

Social Acceptance of Small-Scale Hydropower in Austria

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Renewable Energies in Austria

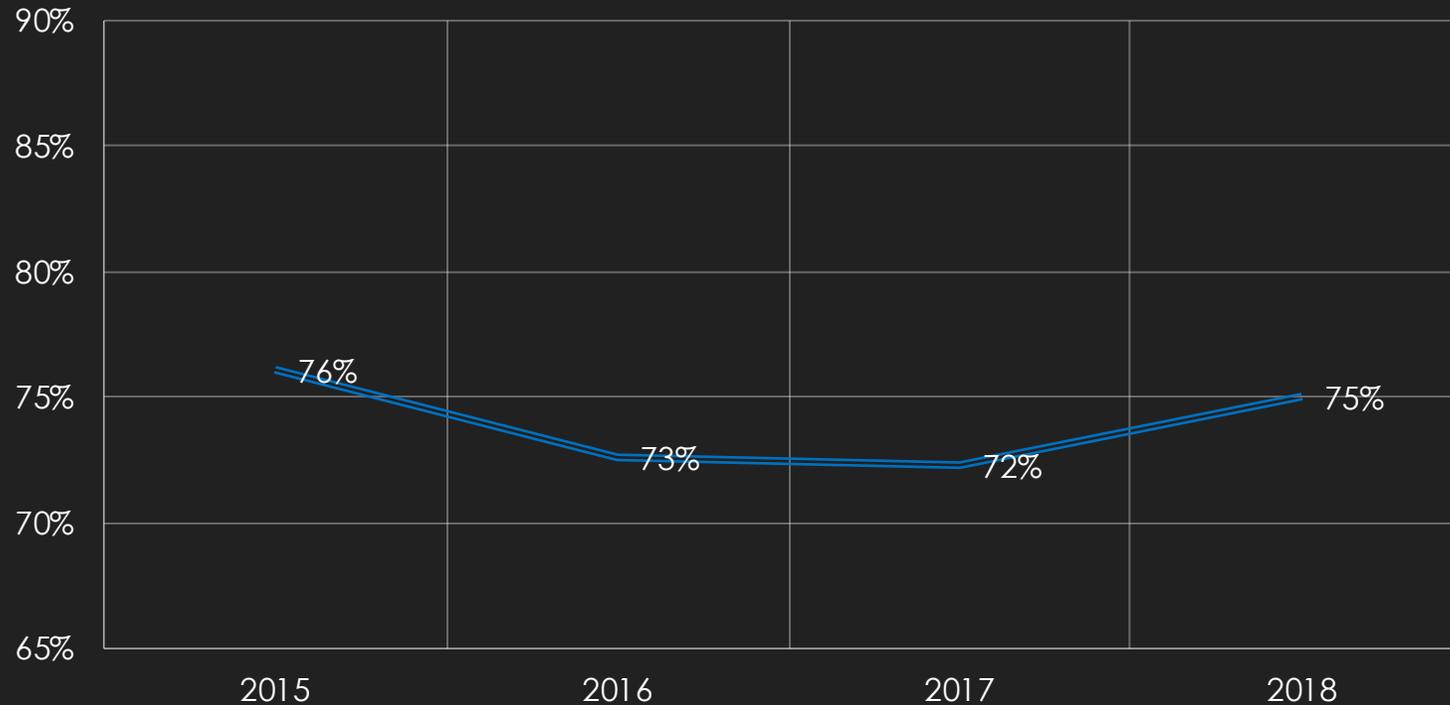
- Presented data is based on results of a yearly tracker study which runs since 2015 and focuses on renewable energy and related topics (electric vehicles, climate change etc.)
- Nationally representative study (Gender, Age, federal state, education, income) with an average of 1.008 respondents
- Acceptance 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

