

Puerto Rico Energy Week 2023

11 - 24 Feb 2023

Poll results





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- How urgent is solving problems regarding resilience, energy and equity and for Puerto Ricans?
- How satisfied are you with the pace of progress?
- Day 1 What is the most important issue to discuss today?
- To achieve Puerto Rico's desired future, a key issue to address in 12 months is
- Regarding the electrification of transportation, to achieve Puerto Rico's energy, resilience and equity goals, a critical obstacle to collectively overcome in 12 months is...
- Regarding workforce needs, a critical issue to address in the next 12 months is
- Day 2 What is the most important issue to discuss today?
- To achieve Puerto Rico's energy, resilience and equity goals, a critical obstacle to collectively overcome in 12 months is ______.
- Regarding Municipalities, to achieve Puerto Rico's energy, resilience and equity goals, a critical obstacle to collectively overcome in 12 months is ______.





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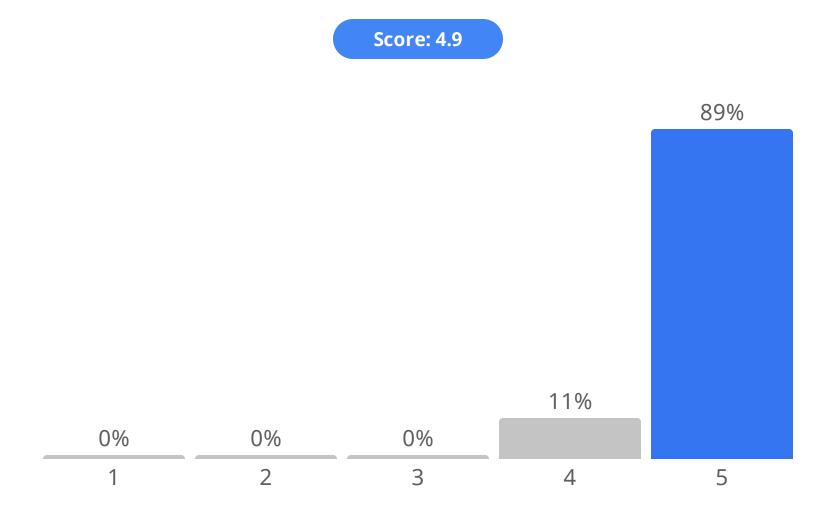
- Regarding the nexus of energy and water, to achieve Puerto Rico's energy, health and equity goals, a critical obstacle to collectively overcome in 12 months is ______.
- To achieve Puerto Rico's energy security goals, a critical obstacle to collectively overcome in 12 months is ______.
- Regarding communities, to achieve Puerto Rico's energy, resilience and equity goals, a critical obstacle to collectively overcome in 12 months is:
- Post Event Survey
- What is a North Star metric for equity that gets us playing to win at what matter most?
- Day 2 Who's willing to volunteer?
- Which Puerto Rico mayors are leading best on resilience, energy and equity?
- PR Community Action Challenge Who's willing to volunteer?
- PR Community Action Challenge Who's willing to volunteer?
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How urgent is solving problems regarding resilience, energy and equity and for Puerto Ricans?



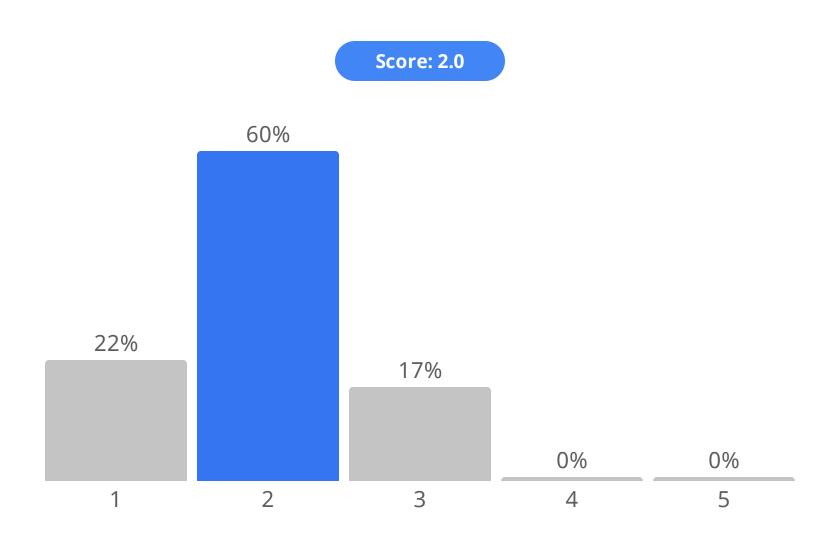






How satisfied are you with the pace of progress?







Day 1 - What is the most important issue to discuss today?



