

# Social Acceptance of Small-Scale Hydropower in Austria

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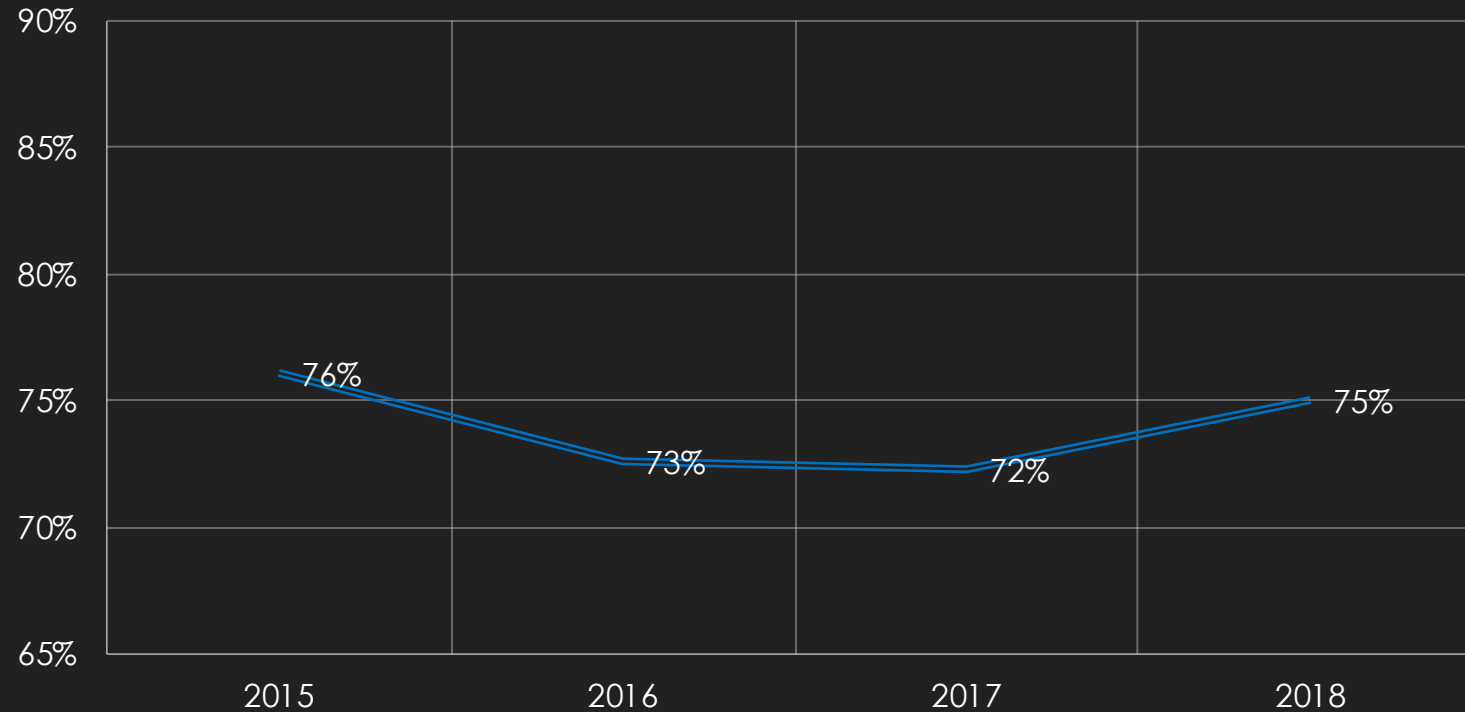
# Renewable Energies in Austria

- Presented data is based on results of a yearly tracker study which runs since 2015 and focuses on renewable energy and related topics (electric vehicles, climate change etc.)
- Nationally representative study (Gender, Age, federal state, education, income) with an average of 1.008 respondents
- Acceptance of renewable energy technologies (RET)
  - Acceptance; Acceptability; Support -> Our survey asks for endorsement of a fictional project in the community
  - Focus on small-scale hydropower plants (Hydro), photovoltaic power plants (PV) and wind turbines (Wind)

# Longitudinal Trends - Hydro

## SUPPORT FOR HYDRO IN COMMUNITY

— Hydro



I would endorse a project in my community to build a small-scale hydropower plant.

