



GRAHAM
SUSTAINABILITY INSTITUTE
UNIVERSITY OF MICHIGAN

Energy Survey Overview and Clean Energy in the U.P.

Sarah Mills, PhD

UP Energy Task Force Meeting

October 7, 2020

EGLE Grant

*Provide technical assistance to local governments on
planning / zoning / policymaking for clean energy*

Don't re-create the wheel

Start with manageable scope

Utilize network




MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Year 1 Activities


- **Survey of local governments**
- **Database of zoning for energy**
- **Curated repository of templates, guidance**
 - Create new content as needed
- **Answers to FAQs, case studies**
- **Real-time consultations**
 - With local governments
 - At conferences
- **Contribute to emerging clean energy policy discussions**

The Survey

- Goal: better understand local officials' perceptions of the costs, benefits, and likelihood of engaging in future energy management activities to inform EGLE activities
- Sent to **1,856 local units**
 - City (mayor + manager or clerk)
 - County (board chair + administrator)
 - Township (supervisor + manager or clerk)
 - Village (president + manager or clerk)
- **1,350 responses (72.7%)**



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY



Center for Local, State, and Urban Policy
| Gerald R. Ford School of Public Policy

2019 Michigan Local Energy Survey (MiLES)

Q1. What type of jurisdiction do you represent?

County
 Township
 City
 Village

What is your jurisdiction's name? _____

(If not a county) In what county is it located? _____

What position do you hold in the jurisdiction? _____

Q2. Thinking overall about topics related to energy, how relevant would you say the following issues have been or currently are for your jurisdiction's government?

	Not at all relevant	Not very relevant	Somewhat relevant	Very relevant	Don't know
Regulating placement of energy infrastructure (e.g., solar panels, wind turbines) on <u>private property</u> in your community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Siting energy infrastructure on <u>public property</u> in your jurisdiction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Planning for electric vehicle (EV) infrastructure (e.g., charging stations)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improving energy efficiency for local businesses (including agriculture) or residents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reducing your jurisdiction government's use of fossil fuels (e.g., in its electricity use, vehicle fleet, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(If you answered "not at all relevant" or "don't know" in all five topics, please skip to Q24 on page 5) →

Q3. (If you answered any "relevant" response in Q2) Again, thinking overall about topics related to energy, to what extent would you say your jurisdiction has considered or enacted any plans and/or policies regarding energy issues?

	Not at all	Very little	A moderate amount	Extensively	Don't know
Considered various plans / policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Developed specific plans / policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Implemented those plans / policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(If you answered "not at all" considered or if you "don't know," please skip to Q24 on page 5) →

Relevant products

- Questionnaire, data tables (by region, pop size, jtype) online
 - <http://closup.umich.edu/miles>
- 2 public reports
 - Intergovernmental collaboration (9/30)
 - Everything else (10/7—TODAY!)
- 2 internal white papers
 - MILES Breakdowns / recommendations for UP, low-income, and MGC
 - Mining of past data MPPS data

The Center for Local, State, and Urban Policy
Gerald R. Ford School of Public Policy >> University of Michigan

Michigan Local Energy Survey
September 2020

Intergovernmental collaboration on sustainability and energy issues among Michigan local governments
By Natalie Fitzpatrick, Debra Horan, and Sarah Mills

This report presents the opinions of Michigan's local government leaders regarding current and potential local government collaboration on a range of sustainability and energy policies. These findings are based on statewide surveys of local government leaders conducted in the Fall 2019 Michigan Local Energy Survey (MILES), a special wave of the Michigan Public Policy Survey.

>> The Michigan Local Energy Survey (MILES) is a census survey of all 1,838 general purpose local governments in Michigan conducted by the Center for Local, State, and Urban Policy (CLSUP) at the University of Michigan. The survey was funded by the Michigan Department of Environment, Great Lakes, and Energy (EGLE). More information about the MILES, including a copy of the questionnaire, is available online at <http://closup.umich.edu/miles>. Report data for the Fall 2019 MILES include county administrators, board chairs, and clerks; city mayors, managers, and clerks; village presidents, managers, and clerks; and township supervisors, managers, and clerks from 1,838 jurisdictions across the state.

For more information, please contact: closup_inq@umich.edu / (734) 647-4891.

Key Findings

- Over a third (38%) of Michigan local governments report they are currently collaborating with other local governments, while 36% do not collaborate on recycling, doing so.
- Intergovernmental collaboration on recycling is reported by the state's larger jurisdictional communities with more than 10,000 residents.
- Even among Michigan's smallest jurisdictions, only 18% have no interest in pursuing collaboration on recycling.
- By region, recycling collaborations are most common in the Lower Peninsula (53%), and least common in the Upper Peninsula (10%). However, 43% of Upper Peninsula jurisdictions are pursuing collaboration on recycling.
- On other topics, relatively few local governments report collaborations on non-motorized green purchasing programs (7%), or the use of shared state-owned assets. However, local government officials expressing interest in pursuing these opportunities, particularly for non-motorized green purchasing programs, and 8% on shared state-owned assets.
- As with recycling, collaboration on non-motorized green purchasing programs is reported by larger local governments more than 30,000 residents among non-motorized or public transportation programs, and 8% on shared state-owned assets, and 48% interested in doing so.

The Michigan Local Energy Survey (MILES) Fall 2019 Data Tables

[Back to the table of contents](#) | [See questionnaire for exact wording](#)

Q4. Does your jurisdiction's government have a person or persons who are specifically responsible for addressing energy issues? (check all that apply)

	Jurisdiction Type				Total
	County	Township	City	Village	
No, no one in the jurisdiction is specifically responsible for energy issues	47%	52%	49%	42%	50%
Yes, we have jurisdiction staff whose sole job responsibility is energy issues	2%	1%	4%	0%	1%
Yes, we have jurisdiction staff who have other job responsibilities in addition to handling energy issues	25%	0%	27%	11%	11%
Yes, we have elected official(s) who have taken ownership of energy issues	5%	5%	3%	2%	5%
We use external organizations or consultants on energy issues	5%	4%	10%	7%	8%
Don't know	2%	2%	1%	2%	2%
Not asked: Energy issues not at least considered in jurisdiction	22%	33%	11%	39%	30%

*Columns may sum to more than 100% due to ability to select multiple response options.

	Population Size					Total
	<1500	1500-5000	5001-10000	10001-30000	>30000	
No, no one in the jurisdiction is specifically responsible for energy issues	45%	54%	61%	51%	38%	50%
Yes, we have jurisdiction staff whose sole job responsibility is energy issues	0%	1%	1%	4%	4%	1%
Yes, we have jurisdiction staff who have other job responsibilities in addition to handling energy issues	4%	7%	17%	24%	45%	11%
Yes, we have elected official(s) who have taken ownership of energy issues	3%	5%	8%	5%	0%	5%
We use external organizations or consultants on energy issues	3%	0%	4%	14%	10%	8%
Don't know	2%	1%	1%	1%	4%	2%
Not asked: Energy issues not at least considered in jurisdiction	44%	27%	14%	11%	8%	30%

*Columns may sum to more than 100% due to ability to select multiple response options.

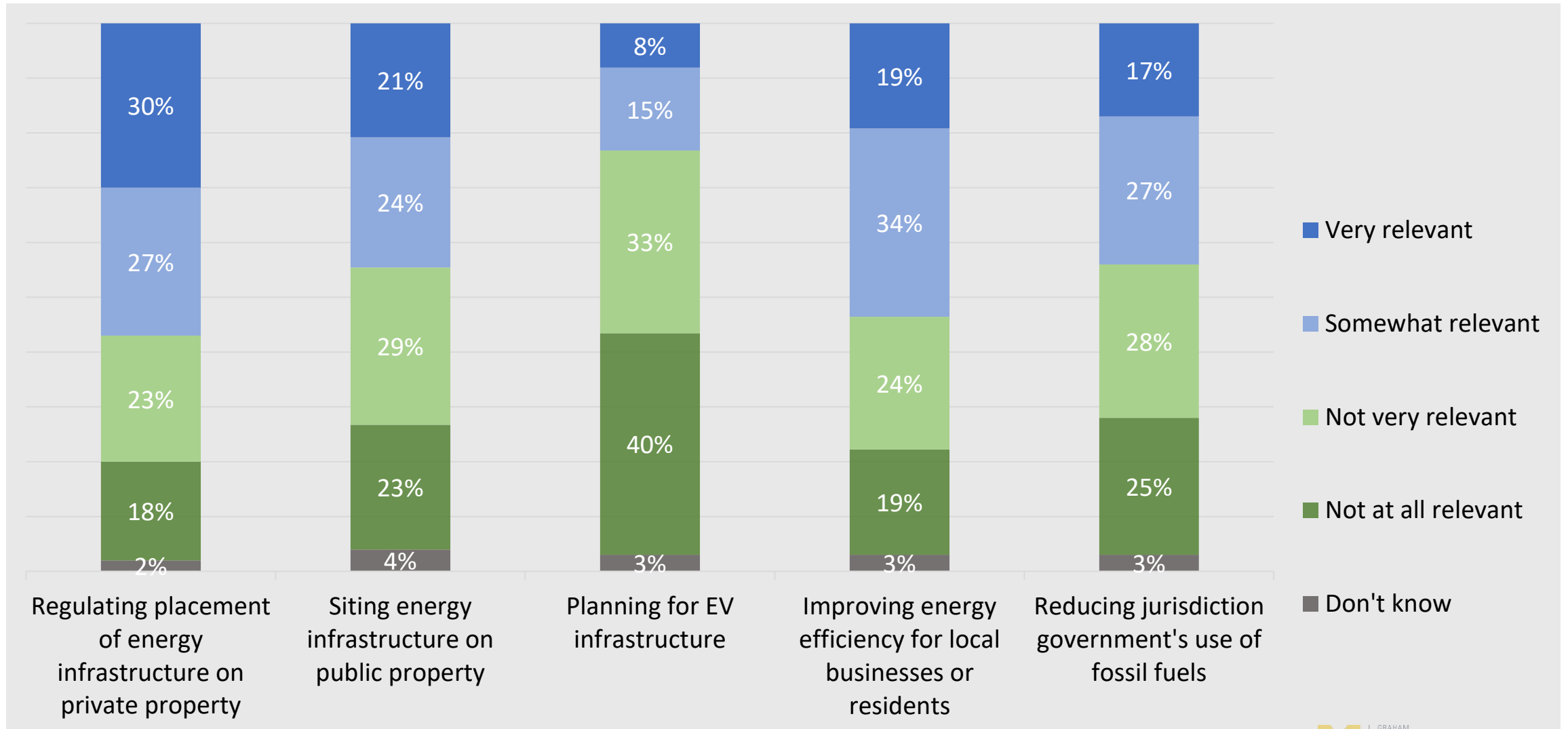
	Region of Michigan						Total
	Upper Peninsula	Northern Lower Peninsula	West Central Lower Peninsula	East Central Lower Peninsula	Southwest Lower Peninsula	Southeast Lower Peninsula	
No, no one in the jurisdiction is specifically responsible for energy issues	47%	46%	44%	54%	52%	55%	50%
Yes, we have jurisdiction staff whose sole job responsibility is energy issues	2%	1%	2%	1%	1%	1%	1%
Yes, we have jurisdiction staff who have other job responsibilities in addition to handling energy issues	5%	4%	10%	0%	14%	10%	11%
Yes, we have elected official(s) who have taken ownership of energy issues	4%	2%	5%	0%	5%	5%	5%
We use external organizations or consultants on energy issues	0%	3%	5%	0%	0%	0%	0%
Don't know	3%	1%	1%	3%	2%	1%	2%
Not asked: Energy issues not at least considered in jurisdiction	37%	44%	35%	25%	24%	15%	30%

