

Human Dimensions Research on Marine Hydrokinetic Energy in Maine

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Human Dimensions Research

Social Acceptance

- Community dimension
 - Public opinion

- Policy dimension
 - Regulator & developer perspectives

Jansujwicz and Johnson 2013



Photo: Ken Woisard/SSI

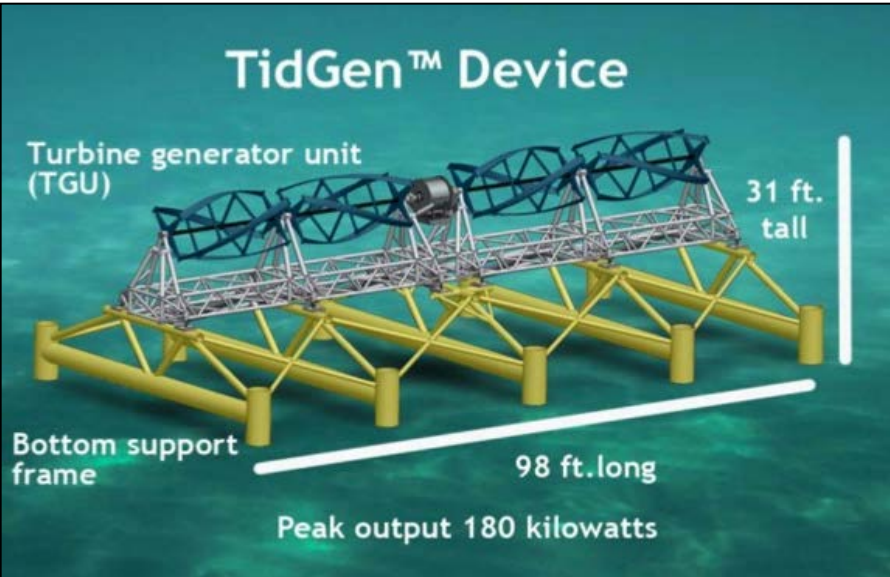
Public Acceptance

It is widely recognized that social or public acceptance is a critical factor constraining the development of renewable energy

Wüstenhagen et al. 2007



Cobscook Bay, Maine USA Tidal Energy Project



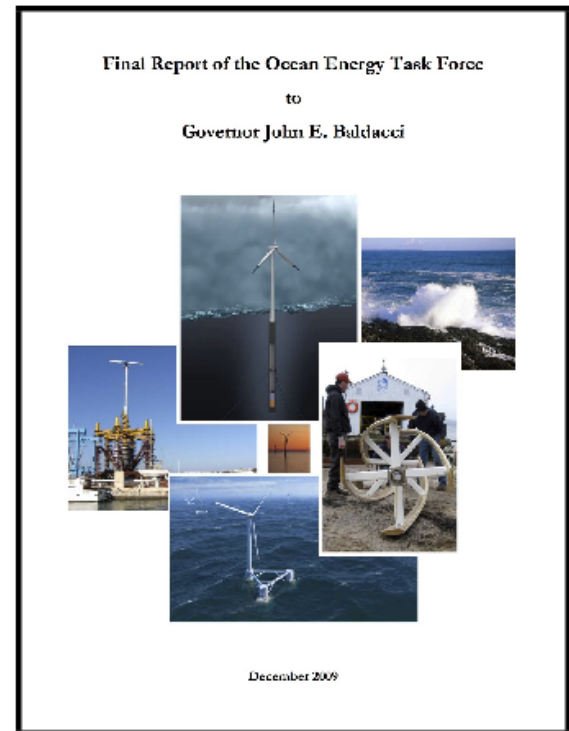
www.oceanrenewablepower.com

“Fundamentally, if you could have the world’s greatest technology, the best turbine human kind has ever known but you don’t have a site, number one and then number two, ***if you don’t have a community that wants you there, it just isn’t going to happen.***”

- *Tidal power developer*

“ Ocean energy developers will gain trust, understanding, and possible support, from a variety of local stakeholders by adopting the **best practices in public engagement...** demonstrated by the ORPC **example**”