Agree & Somewhat agree

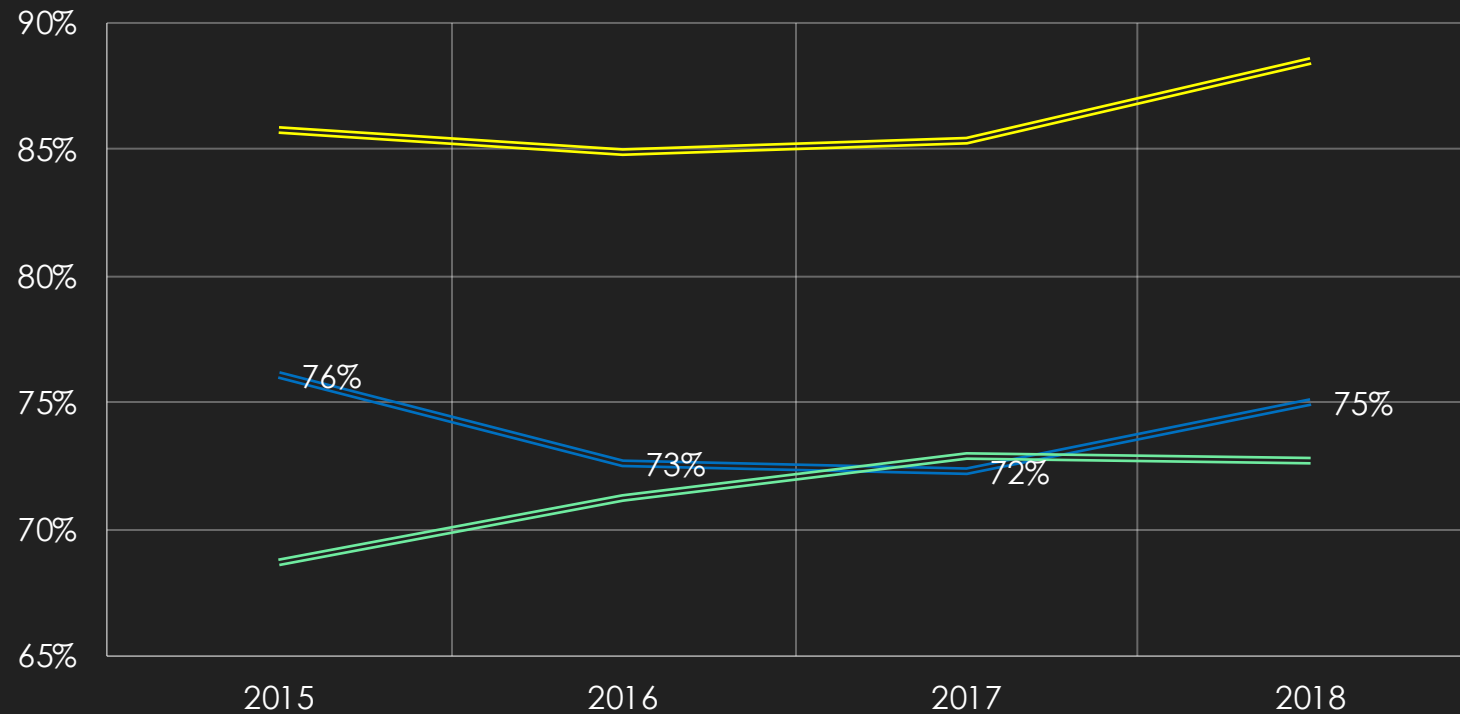
# Longitudinal trends – PV, Hydro, Wind

## SUPPORT FOR RET IN COMMUNITY

— Photovoltaic — Hydro — Wind

I would endorse a  
project in my  
community to build  
...