*Columns may sum to more than 100% due to ability to select multiple response options.



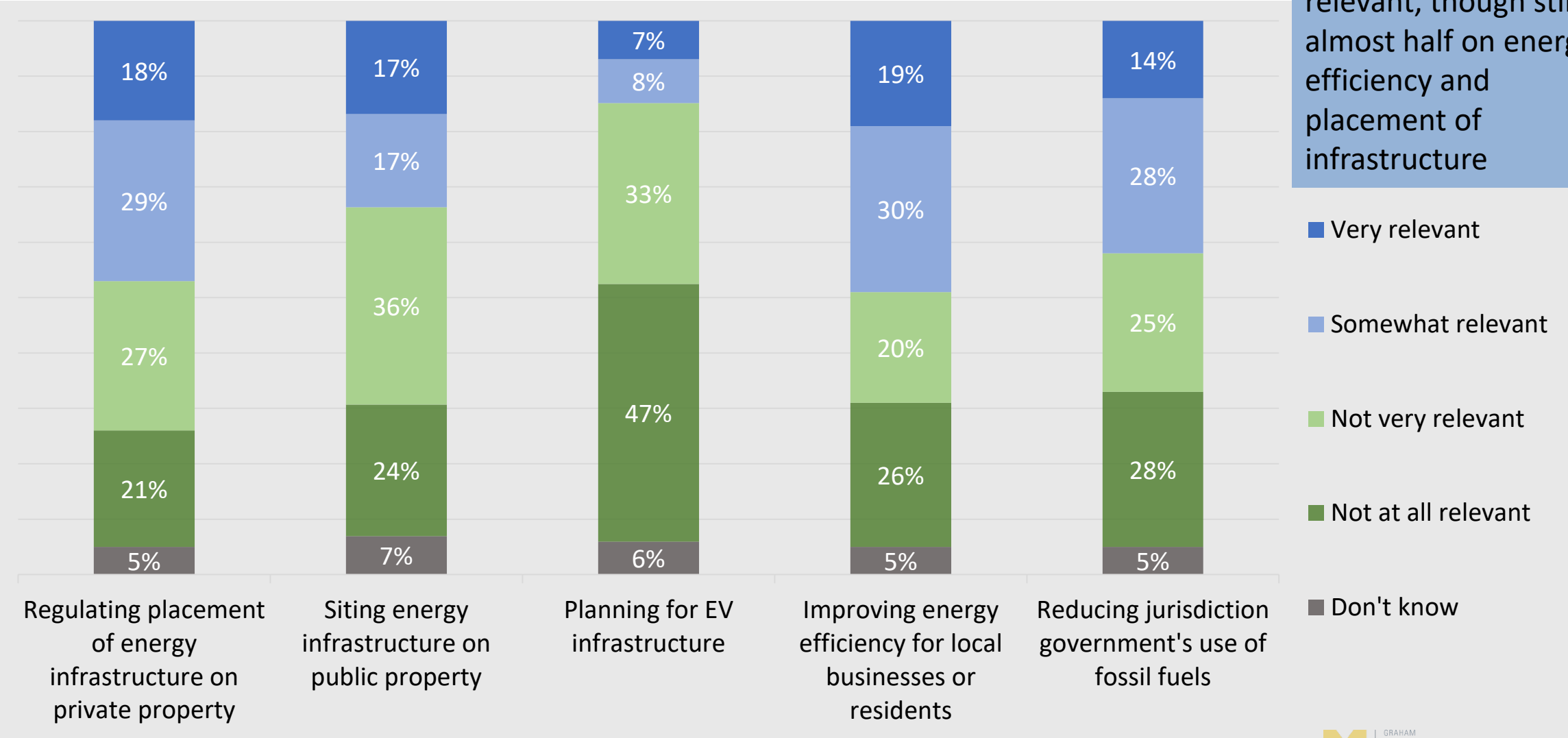
Key Findings from Energy Survey

How relevant are the following issues for your jurisdiction's government?

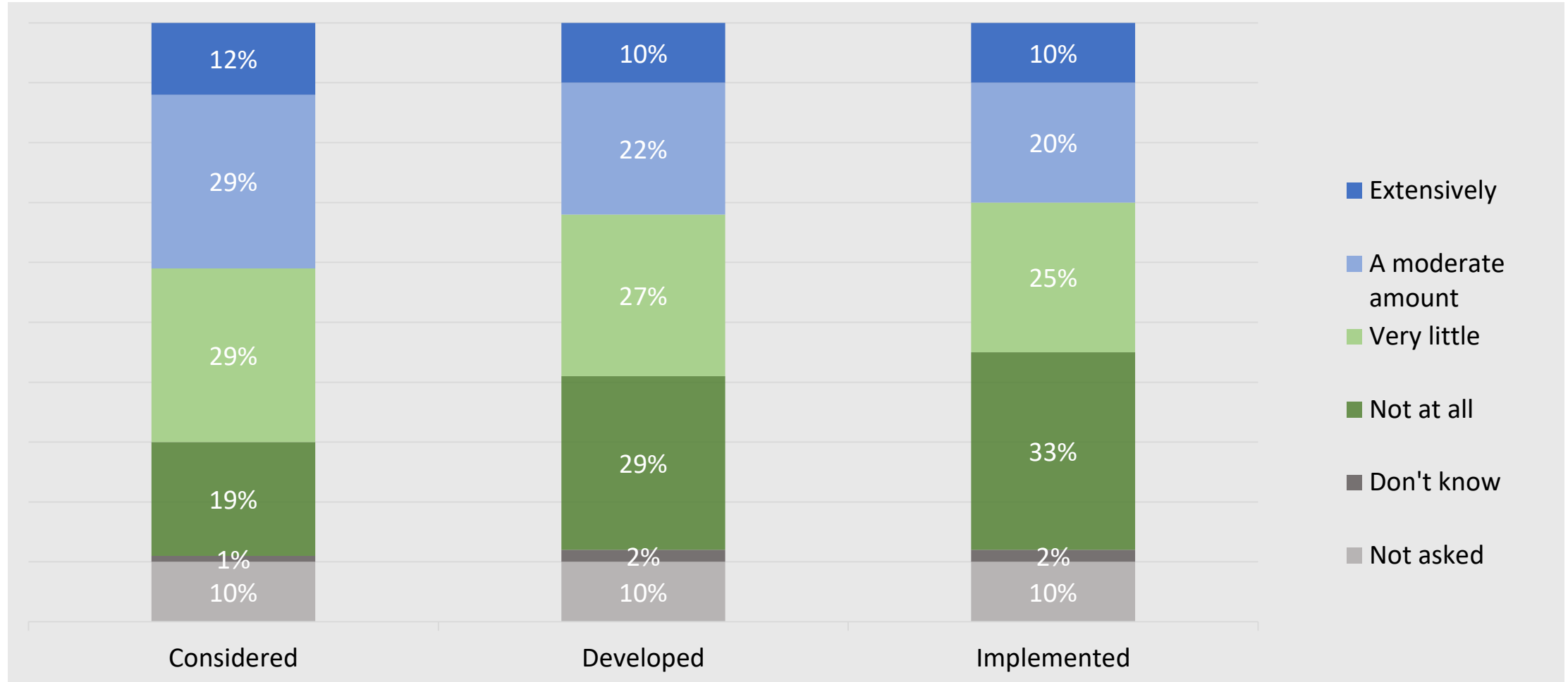


UP: How relevant are the following issues for your jurisdiction's government?