Equitable holistic approa

How to increase the pace

Impact & Benefit

New business models

Facilitate microgrids

Low income solar access

Jobs Trust

Political will
Trust

Resiliency
Where to get fun for proj

Energy KPIs and Due Dates

Utility scale energy

System Planning Wicrogrids

stility scale energy

System Planning Wicrogrids

Solution providers

Stakeholder engagement

Execution

Bureaucracy

_{Kpi} Renewables

fair financing

Equity

Solar for residential

Reliable energy& storage Funding

Financing

Sustainability Workforce certification Energy cost

Industry+Utility+Gov

Law 17 compliance



To achieve Puerto Rico's desired future, a key issue to address in 12 months is _____.



"Increase stakeholder engagement, bring more technology to the island and establish policies that will benefit Puerto Rico." - Maria Hilda Rivera, LUMA Energy

35 %

"Coordination." - Juan Carlos Perez Bofill, PR Department of Housing

19 %

Energy Strategies for Owner/Operators - Mariette Sanchez, Xcala Strategies

8 %

"The agility to coordinate the procurement of equipment and services in order to achieve resilient and sustainable goals for the betterment of our infrastructure." - Guillermo Gil Díaz, Aerostar Airport Holdings



Regarding the electrification of transportation, to achieve Puerto Rico's energy, resilience and equity goals, a critical obstacle to collectively overcome in 12 months is...



"Education." - Ignacio Diaz, Glenn International

33 %

"Future Load Forecasts, Advanced Metering Infrastructure (AMI), Distribution System Constraints, Controllability and Communications." - Commissioner Ferdinand Ramos, PREB

33 %

"Collaboration." - Robert Vargas



Regarding workforce needs, a critical issue to address in the next 12 months is _____. (1/2)



"High turnover and lack of skills resulting in improper installations (Solar Workforce)."- Carlos Velasquez, IIREC

6 %

"Installer Financing." - Thomas King, Fundacios Borincana

3 %

"Add workers and professionals to the industry for construction projects." - Carlos Rodriguez, AGC PR

13 %

"Providing affordable and reliable energy, transportation and housing options to help businesses attract and retain the best talent, and ensure their workforce is productive and successful." - JB Cuartas, IEM



Regarding workforce needs, a critical issue to address in the next 12 months is _____. (2/2)



"The importance of establishing a Grassroots Effort." - Joe Sarubbi, IREC

28 %

- Ana Laura Miranda, ConPRmetidos
- 0 %

"Finding a way to expand the number of training programs in the energy sector." - Christian Carlo, Departamento de la Vivienda



Day 2 - What is the most important issue to discuss today?



Communication with agenci Financial literacy

> Execution Small business grants Financial viability

Inclusive innovation Private investment

Health

Workforce developement public awareness

Reliability

Opportunity Diversity education

Financing Innovation

Priority subscribers

Resiliency

Projects

Implementation Resilience Workforce

Reliability and affordabi

A "Pathway"

Air quality Risk assessment

No credit-bankrupt utilit

vulnerable populations

Permittina

Educate Community

Execution of projects

Solar hybrid & microgrids

Energy opportunities

Apprenticeship programs



To achieve Puerto Rico's energy, resilience and equity goals, a critical obstacle to collectively overcome in 12 months is _____.



"Collaboration."- Maretzie Díaz Sánchez, PR Department of Housing

34 %

"The design of a \$1B federal program that can be quickly implemented, stakeholder informed, and utilizes innovative financing mechanisms to maximize available funding." - Marisol Bonnet, US DOE

45 %

"Challenge pre-existing assumptions and conceptions with databased arguments." - Manuel Laboy, COR3

Regarding Municipalities, to achieve Puerto Rico's energy, resilience and equity goals, a critical obstacle to collectively overcome in 12 months is _____.



"For municipalities to renew their ministerial statement, activate themselves as a key participant of the island's energy resilience goals and endeavor to make their constituents stakeholders in Puerto Rico's energy future." - Randy Freeman, Antilles

57 %

"The overregulation and government intervention that hinders private sector investments and innovation in energy-efficient equipment and renewable energy projects." - Dr. Leonardo Valentin, Professional Hospital Guaynabo

33 %

"Streamlining permitting and bureaucratic processes." - Emilio Colon-Zavala, ECZ Group

Regarding the nexus of energy and water, to achieve Puerto Rico's energy, health and equity goals, a critical obstacle to collectively overcome in 12 months is _____.



"Energy Optimization Master Plan." - Joel Lugo, PRASA

32 %

"How to facilitate and deliver the overall benefits from Federal investments in water and clean energy infrastructure to disadvantaged communities in Puerto Rico." - Carmen Guerrero Pérez, US EPA



| To achieve Puerto Rico's energy security goals, a critical obstacle to collectively overcome in 12 |
|--|
| months is |
| (1/2) |



"Recognize the transition of the ESF-12 membership from a purely gov't structure to a dynamic PPP dictating changes on how the partnership shares information & make decisions that benefit customers of the Puerto Rico electric grid" - Michelle Fraley, LUMA

50 %

"Continue fostering the ESF 12 working Group meetings, 2023 Hurricane Season Impacting Energy Critical Infrastructure & Fuel Contingency Planning and Distribution." - Orlando Olivera, FEMA