Agree & Somewhat  
agree

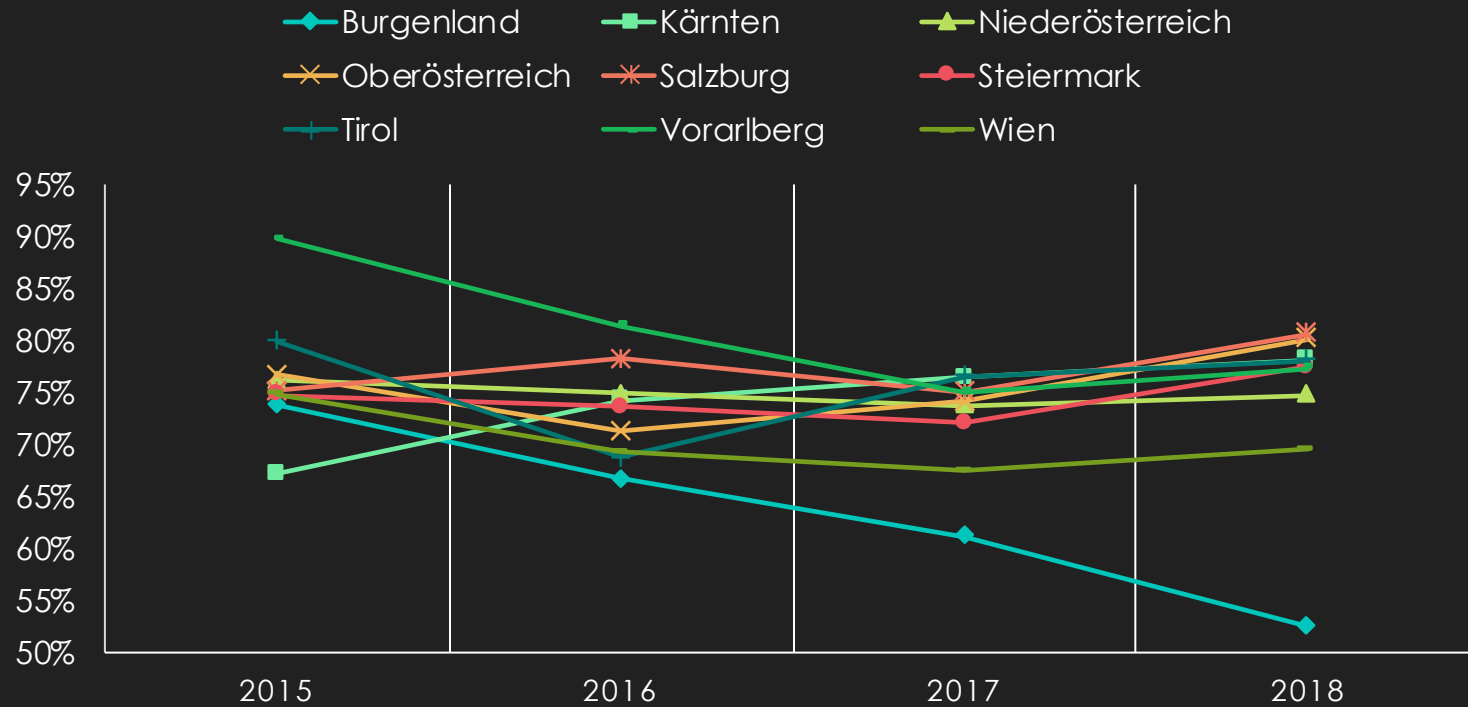


# Regional differences

## REGIONAL DIFFERENCES IN HYDRO SUPPORT

I would endorse a project in my community to build a small-scale hydropower plant.