Maine Ocean Energy Task Force 2009



Research Focus: Public Perceptions

- Research design
- General findings
- Implications



Research Methods

community interviews n=38



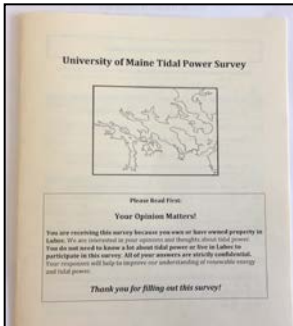
participant observation



focus groups n= 3



mail survey n= 1,345



community interviews n=7



2010

2011

2012

2013

2014

community meetings n = 8



Qualitative Findings

Direct benefits

“It’s employed a lotta people. It’s provided work in a time where this area needs work.”

- *Cobscook Bay fisherman*

Qualitative Findings

Direct benefits

Indirect benefits

"...a restaurant that normally closes in the winter, but that stayed open and prospered all winter, that's the spinoff."

- *City Councilor*

Qualitative Findings

Direct benefits

Indirect benefits

Hopeful benefits

“ ...it'd be nice if I had cheaper electricity.”

- *Local business owner*

Qualitative Findings

Direct benefits

Indirect benefits

Hopeful benefits

Potential costs

“What I am afraid of is losing bottom.”

- *Cobscook Bay fisherman*

Qualitative Findings

Direct benefits

Indirect benefits

Hopeful benefits

Potential costs

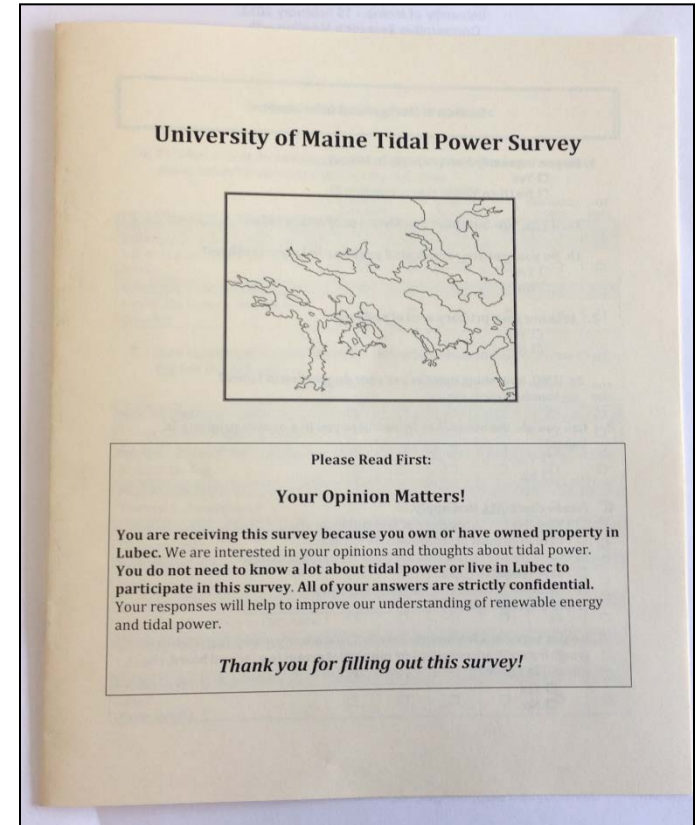
Development process

"Great deal of public outreach by developers."