In UP, each issue less relevant, though still almost half on energy efficiency and placement of infrastructure

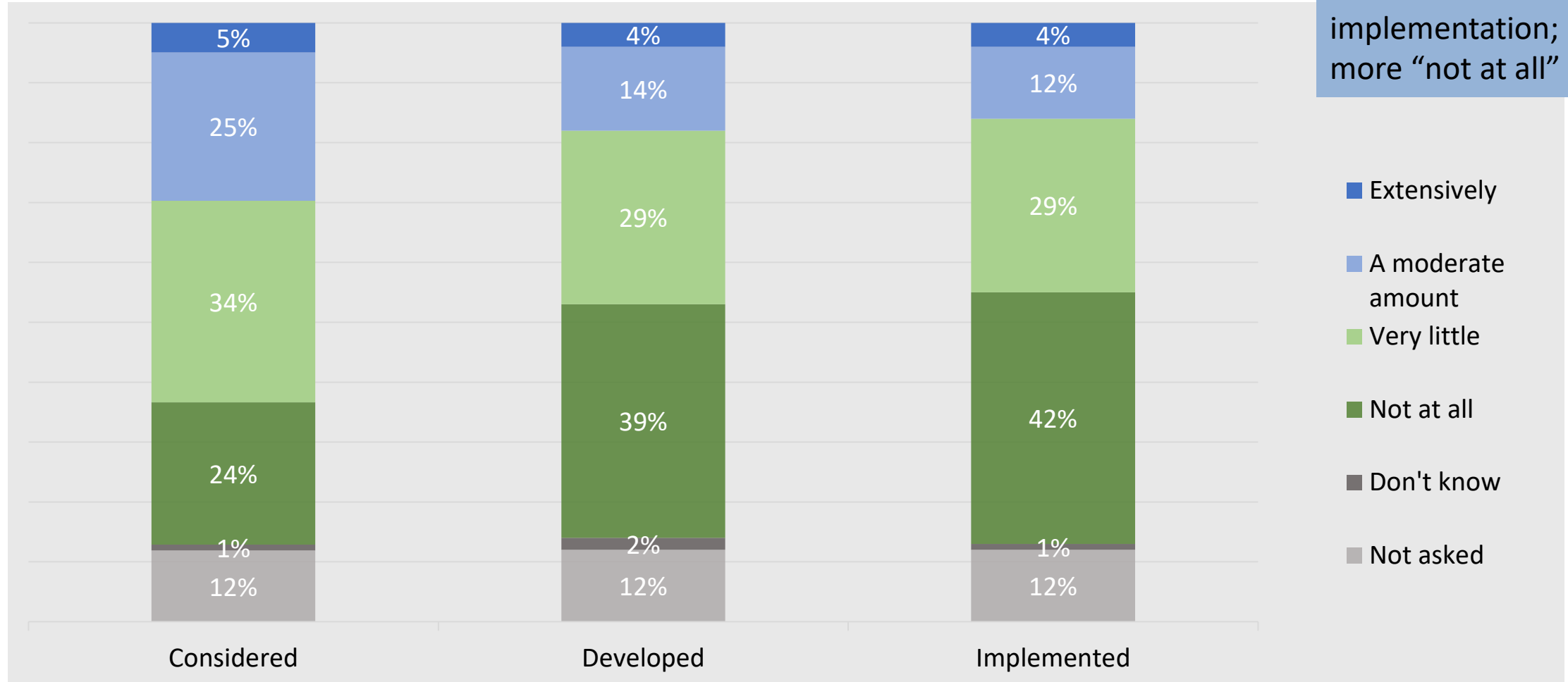


Status of energy planning / policymaking?

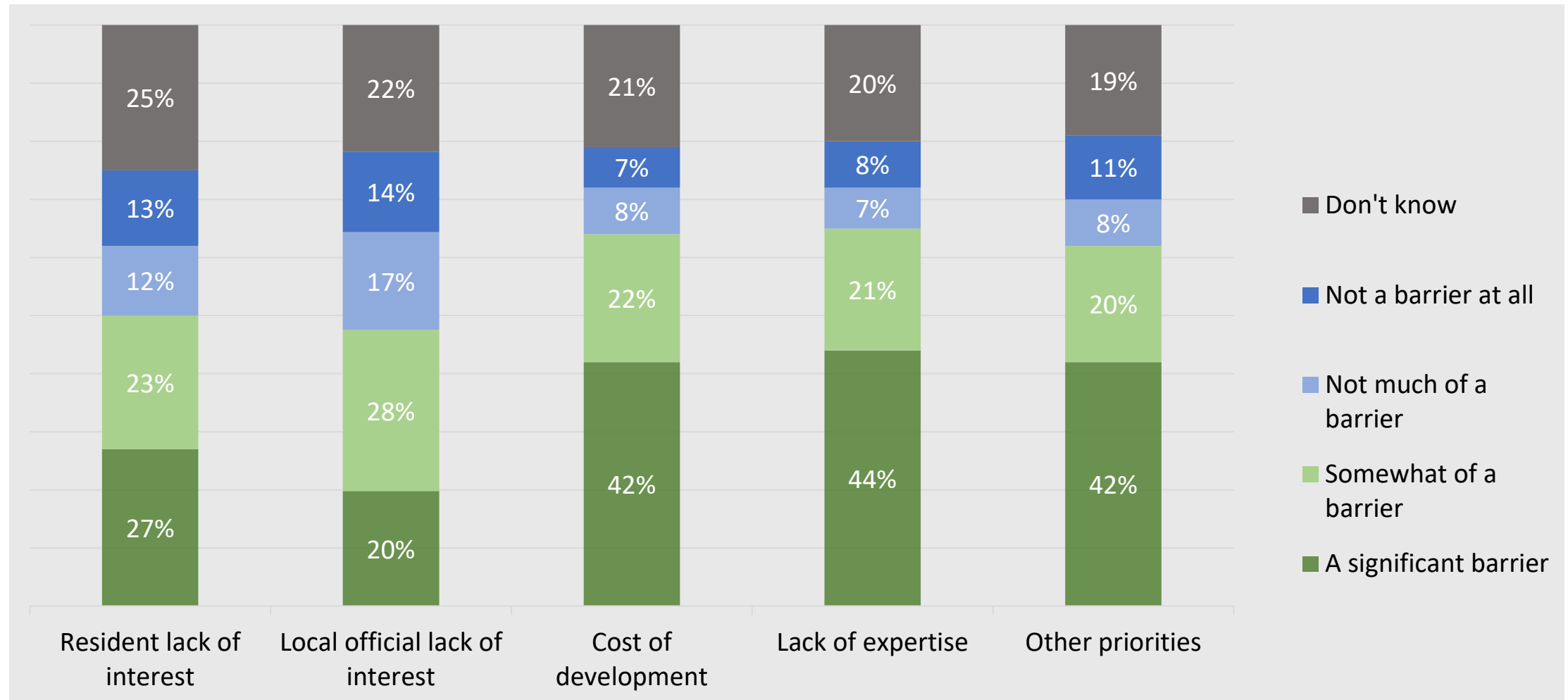


UP: Status of energy planning / policymaking?

In UP, less extensive consideration & implementation; more “not at all”

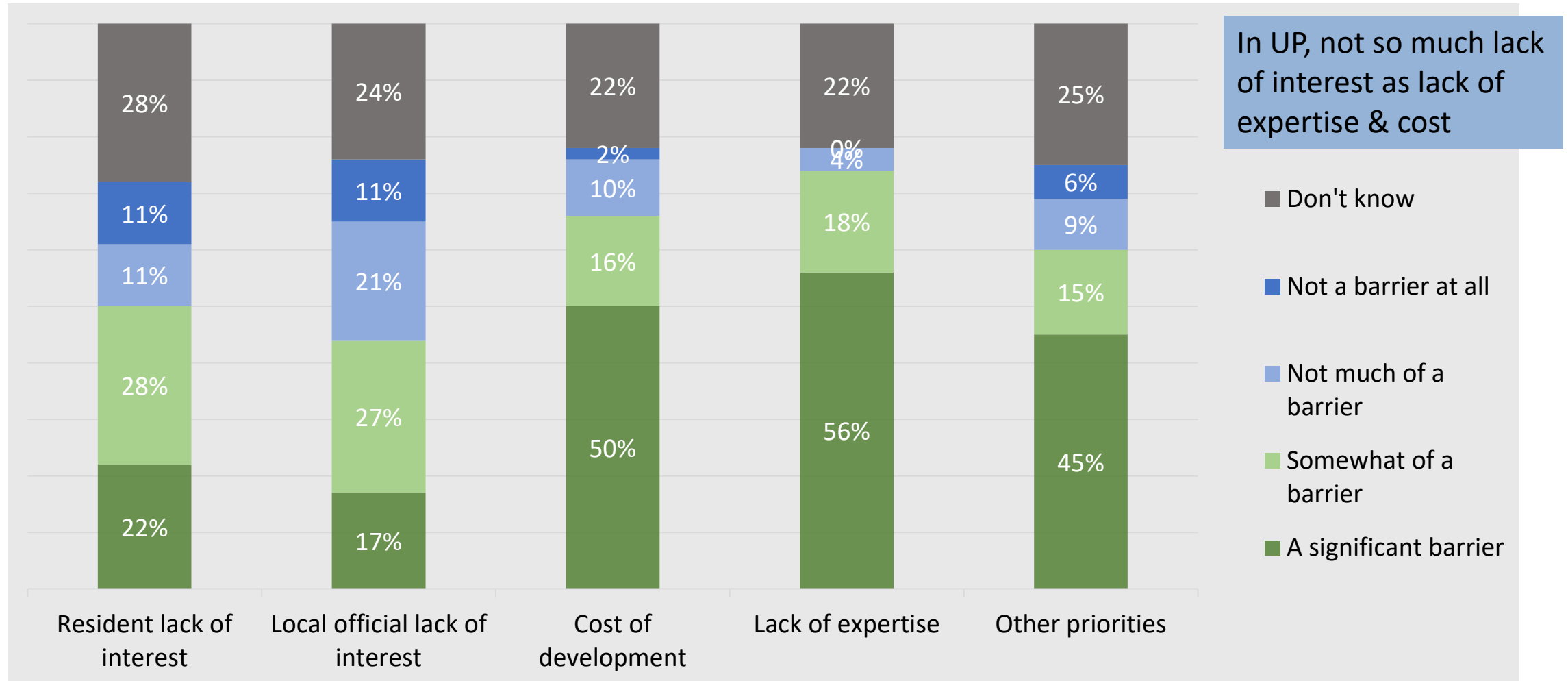


What are the barriers to developing energy policies? (among those who have not considered energy policy or feel it is irrelevant)