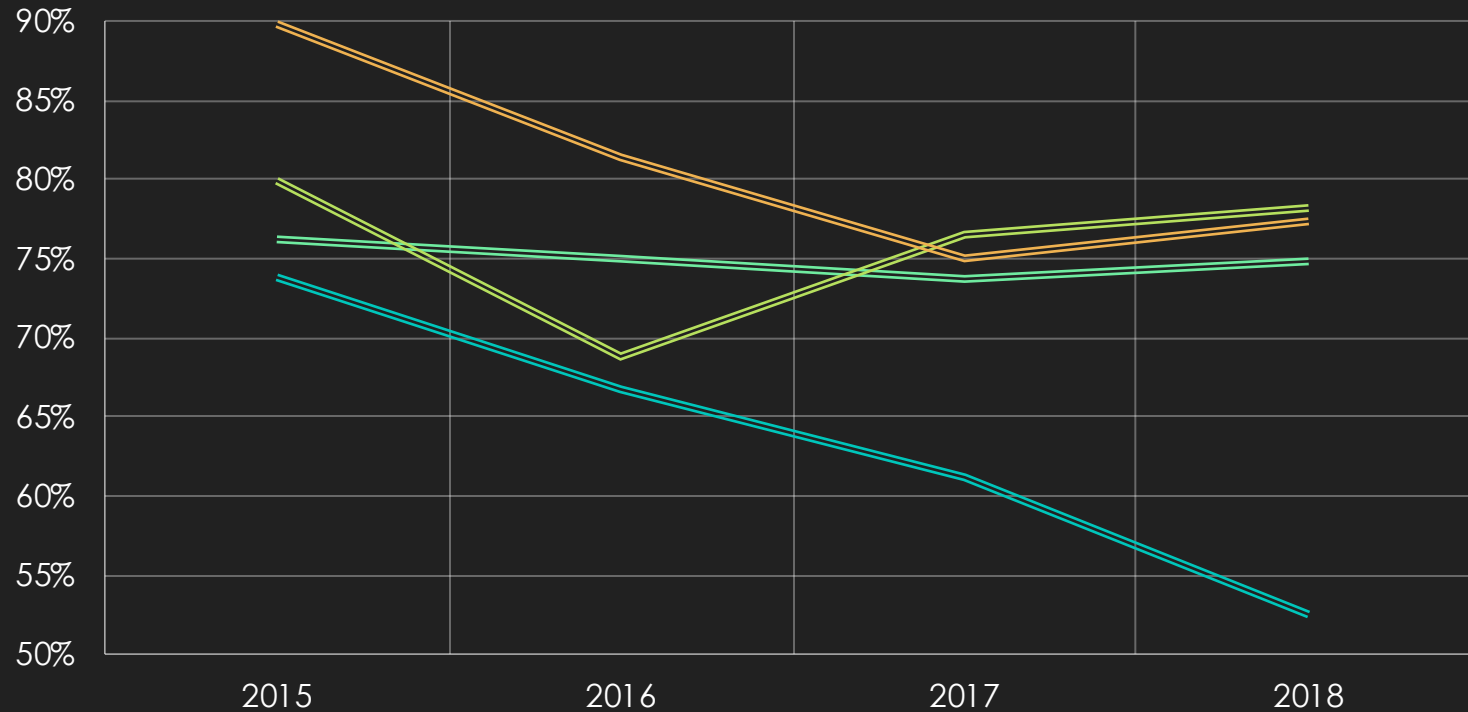
Agree & Somewhat agree



# Regional differences - Hydro

## HYDRO SUPPORT - WEST/EAST

Burgenland    Niederösterreich    