- *Cobscook Bay fisherman*

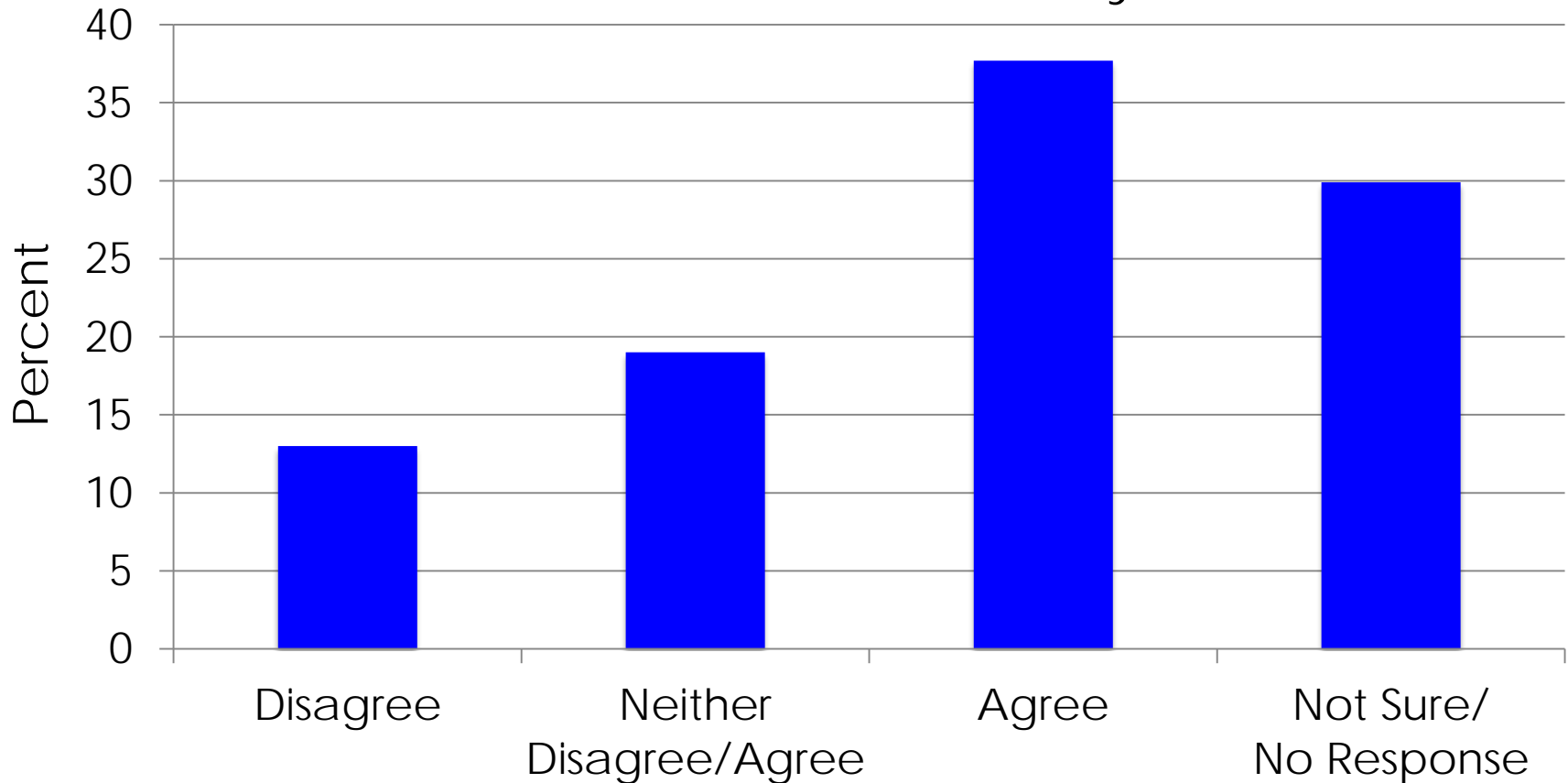
Quantitative Data Collection

- Random sample: 50% property owners (n=1,345)
- Multiple mailings (Dillman et al. 2008)
- 51.9% response rate