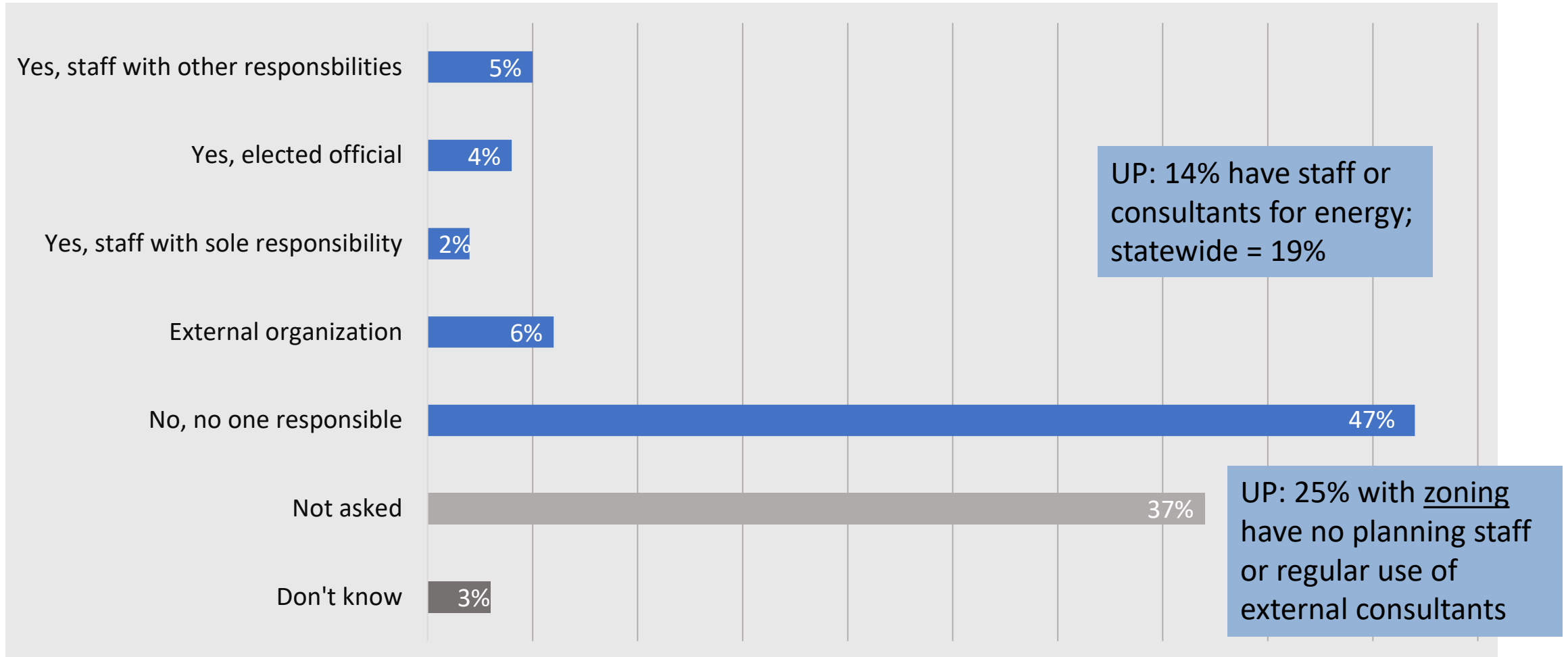


UP: What are the barriers to developing energy policies?

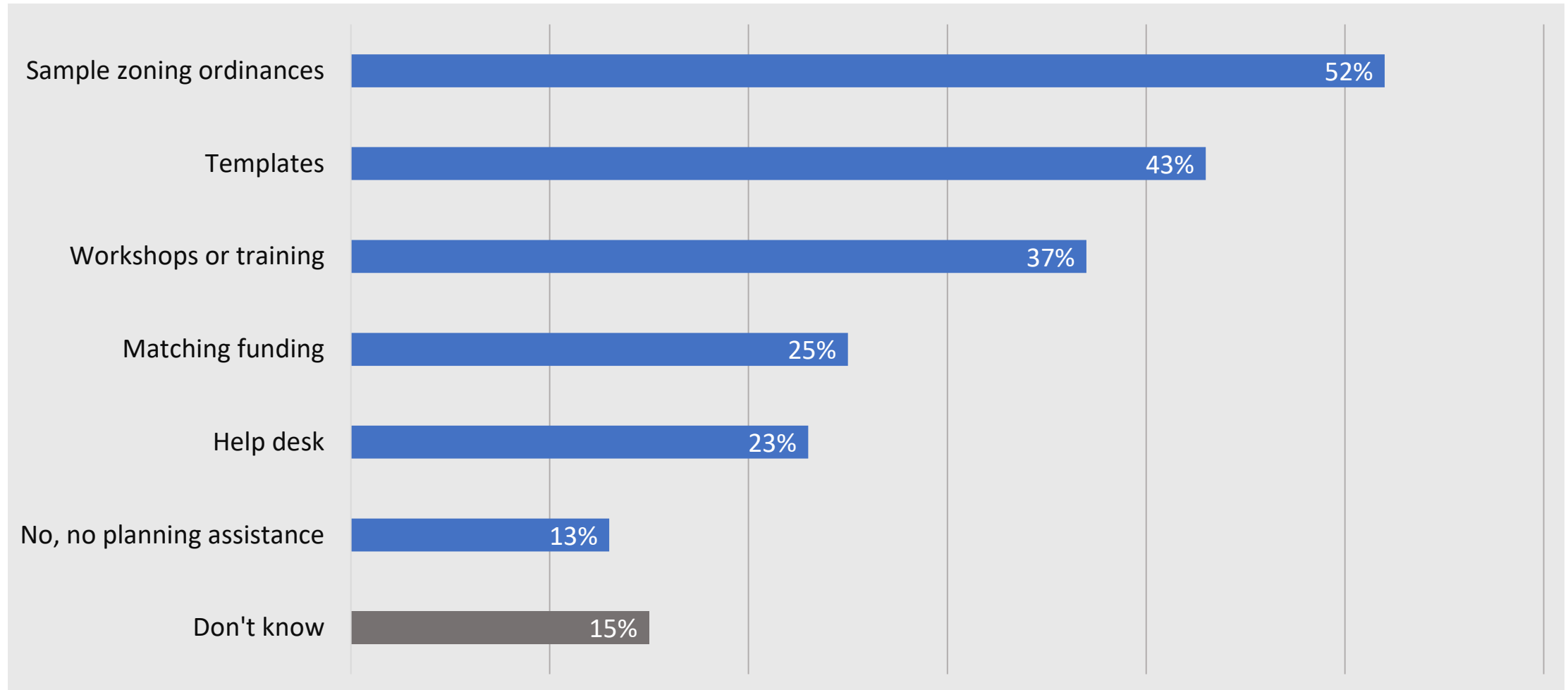
(among those who have not considered energy policy or feel it is irrelevant)



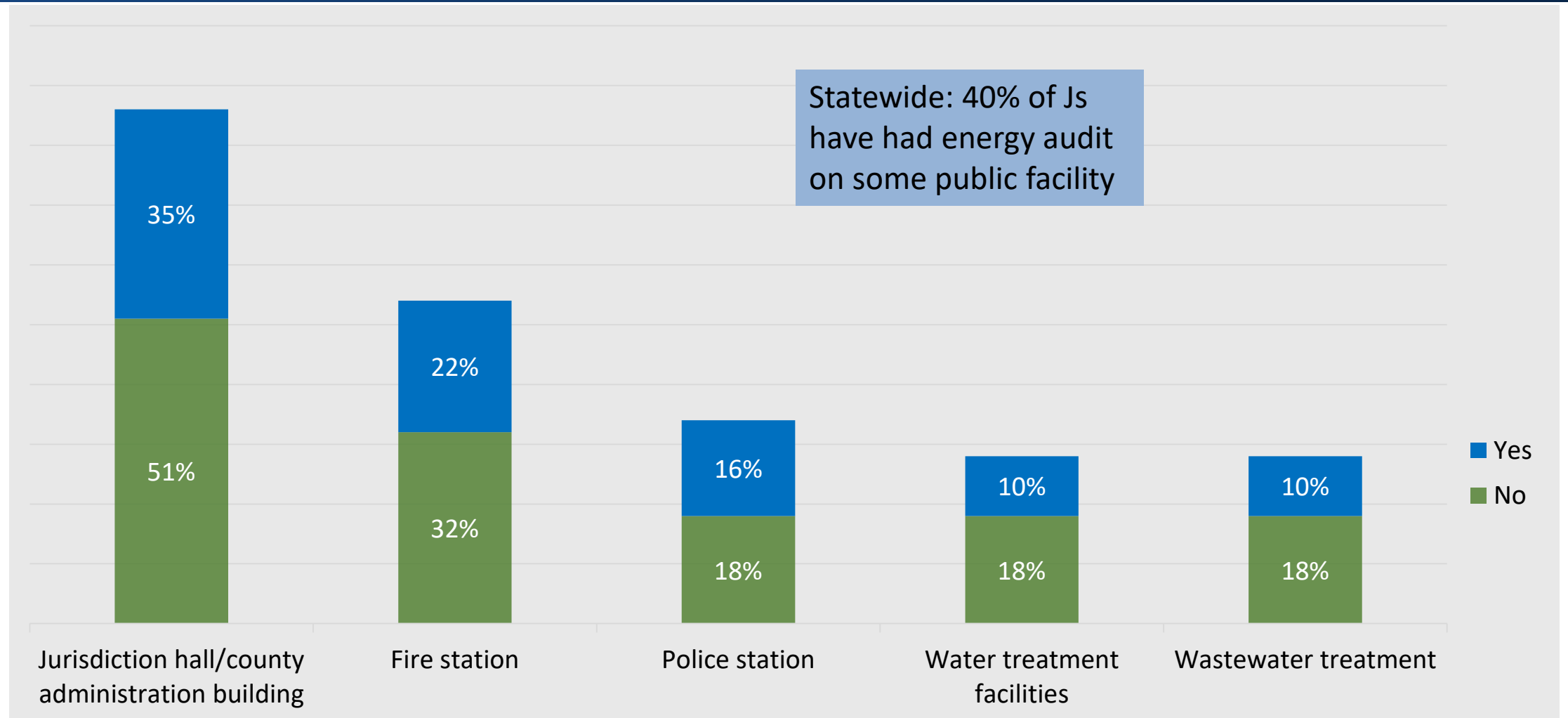
UP: Is there a person specifically responsible for addressing energy issues?