Tirol    Vorarlberg



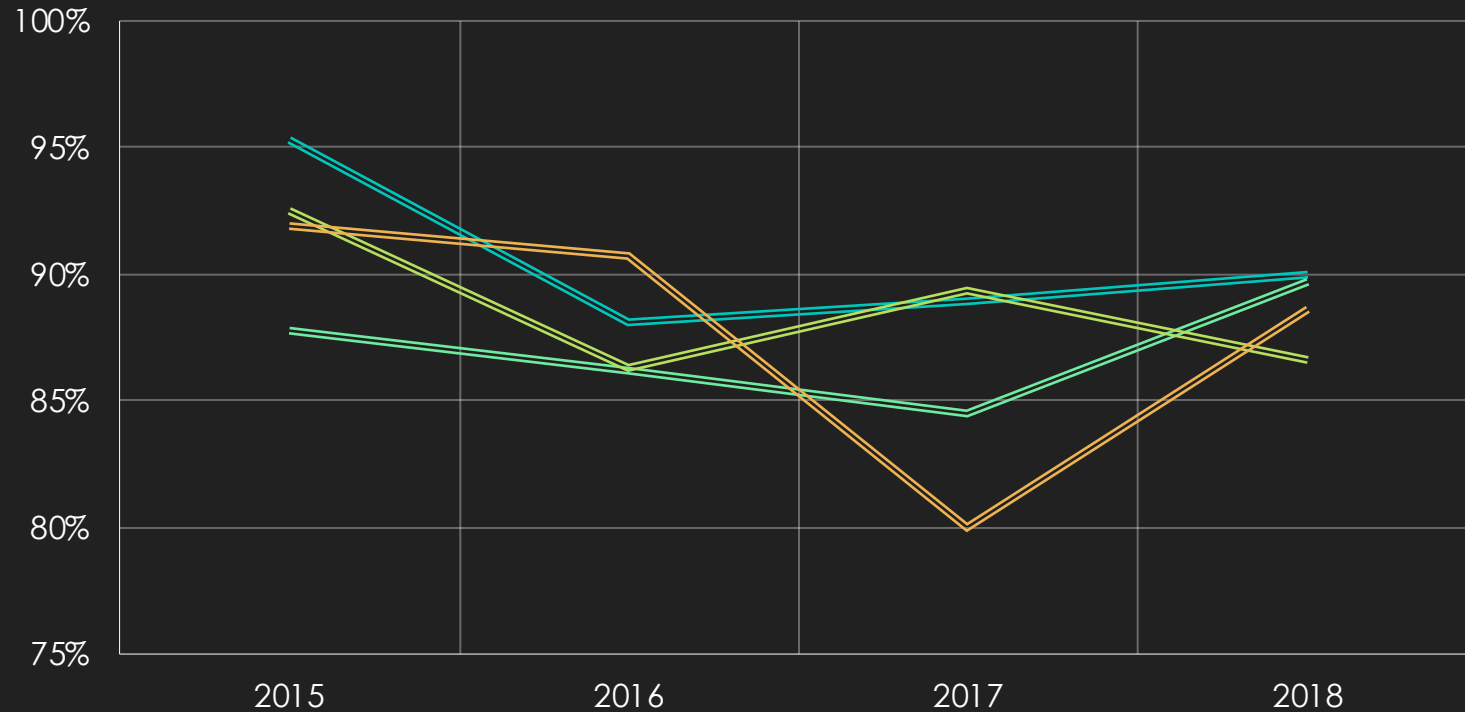
I would endorse a project in my community to build a small-scale hydropower plant.