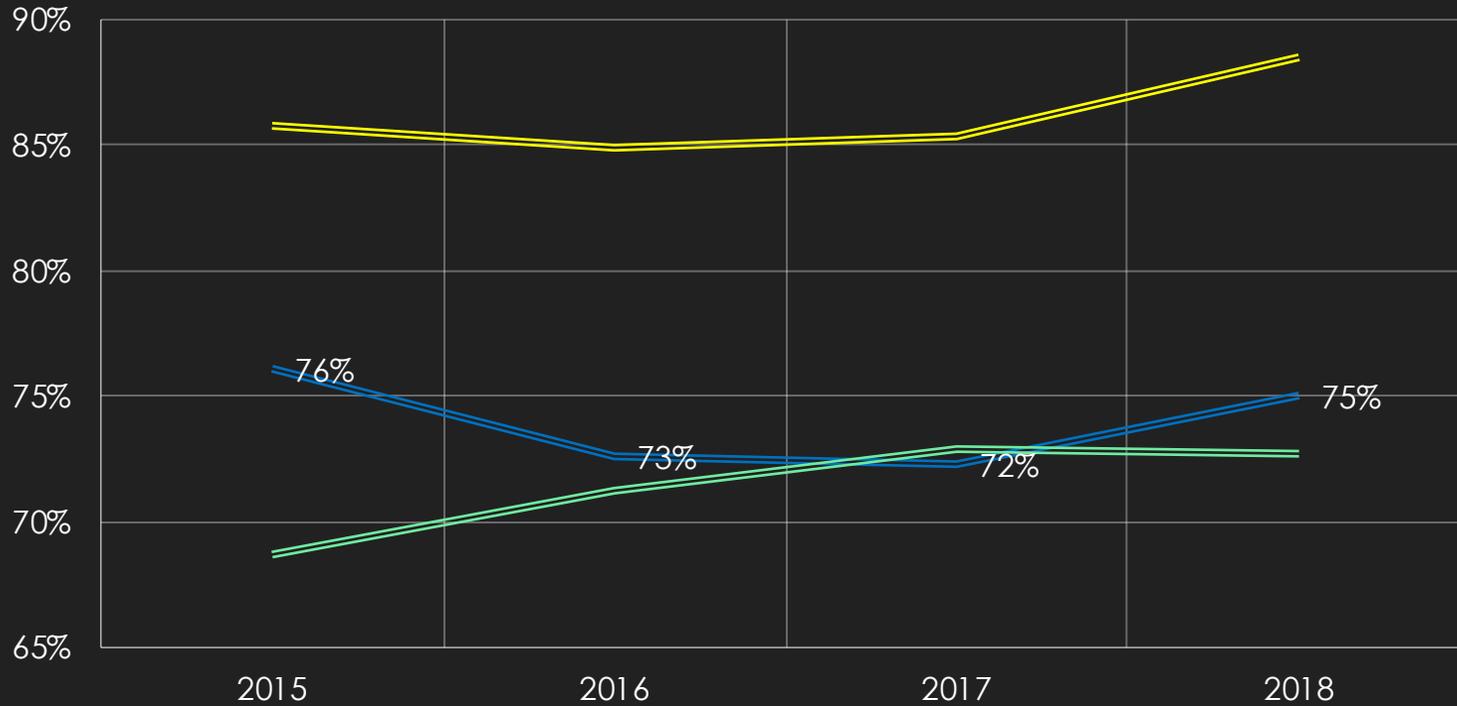


Longitudinal trends – PV, Hydro, Wind

SUPPORT FOR RET IN COMMUNITY

— Photovoltaic — Hydro — Wind

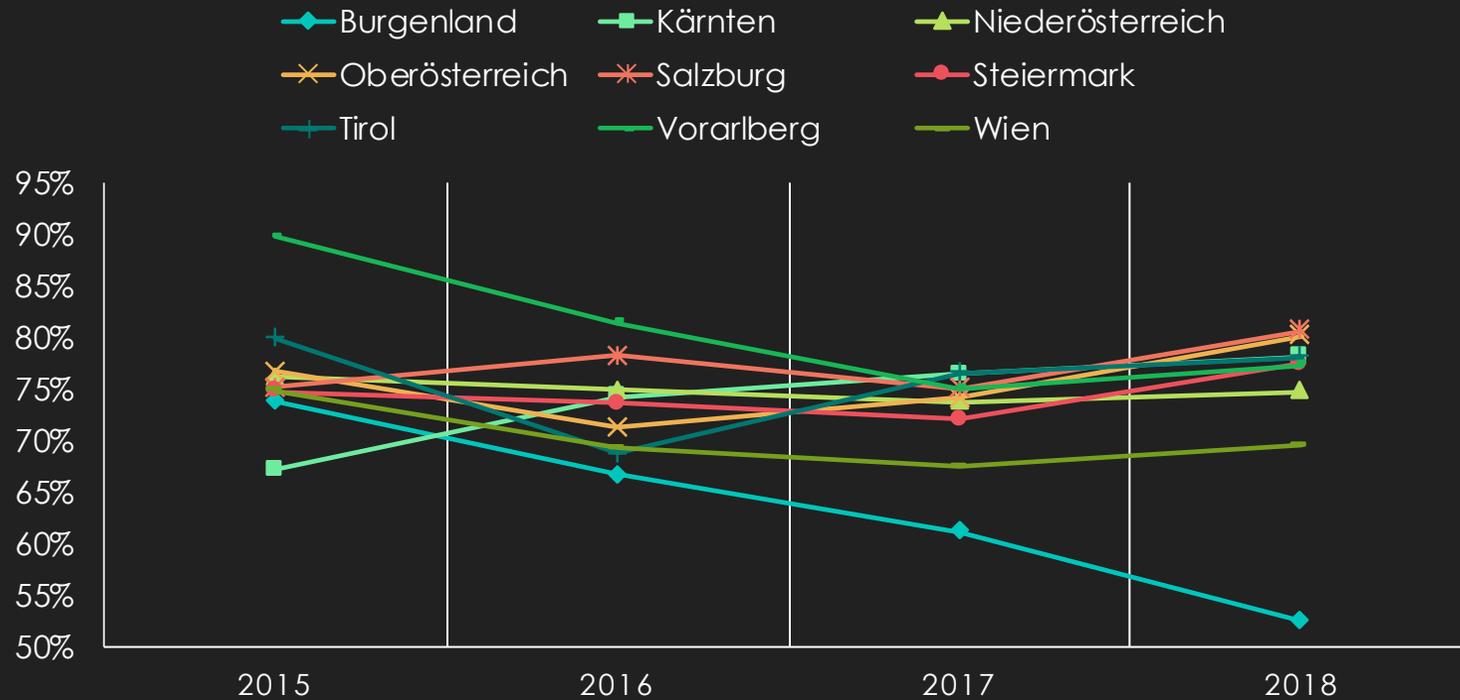
I would endorse a project in my community to build ...