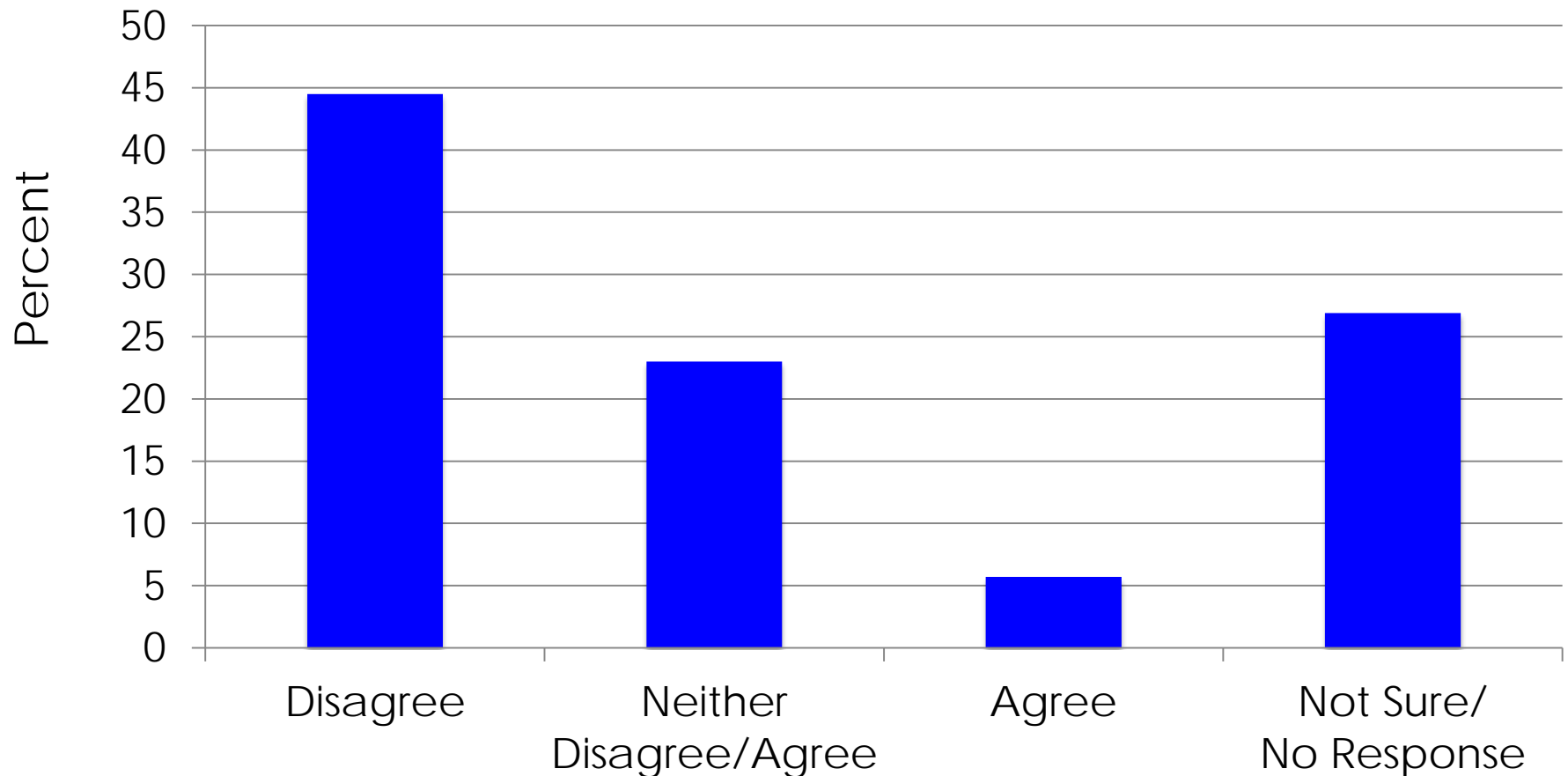
Preliminary Findings

I think ORPC's project will fit in with other marine uses in the bay.