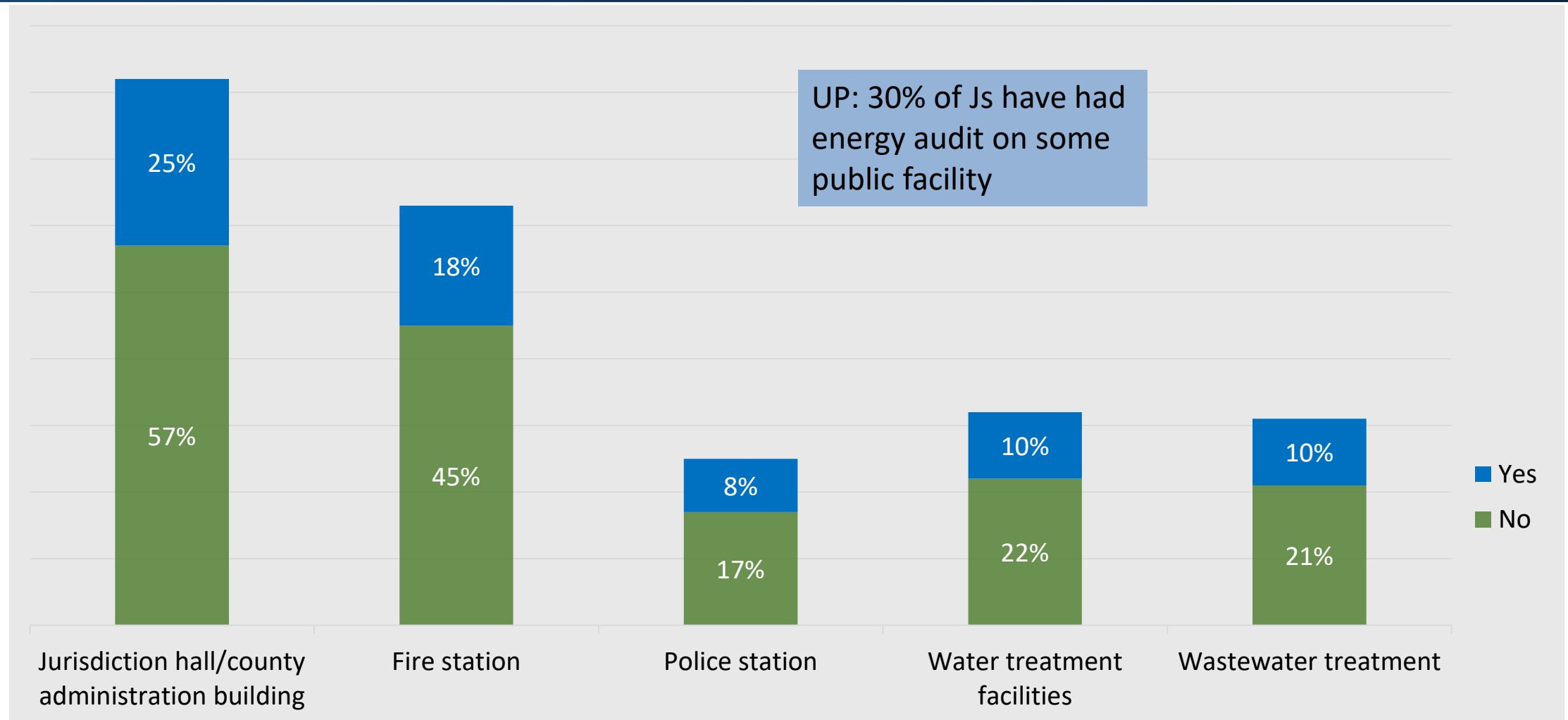
UP: Would your jurisdiction take advantage of any of the following?



Have energy audits been conducted...?

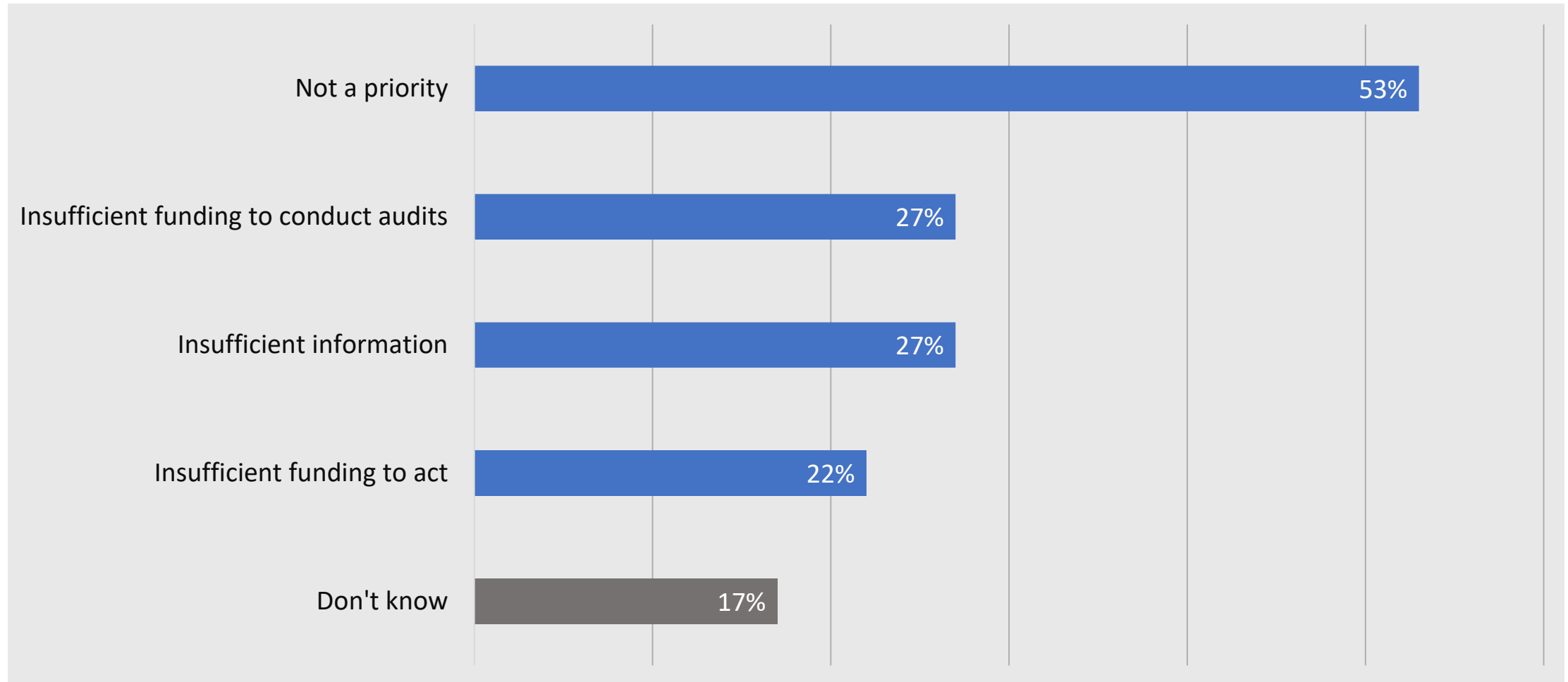


UP: Have energy audits been conducted...?