Agree & Somewhat agree



Regional differences

REGIONAL DIFFERENCES IN HYDRO SUPPORT

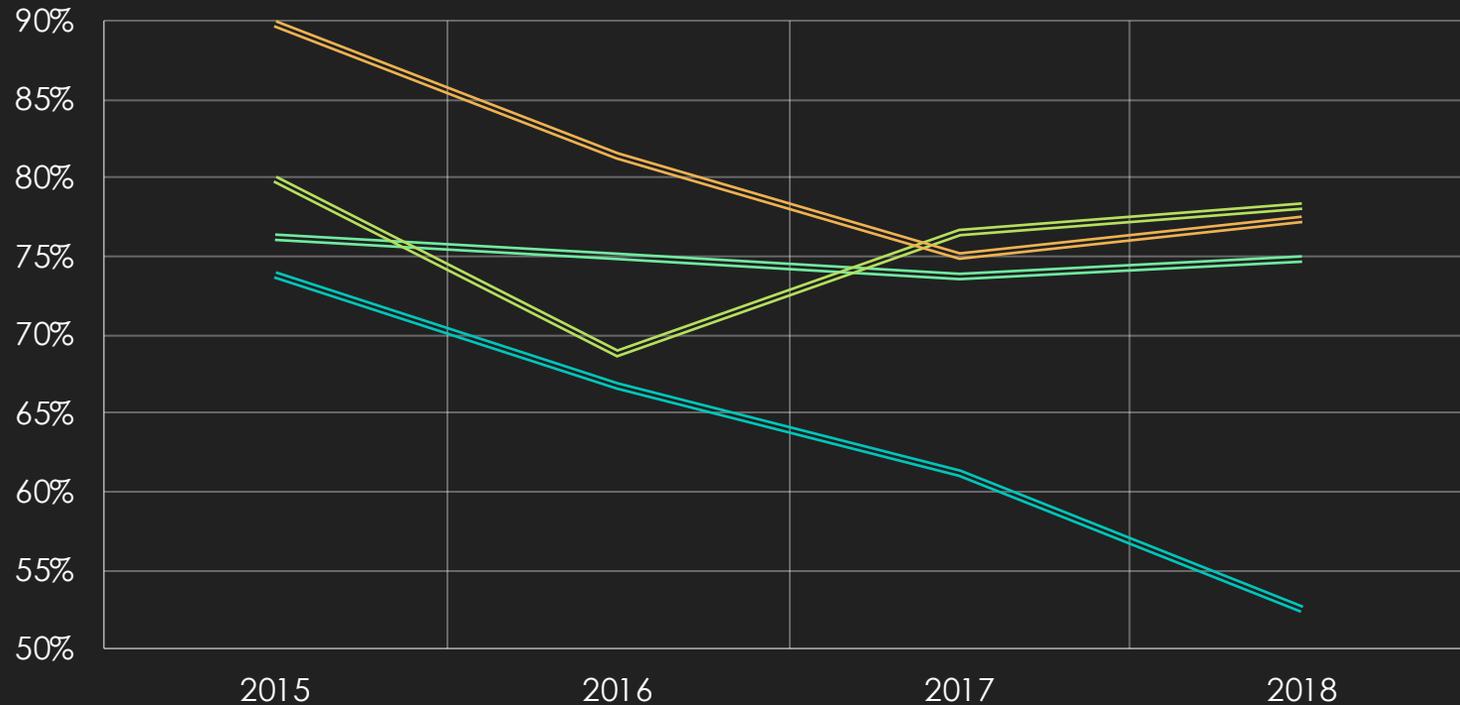
I would endorse a project in my community to build a small-scale hydropower plant.
Agree & Somewhat agree