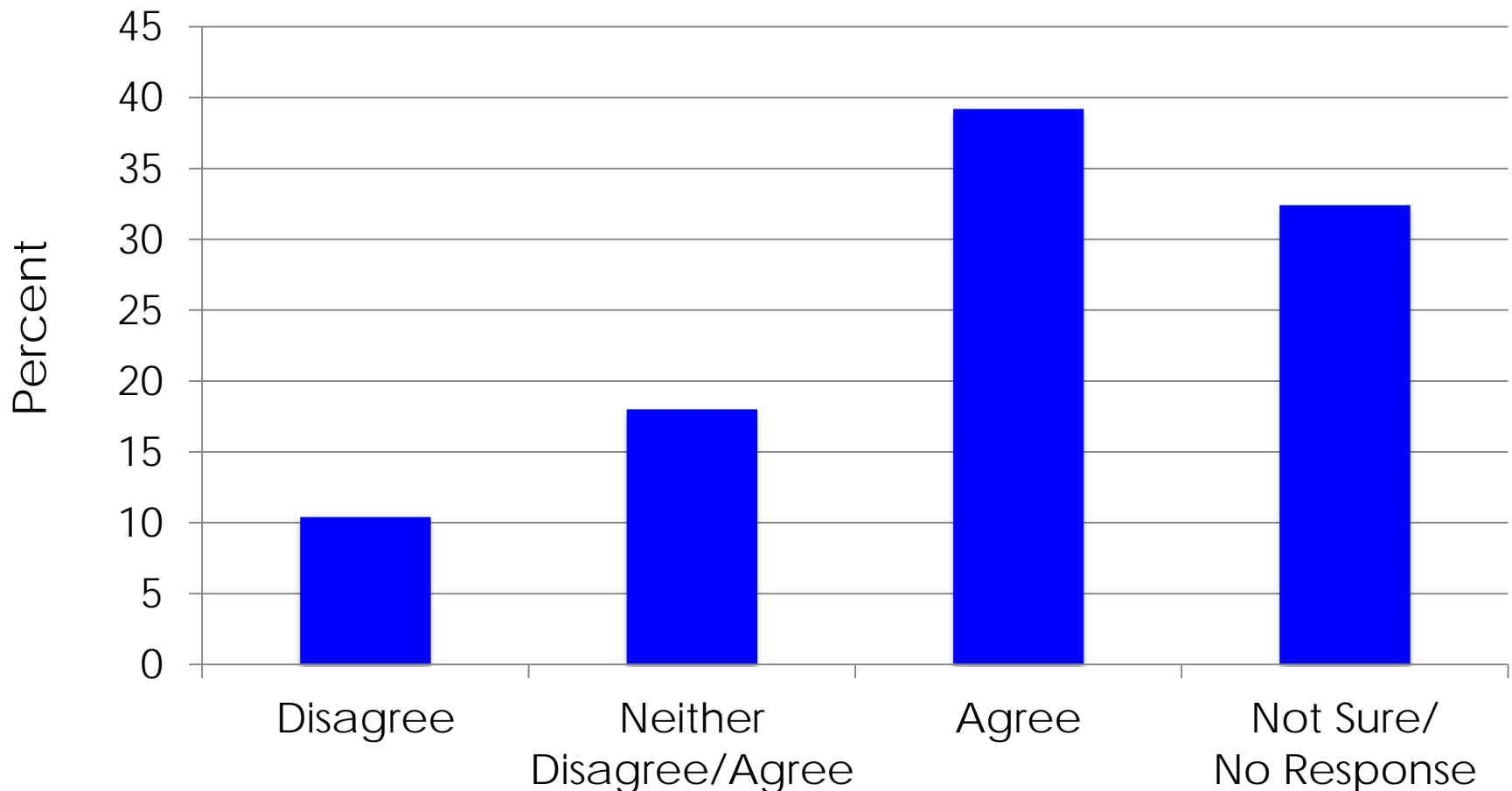
Preliminary Findings

I think ORPC's project will negatively impact my way of living.



