

Estimating Economic Values for a Sustainable Energy

Supply: A case study in Northern Cyprus



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Study aim and contribution



- Study aims to test the people's preferences and acceptance for utilising renewable energy as an alternative to the existing sources(non-renewable).
- The results will contribute to the application of the economy and policy of northern Cyprus for a sustainable development scheme also,
- The results could be useful for similar islands that are dependent on importing non-renewable sources of energy.

Economic methods



- **Contingent Valuation:**

Measures the preferences as a whole.

What is your maximum willingness to pay and minimum willingness to accept?

Ex. Are you willing to pay X amount for 1 kWh solar panels?

- **Choice Experiments:**

Measures the preferences based on the components.

Determines the factors and their levels that influence individual's choice.

| Factors | Factors' levels |
|--------------------------------|---|
| Subsidy | 10%, 25%, 40% |
| Feed-in tariff | 0.10, 0.20, 0.30 |
| Space required | 8m ² ; 1kWp 16m ² ; 2kWp 25m ² ; 3kWp 40m ² ; 4kWp |
| Initial investment Cost (Euro) | 4000, 6000, 8000, 10000, 12000,14000 |
| Energy saving (Euro) | 800,1200,1500, 2000, 3000, 3600 |

Data collection



1. Pre- studies were carried out:

- ❖ Focus groups, pilot surveys, interviews, debriefing

2. Main surveys:

- ❖ 369 Contingent Valuation
- ❖ 205 Choice Experiments

Conclusion



- The results indicate that on average Turkish Cypriots are willing to pay for PV installation.
- High FIT induces greater take up of PV as does energy saving cost.
- The results suggest that a lower financial incentives can be set by the Northern Cyprus government.