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

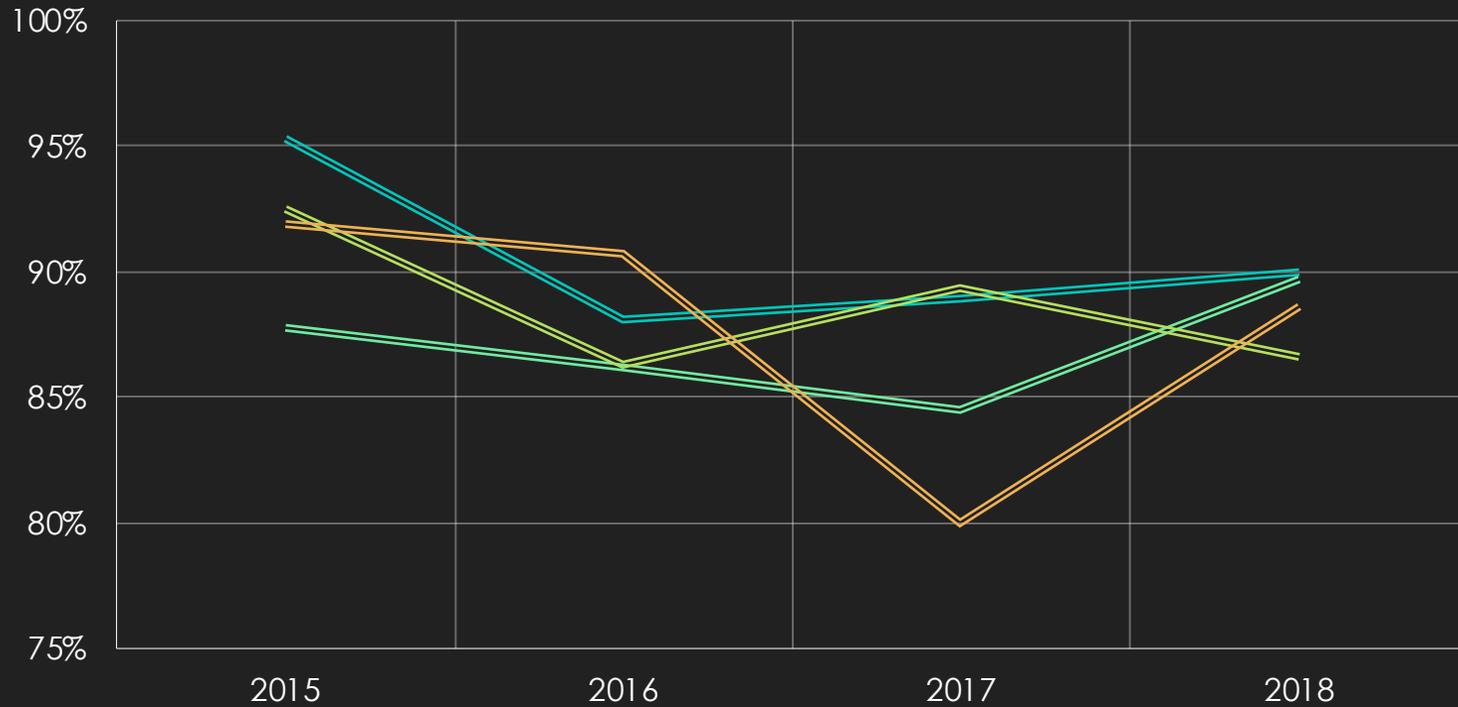
Regional differences - PV

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