Agree & Somewhat agree

# Regional differences - PV

## PV SUPPORT - WEST/EAST

Burgenland   Niederösterreich   Tirol   Vorarlberg



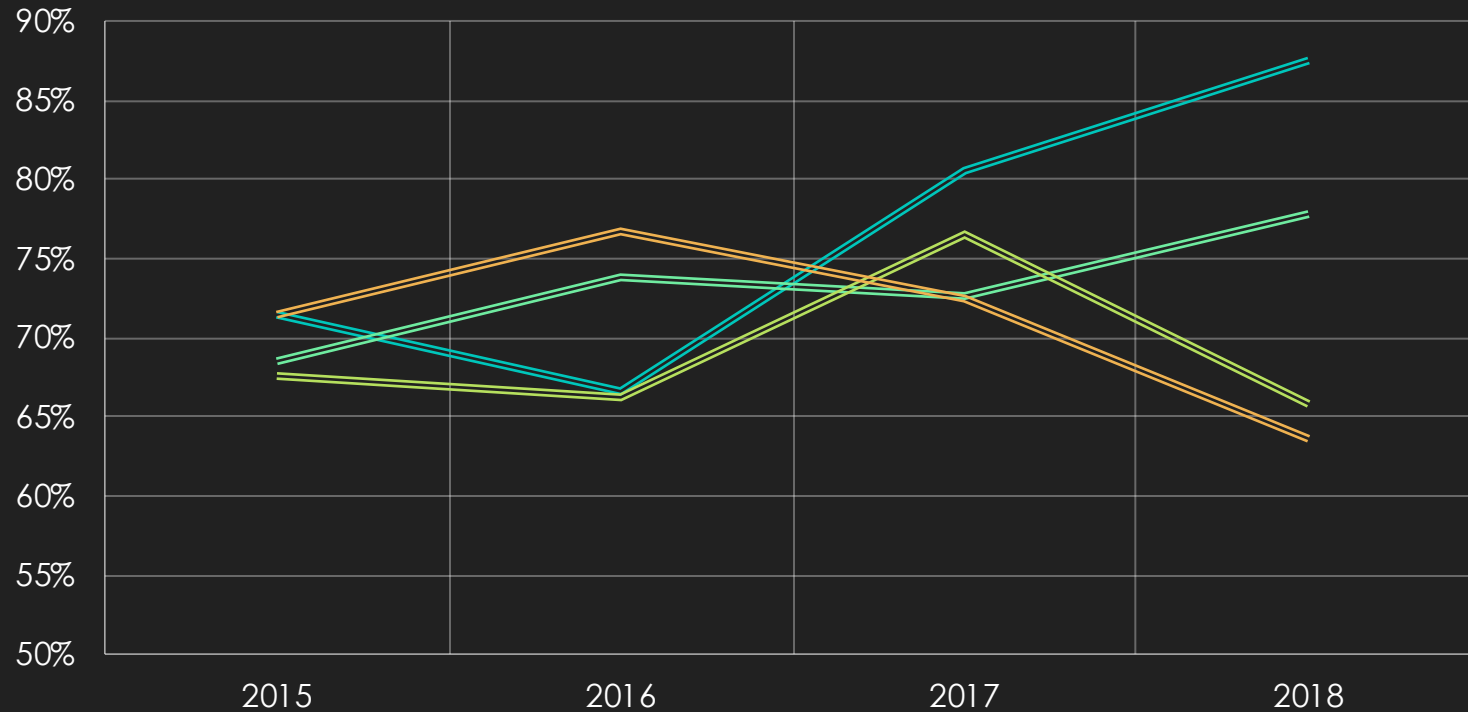
I would endorse a project in my community to build a PV power plant.