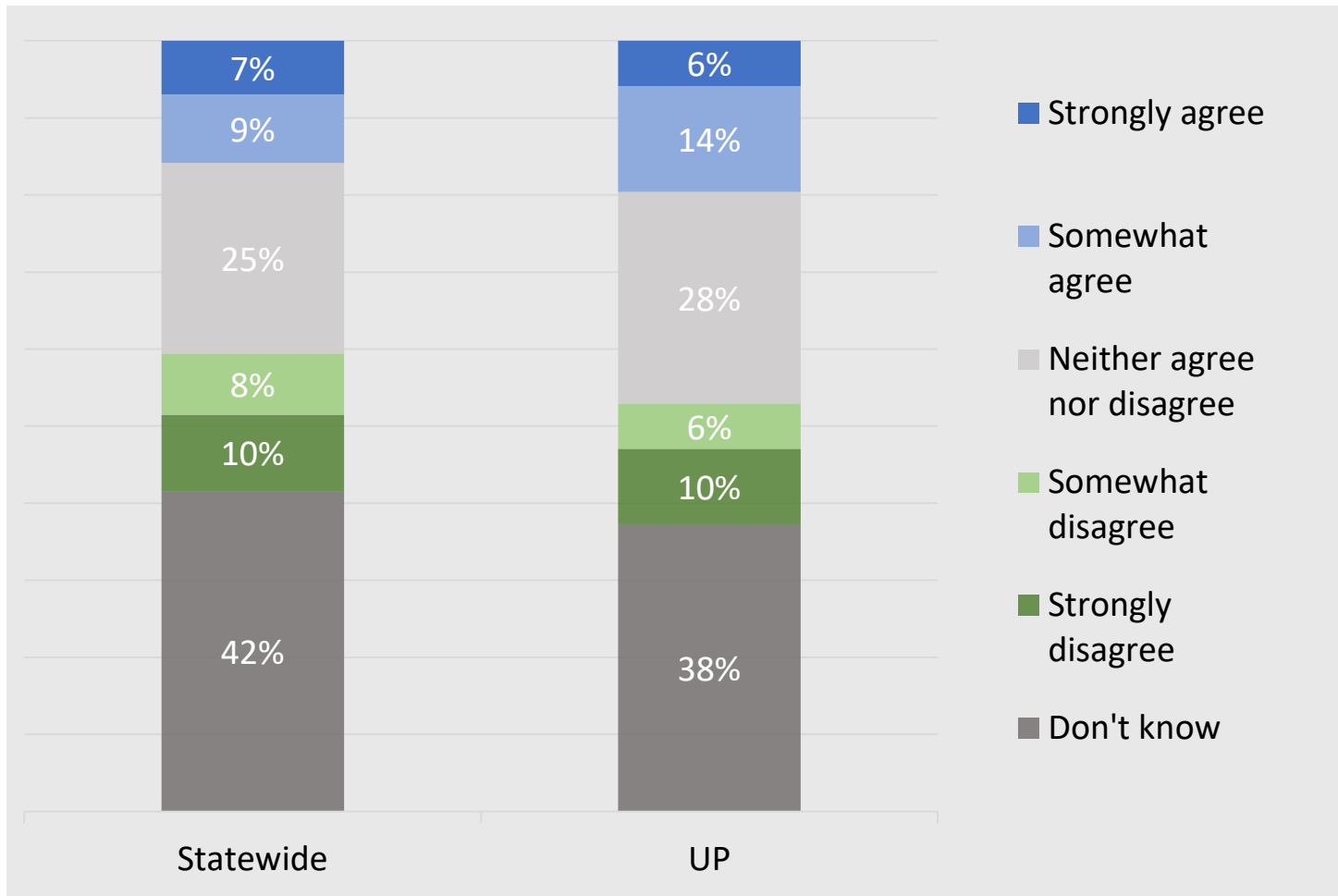


UP: Why have energy audits not been conducted on public facilities?

(among those who have not conducted any audits)



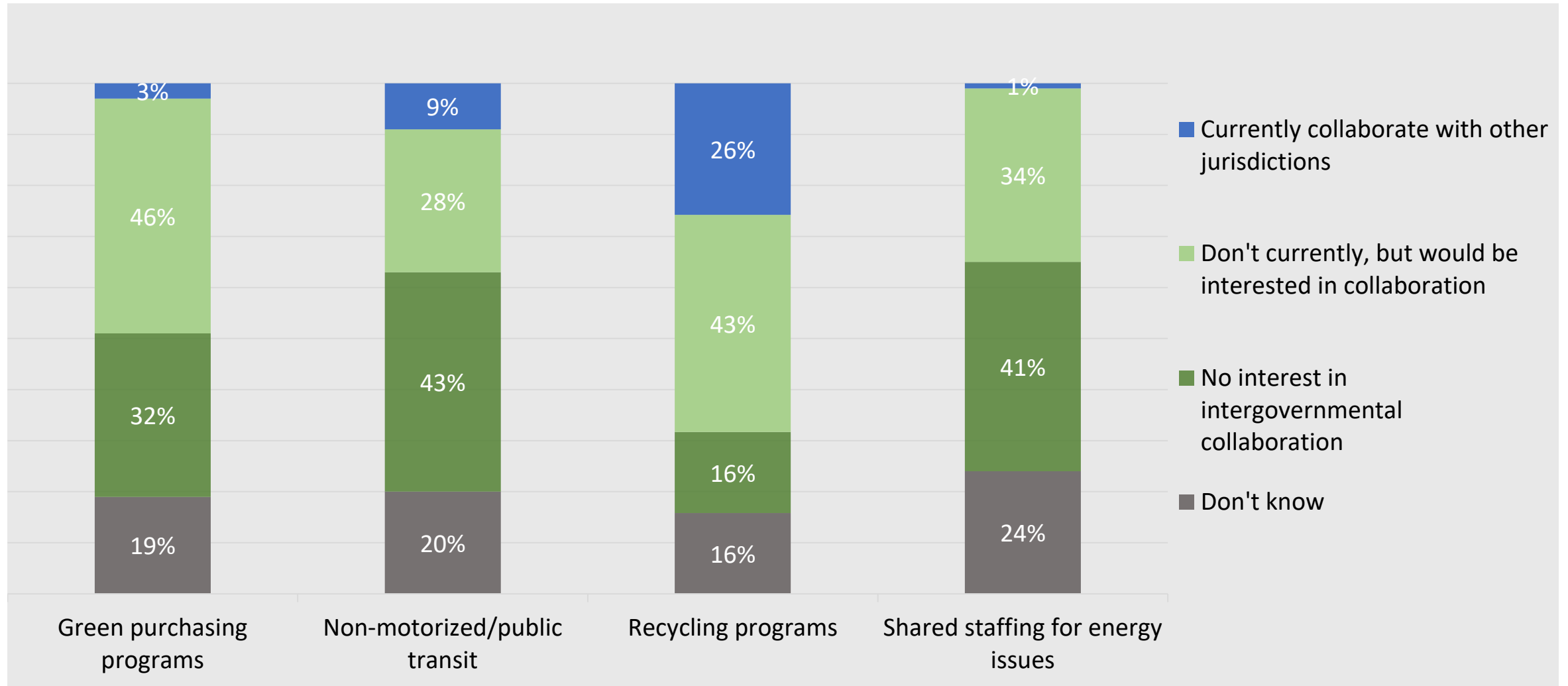
Do building inspectors in your jurisdiction struggle to enforce current energy codes?



“Codes are too complex and don't always apply to the types of construction within our community.”

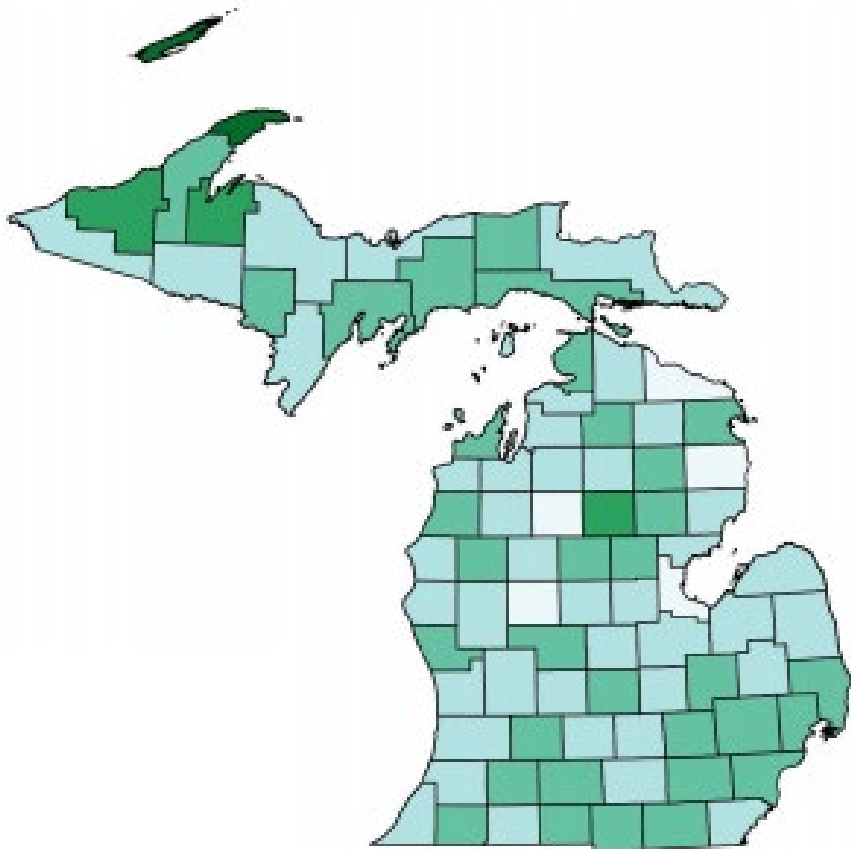
“I think we have one building inspector shared by more than one county. Distance, budget, old buildings, and political will are obstacles for us. We would love to hire even a basic code enforcer. If we had a building inspector, I think they would struggle with the fuel mixes and independent nature of our public. “

UP: Which best describes your jurisdiction's collaboration on the following issues?