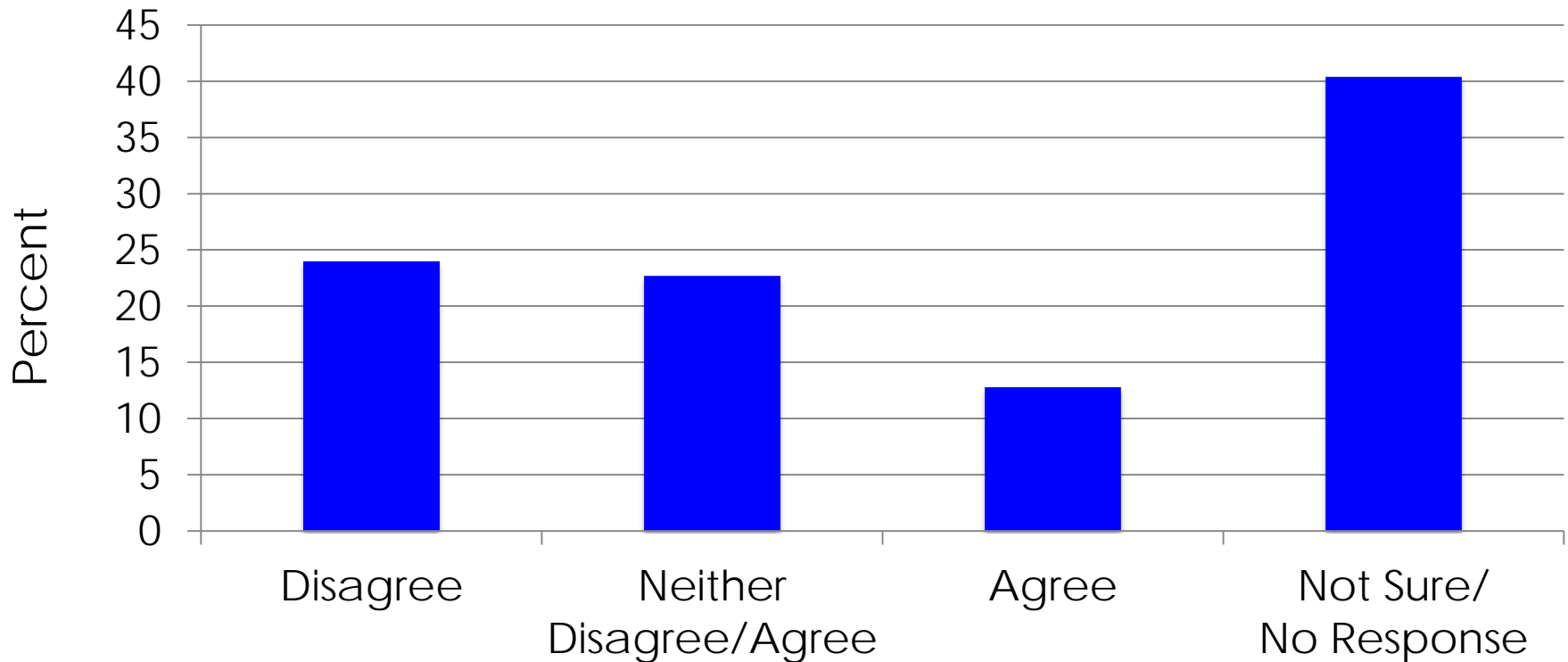
Preliminary Findings

I think ORPC's project will increase local employment.



