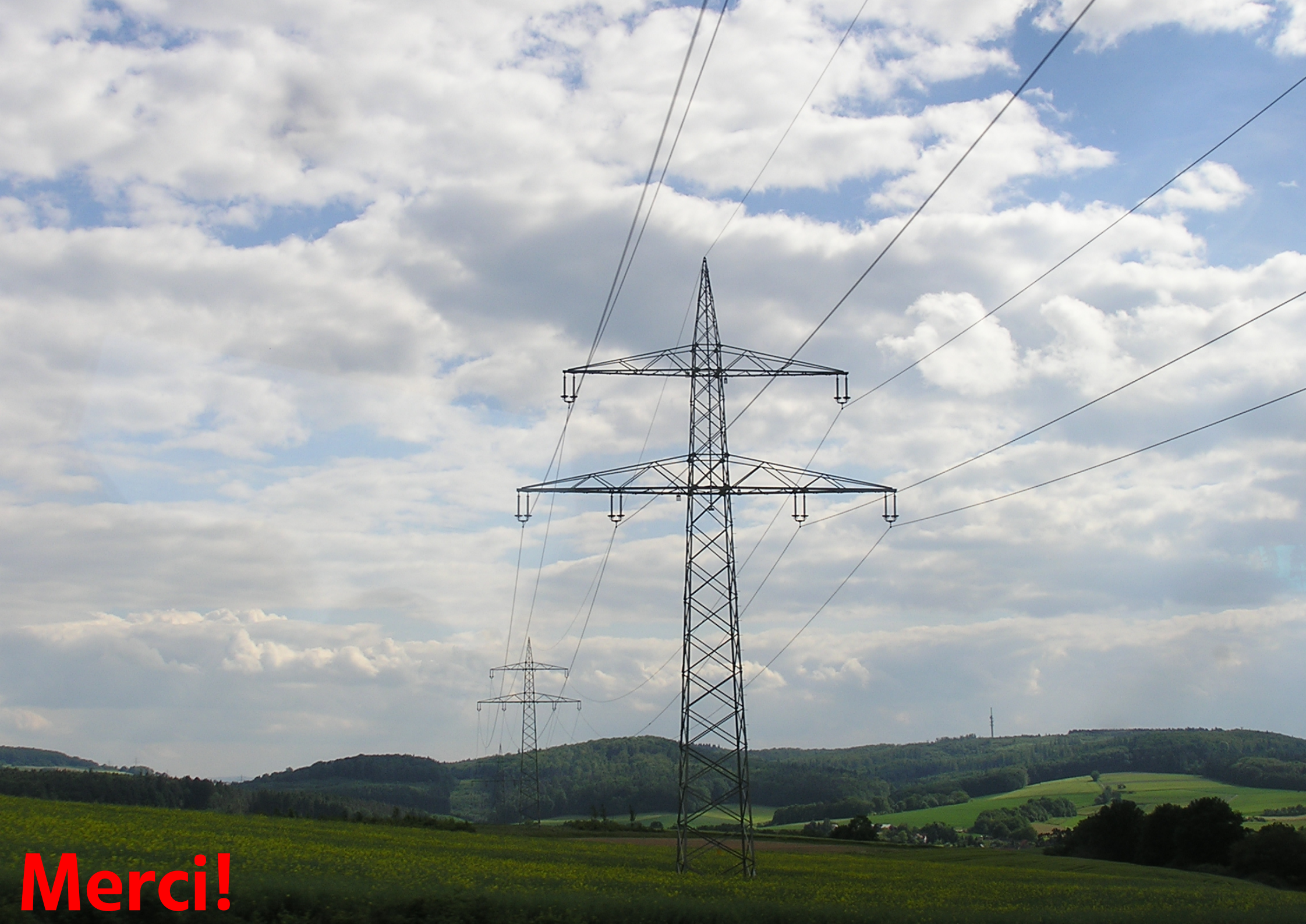
'Net Development Initiative' Schleswig-Holstein

- early citizen participation
- regional conference, info-market, homepage etc.
- discuss "citizen net" – create benefit
- stakeholder meetings
- cooperation of net operators 110 kV | 380 kV
- use existing infrastructure, 110 kV underground partially
- model districts – events with Deutsche Umwelthilfe
- independent evaluation

conclusions

- use existing infrastructures
- underground in sensitive areas
- 110 kV underground
- energy source matters
- new planning culture
- dialogues needed
- compensation,
create benefit





Merci!