Agree & Somewhat agree

# Regional differences - Wind

## WIND SUPPORT - WEST/EAST

Burgenland    Niederösterreich    Tirol    Vorarlberg

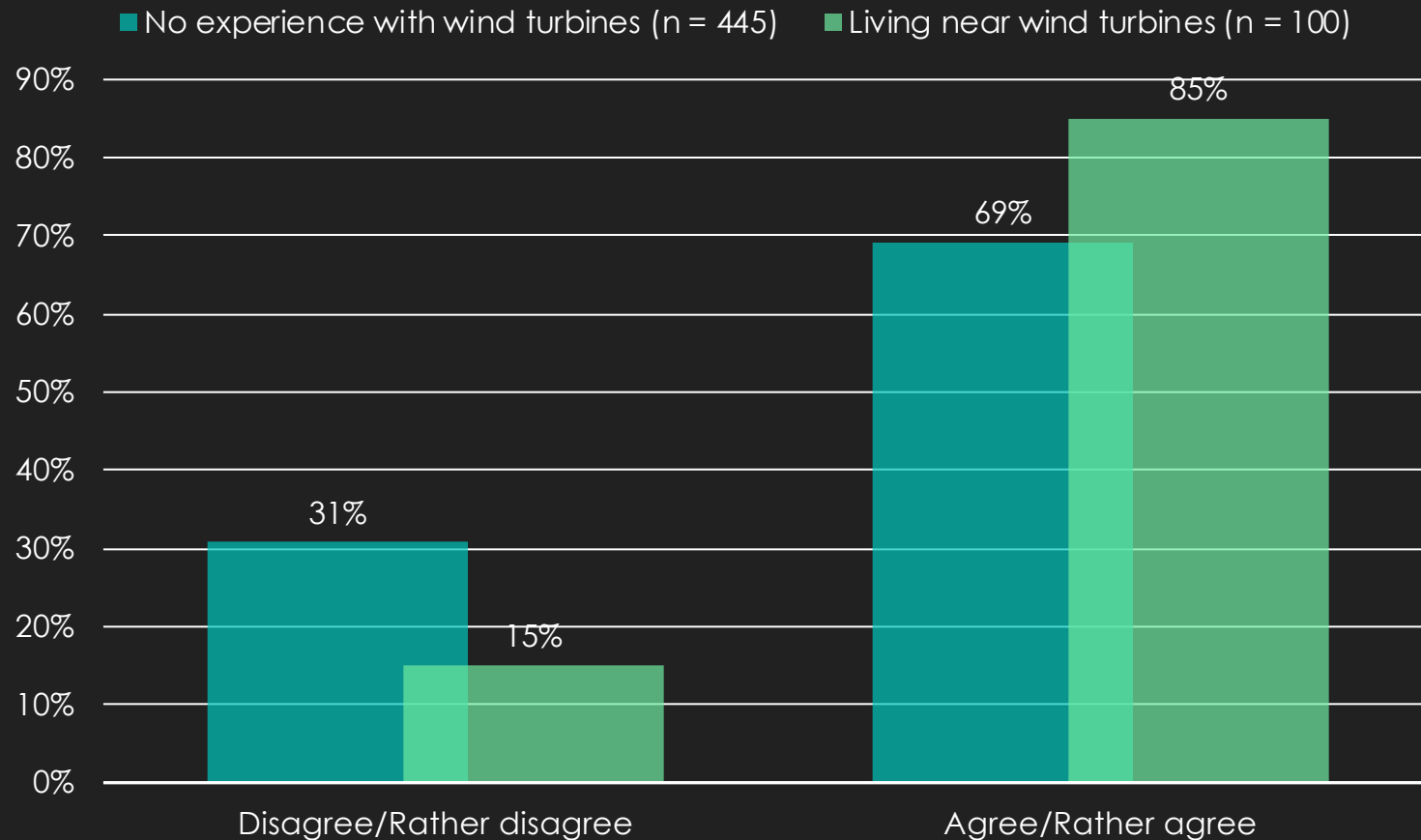


I would endorse a project somewhat outside my community to build a wind turbine

Agree & Somewhat agree



# Regional differences as differences in Experience – Evidence from wind



# Predictors of Hydropower Acceptance

Model performs worse for Hydro

Gender has a stronger effect for Hydro

Typically sceptic beliefs work only, albeit weakly, for PV and Wind

Same goes for ideological convictions

	R Square = 0,104		→	R Square = 0,27	
	<b>Hydro</b>			<b>Wind &amp; PV</b>	
	$\beta$	Sig.		$\beta$	Sig.
Gender (1=Male; 2=Female)	-0,102	0,002	→	-0,06	0,046
Age	-0,092	0,006		-0,083	0,006
Education	0,028	0,405		0,001	0,983
Income	0,037	0,258		0,038	0,201
Renewable Belief	0,223	0		0,369	0
Renewable Scepticism	0,04	0,244	→	-0,095	0,002
Renewable Support	0,17	0		0,221	0
Renewable Social Norm	-0,009	0,8		-0,031	0,313
Communitarianism & Egalitarianism	0,021	0,544	→	0,075	0,014
Hierarchism & Individualism	-0,034	0,33		-0,008	0,794

# Conclusion

- Hydropower – the OLD renewable energy
- Definitely less popular compared to PV, similar to wind though?
- Experience seems to be an important aspect. Need to definitely test this.
- Small-Scale hydropower in focus but regional differences point to little distinction in public perceptions. Same might apply to photovoltaic powerplants
- Ideological divide does not seem to exist for Hydro as it exist for PV and Wind
- Questionable whether results really apply to actual small-scale hydropower developments
- What's to come? More in depth analyses of predictors of Hydro acceptance (climate change perceptions, social dominance orientation, actual experience ...)