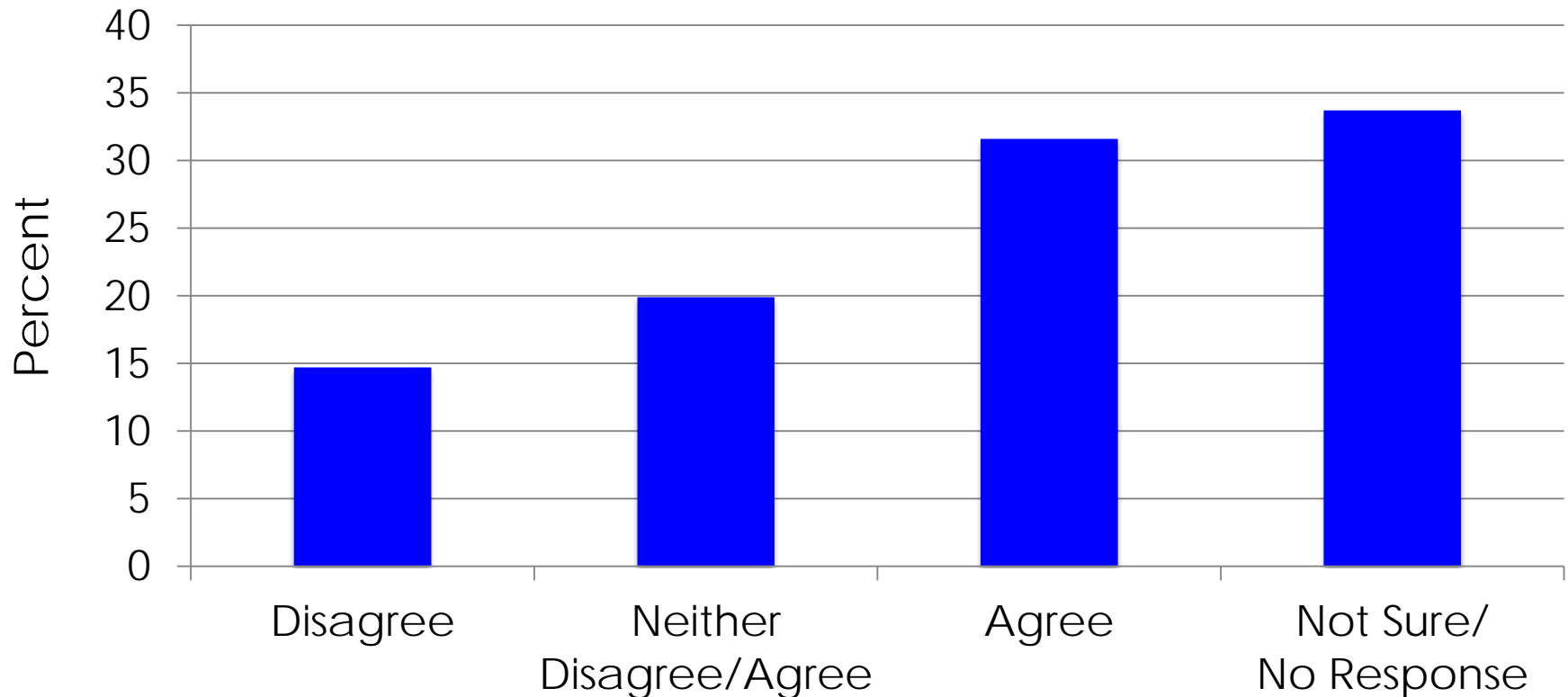
Preliminary Findings

I think ORPC's project will decrease my electric rates.