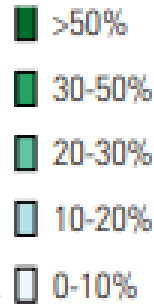


UP: Jurisdictions with interest in (but not currently) collaborating

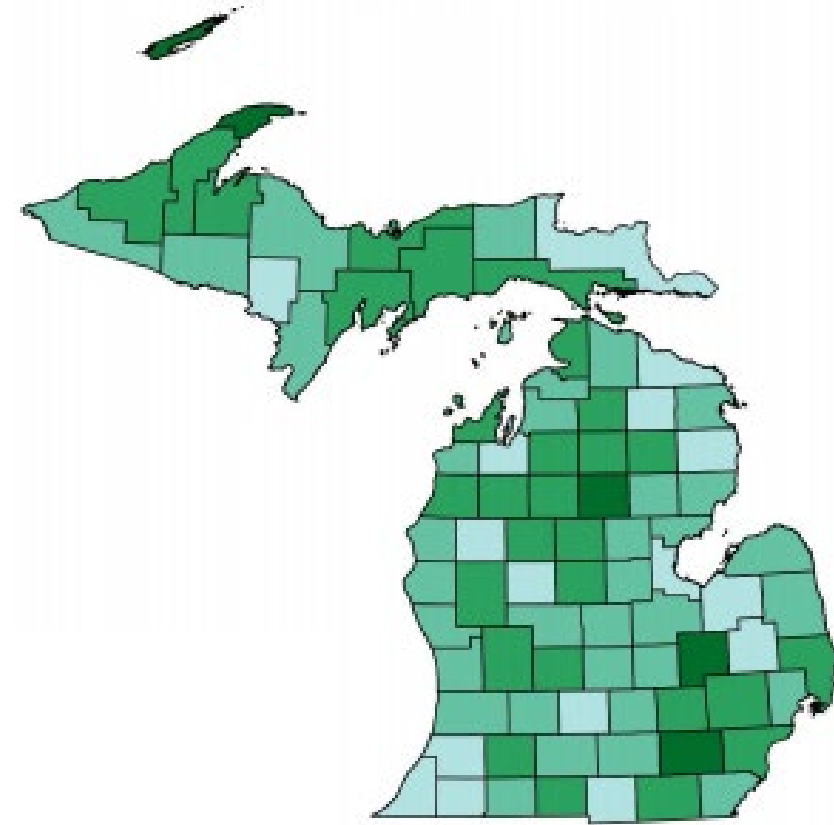
Shared Energy Staffing



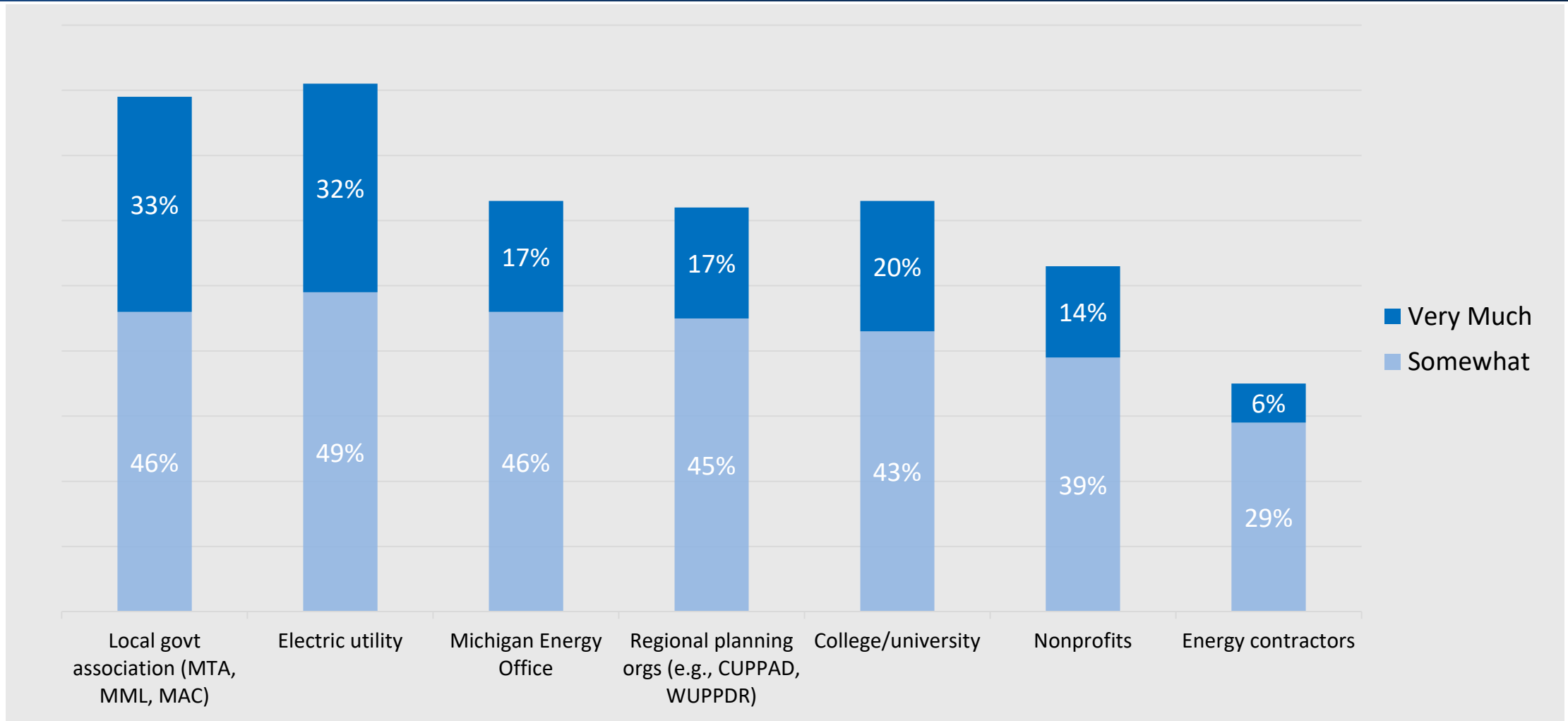
Percentage of jurisdictions



Green purchasing Programs



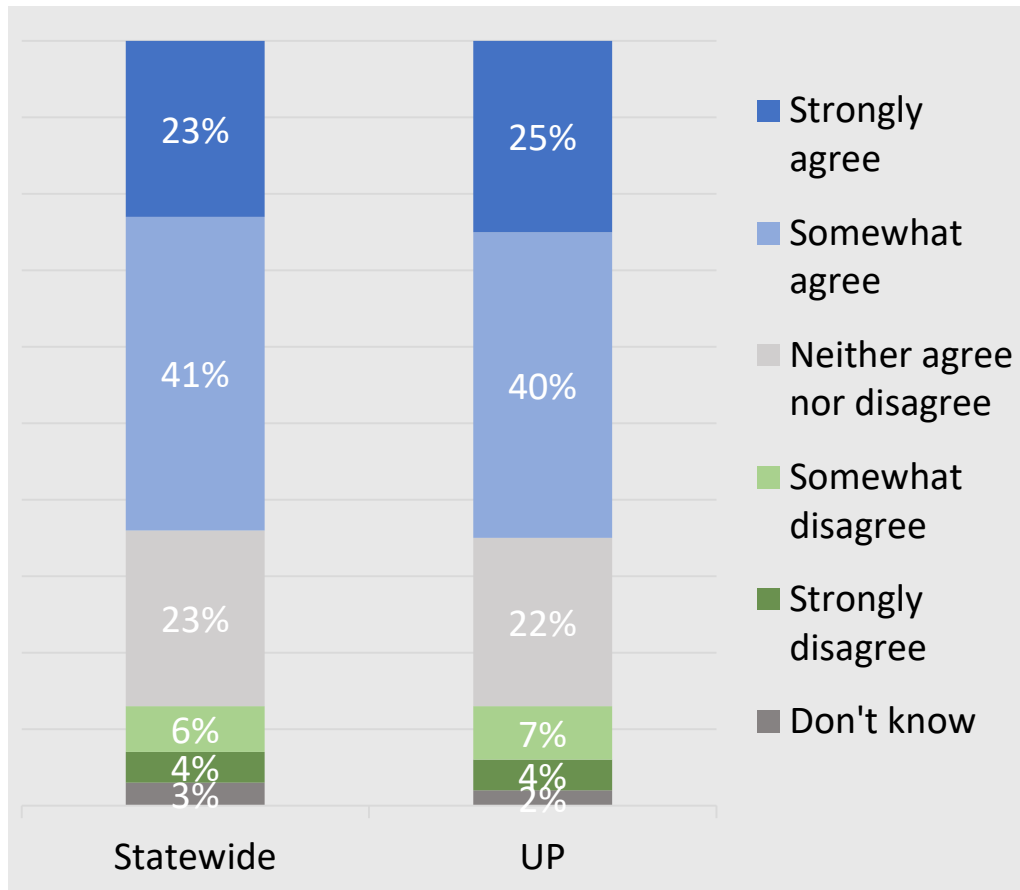
UP: How much do you trust the following as a source of information on energy?



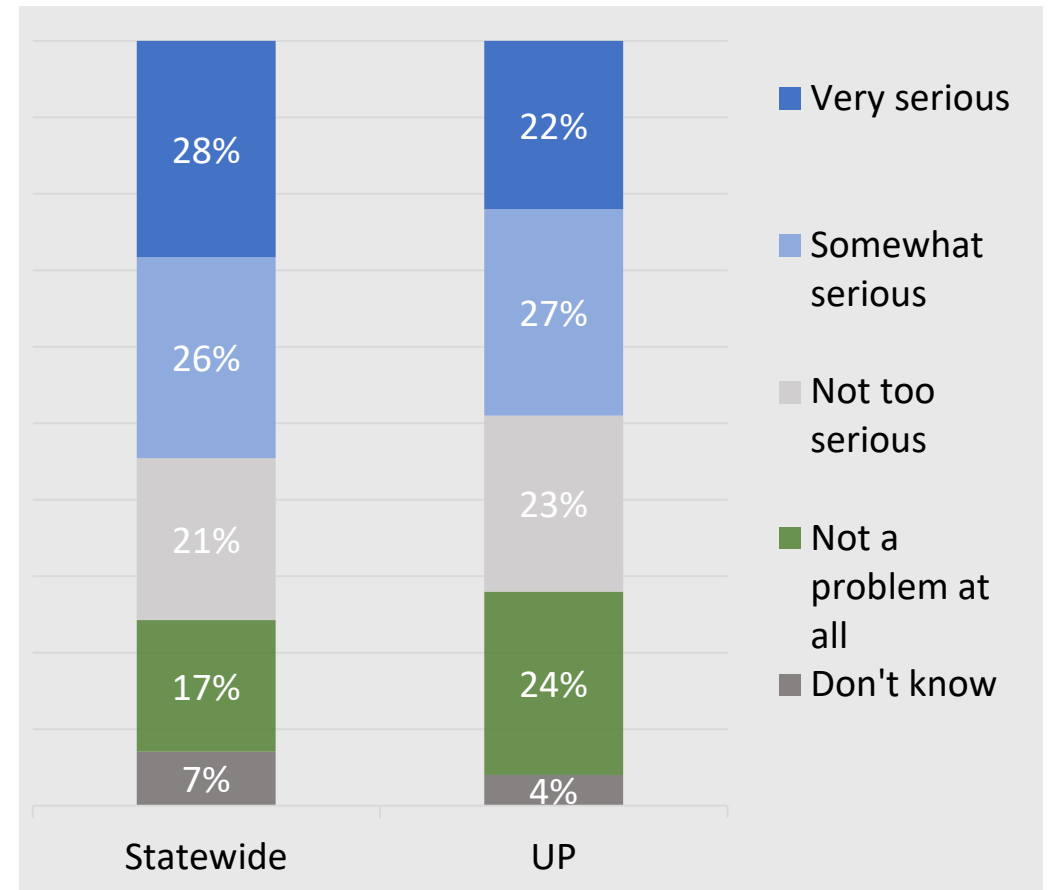
Source: Spring 2019 MPPS

UP: Environmental vs. climate message

“Promoting environmental sustainability is an important aspect of local government leadership”



“How serious of a problem is climate change?”