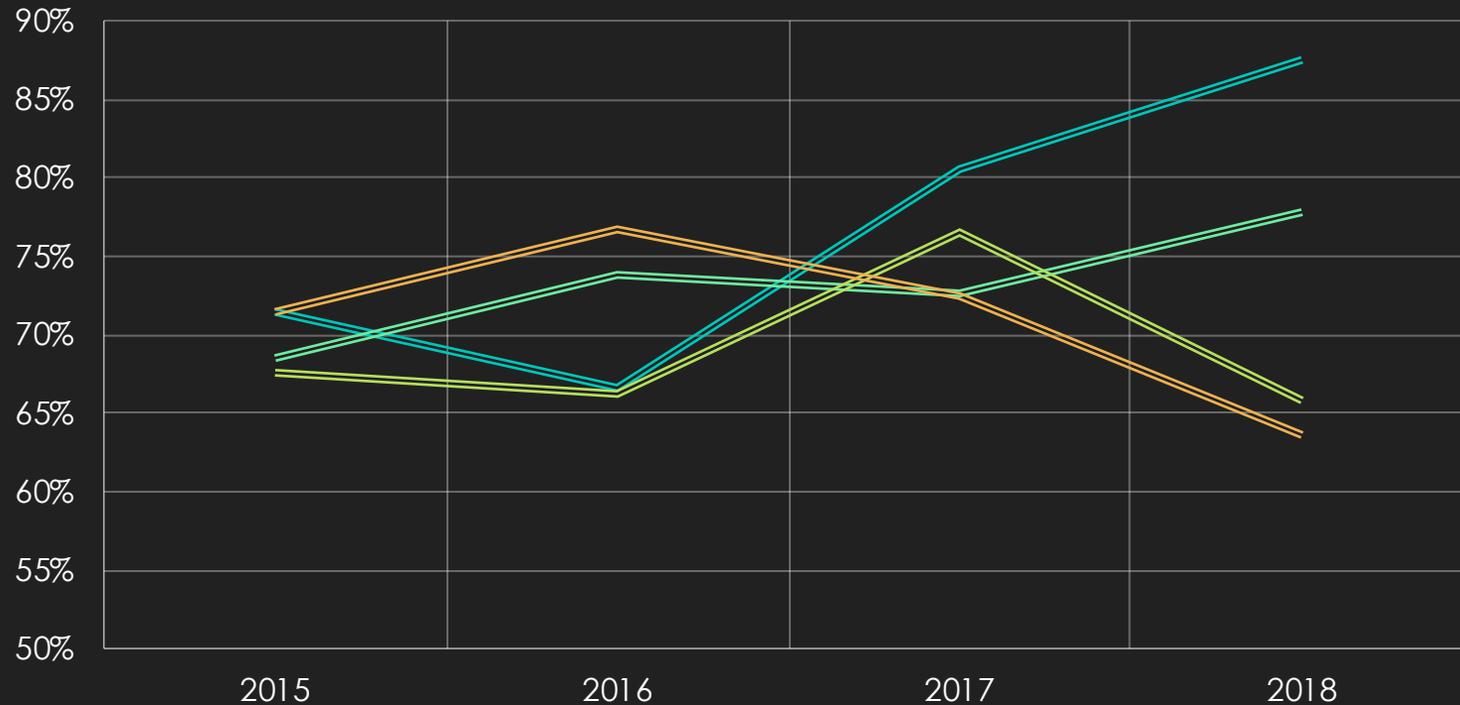
Regional differences - Wind

WIND SUPPORT - WEST/EAST

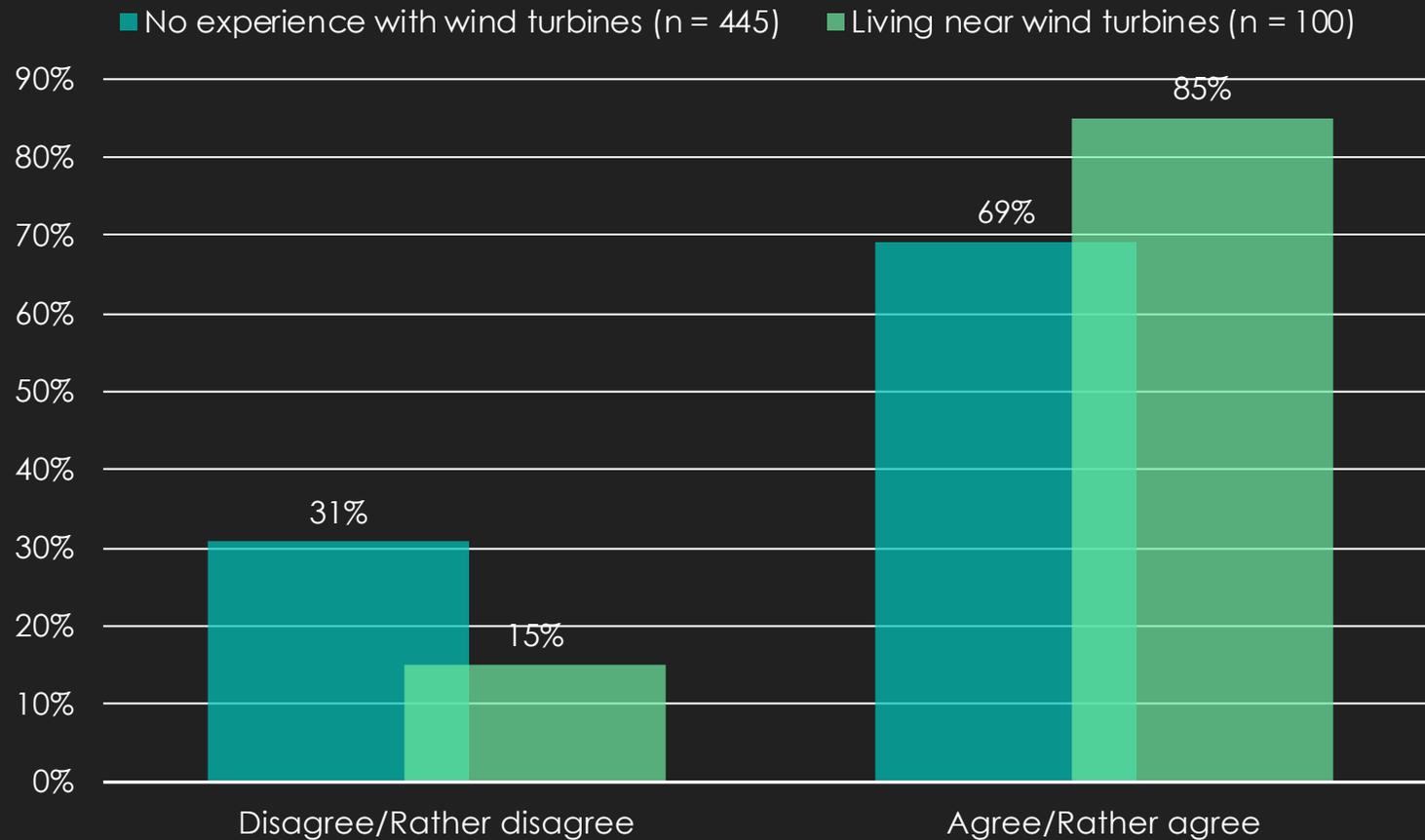
Burgenland Niederösterreich Tirol Vorarlberg

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	
	β	Sig.		β	Sig.
Hydro					
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 ...)