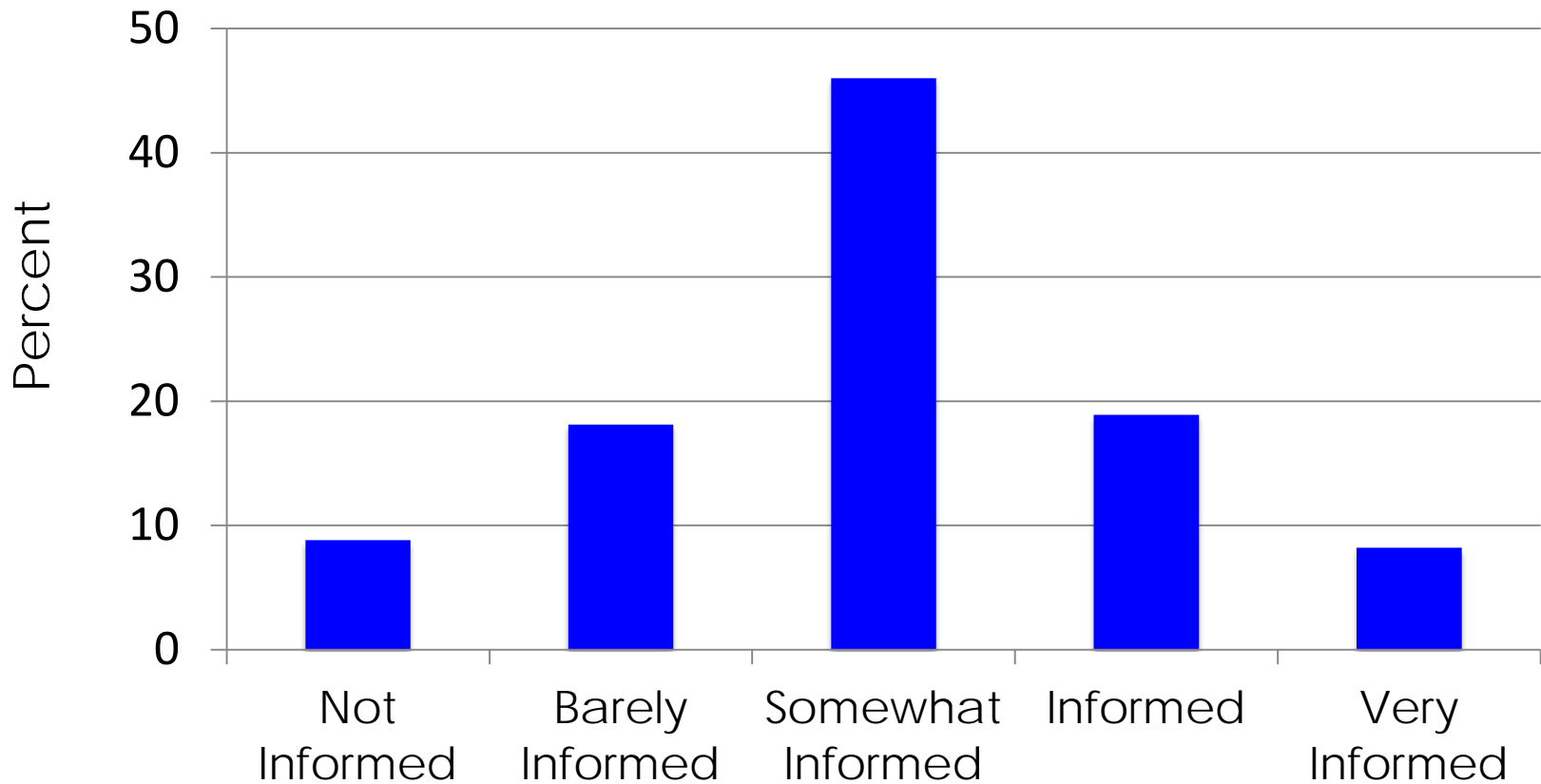
Preliminary Findings

I think ORPC's project will limit commercial fishing areas.



Preliminary Findings

In general how well informed would you consider yourself to be about tidal power? (n= 646)



Preliminary Findings

Open-ended survey questions

- "The survey makes me aware about how little I know about ORPC."
- "I do not have information needed for many of these answers."
- "Sorry. I am not informed."

Qualitative Findings

Informal discussions

- “ill informed”
- “lack of knowledge” for “meaningful participation”



Photo: Ken Woisard/SSI

Qualitative Findings

Observations at community meetings

- “general familiarity”
- many questions
 - fish impacts
 - risk to mammals
 - recreation
 - technology
 - electricity generation
 - community benefit



“Attending the meetings made me realize that there are a lot of questions still out there that we need to address.”

– *Employee of developer*



ORPC to host Cobscook Bay Tidal Energy Project Informational Fair

Portland, ME, August 19, 2013 – Ocean Renewable Power Company cordially invites all interested persons to attend a Cobscook Bay Tidal Energy Project Informational Fair on Tuesday, August 27 from 4:30 to 6:00 p.m. at Morrison Landing, Deep Cove Road in Eastport.

Conclusions

- General support for ORPC's project because:
 - Direct & indirect local benefits
 - Transparent community engagement process
- Significant uncertainty:
 - POTENTIAL costs
 - "Hopeful" benefits



Photo: Ken Woisard/SSI

Implications

- Process is important:
 - Benefits of developer's engagement strategy
- Acceptability also likely due to:
 - Local context
 - Scale
 - Significant uncertainty
- Attention to knowledge needs and information flow:
 - Developing industry; acceptance has a time dimension
 - Assess and adapt engagement as new information emerges; keep conversations and relationships current

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Partners:

- Ocean Renewable Power Company
- Cobscook Bay Resource Center
- The Chewonki Foundation
- Homeowner Pleasant Cove Association
- TEDEC



Award EPS-0904155