Statewide Take-aways

- Meet communities where they are
 - Leading (Catalyst Communities), interested middle, those who are uninterested
- Use peer-to-peer sharing to convey opportunity for low-cost municipal action
 - [Community Energy Management Webinar Series](#)
- Partnerships key
 - Increasing collaboration
- Education on EVs

U.P. Specific Takeaways

- Technical assistance esp. on community engagement, planning/zoning
- Opportunity for intergovernmental collaboration
 - Sharing staffing, green purchasing
- Messaging about environmental protection, economy really important

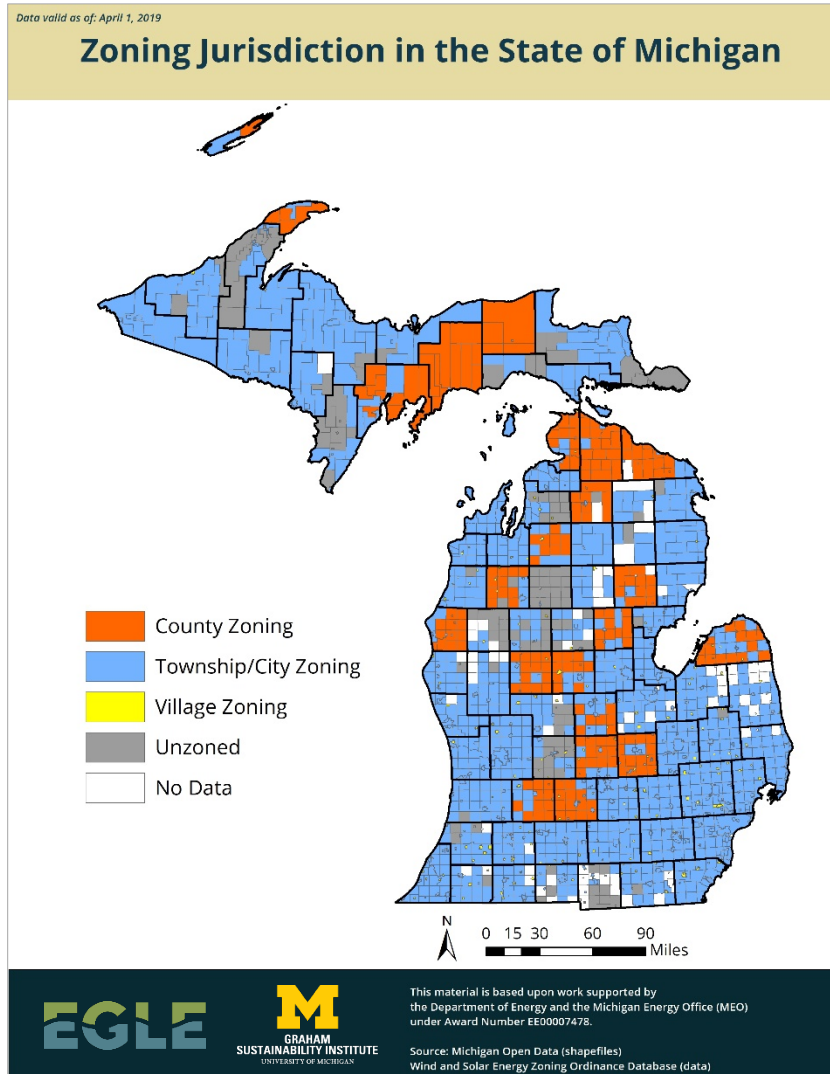
So much more in survey...

- Benchmarking / energy use data
- Renewables on public lands
- Renewable energy goals
- EV infrastructure needs / local policy making

- Able to do specific analyses; just ask
 - <http://closup.umich.edu/miles>

Resources for communities

Michigan Zoning Database



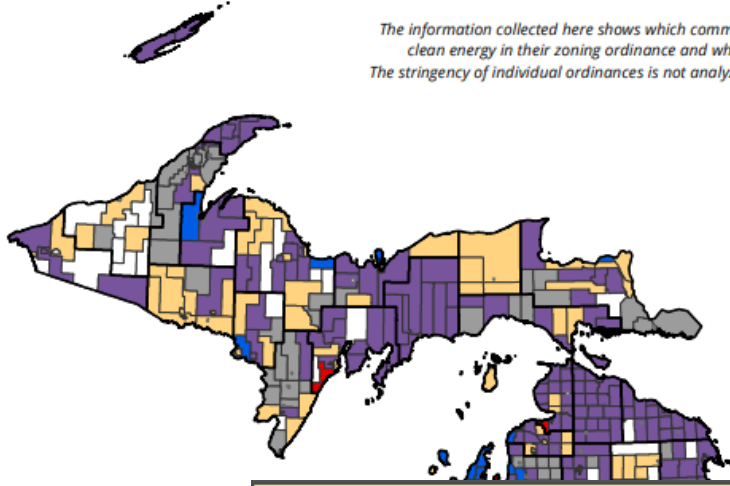
- Database of all zoning ordinances in the state; which have wind/solar content
- Help find peer communities
- Target outreach / technical assistance
 - Understand pros/cons
 - Proactively plan
- Available at <https://www.michigan.gov/energy/>

Michigan Zoning Database

Data valid as of: April 1, 2019

Zoning for Wind Energy - Michigan

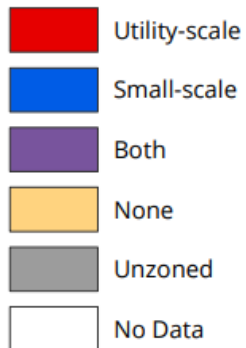
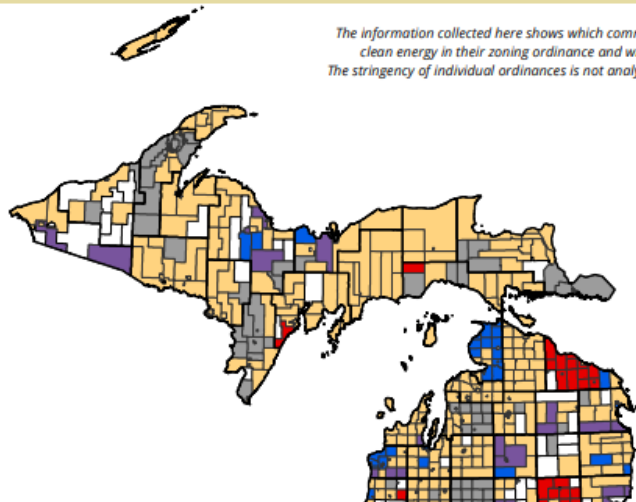
The information collected here shows which communities include clean energy in their zoning ordinance and which do not. The stringency of individual ordinances is not analyzed on this map.



Data valid as of: April 1, 2019

Zoning for Solar Energy - Michigan

The information collected here shows which communities include clean energy in their zoning ordinance and which do not. The stringency of individual ordinances is not analyzed on this map.



- In UP:
 - 57% of ordinances include wind
 - Some are out-of-date...
 - 6% include utility-scale solar
 - 9% include small-scale solar
 - Solar likely interpreted as accessory structure

Planning and Zoning Resources

- Curated repository of templates, guidance
 - [EGLE's Website](#)
- Case Studies, FAQs
 - Brownfield solar
 - Economic impacts
- March-April 2020 issue of Planning & Zoning News

Solar Resources

Solar energy development is rapidly growing in Michigan as technology and price continue to become more accessible. For both small-scale and utility-scale projects, the resources below can help identify the right policies for your community.

SOLAR IN YOUR COMMUNITY

Communities around the state are exploring solar power to offset the costs and emissions of other energy sources. Solar panels provide a flexible alternative to coal and gas powerplants that can allow communities to produce clean energy for local residents and the rest of the state. These resources will help you prepare, plan, and zone for solar energy production in your community.



Guidebook for Local Governments



Becoming Solar-Ready: A Guide for Michigan Governments, produced under a grant to the Clean Energy Coalition from the MEDC—Michigan Energy Office, includes sample permitting checklists, board and council resolutions, and planning/zoning language.

Comparison: Minnesota Guidelines



Grow Solar Minnesota: Local Government Solar Toolkit, produced by the Great Plains Institute, addresses the role of solar development in comprehensive plans and zoning ordinances and provides sample ordinance language.

Sample Ordinance Language



Model Zoning for the Regulation of Solar Energy Systems, produced by the Massachusetts Executive Office of Energy and Environmental Affairs, includes sample ordinance language for solar energy development of all sizes, along with recommendations.

Integrating Solar Energy into Local Plans



Integrating Solar Energy into Local Plans, one of the American Planning Association's Solar Briefing Papers, is a short guide on incorporating goals, objectives, policies, and actions that support solar energy use into local plans.

Sample Master Plan Language



Planning for Solar Energy, produced by the American Planning Association, is an in-depth report on how planners can promote solar energy use through local policy and action.

More Resources



A table of additional documents and websites on preparing, planning, and zoning for solar energy production.

Other related activities

- Webinar series
 - Benchmarking, audits
 - Code adoption primer
- Integrating work of other Energy Office grantees
 - RMI assistance for advanced communities
 - WUPPDR guidance
 - EV convenings
- Utility-scale solar taxation clarification

Any questions?

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