18 %

"The siloed security functions. We need to integrate both worlds by converging security functions. View and manage cyber and physical security as one." - N'Gai Oliveras, US DHS

| To achieve Puerto Rico's energy security goals, a critical obstacle to collectively overcome in 12 |
|--|
| months is |
| (2/2) |



"Address the main electric generation challenges." - Pedro Martinez, EcoEléctrica



Regarding communities, to achieve Puerto Rico's energy, resilience and equity goals, a critical obstacle to collectively overcome in 12 months is:



"Staying engaged and informed." - C.P. Smith, Cooperativa Hidroelectrica de la Montaña

18 %

"Proveer a las comunidades el apoyo necesario para que desarrollen su organización comunitaria con el fin de dar pié a los proyectos de resiliencia energética/Provide communities with support to develop energy resilience projects" - Loraima Jaramillo, IRE

29 %

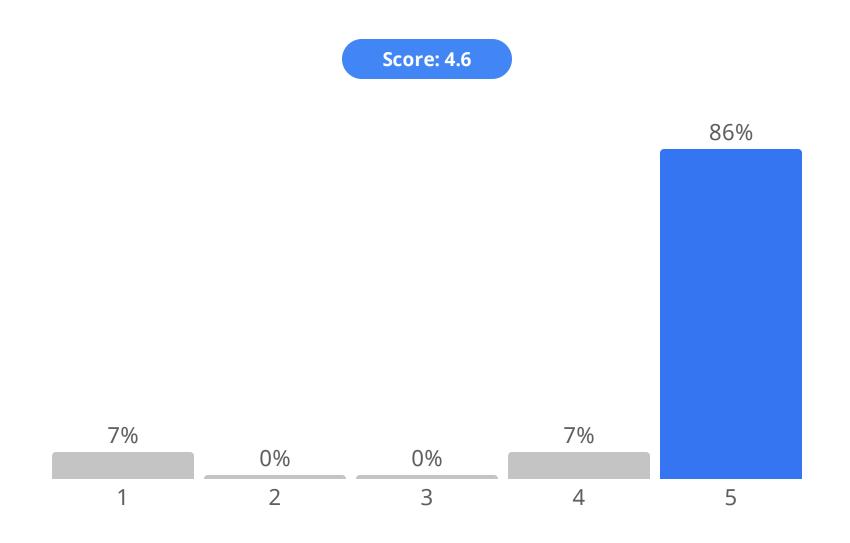
"Understand the needs of communities in different regions of Puerto Rico and ensure that these are covered in the programs that are being created with federal funds." - Jonathan Castillo Polanco, Hispanic Federation



Post Event Survey (1/4)

0 1 4

How likely are you to recommend AEG events? (5 = very likely)





Post Event Survey (2/4)

0 1 3

In one word, how would you describe your experience?

Knowledge Learning Experience
Great Thoughtful Amazing

Empowering

Invigorating enlightening Enlightning
Great Networking Though Summit

Collaborative



Post Event Survey (3/4)

0 1 0

Please leave us a testimonial and include your name.

(1/3)

- HG is a great catalyst for and facilitator of collaborative thought.
 Javier Rúa
- Los paneles trataron los temas más retantes e importantes de la transformación eléctrica de Puerto Rico. Gracias.
- As someone whose professional background is in Finance and Wealth Management, I'm so appreciative of everyone's willingness to explain their processes, business

- models, and vision for Puerto Rico while opening doors for our technology (Batricity) here in Puerto Rico Jason William Negron
- a rewarding learning experience for professional and personal development. Jeanne Deliz López
- Increíble networking and great topics & necessary goals and objectives highlighted. I believe the





Post Event Survey (3/4)

0 1 0

Please leave us a testimonial and include your name.

(2/3)

timeline established are unrealistic, but will monitor performance and traction to complete tasks.... Ignacio Díaz.

- I came with little to no notice and I
 have been exposed to new ideas
 and programs that are currently
 going on with the revitalization of PR
 and how the process of action plans
 work.
- Great logistics and selection of speakers and topics. HG Ang Jess,

- not great but excellent work guys. Carlos Tejera
- It is one of the most professional, compromised and hands on conference. Edwin Acevedo Rivera, MEM
- This event helps motivate and encourages developing a pathway for improvement on current events and industry challenges
- I have seen the efforts of the AEG Challenge





Post Event Survey (3/4)

0 1 0

Please leave us a testimonial and include your name.

(3/3)

pay off in invaluable ways, but the biggest benefit is meeting diverse stakeholders exactly where they are and then labor together for a shared solution of succes!





Post Event Survey (4/4)

Any suggestions? (1/2)

- I think there could be a little less diplomacy and more accountability regarding some Commonwealth of PR agencies that have had no tangible impacts in the resilient renewable energy space, despite substantial federal funding commitments, and even with a Democratic White House trying to push resources out the door. Time is running out.
- More community participation.
 More attention to the education subject. And I don't

0 0 9

- know if it is possible to bring the sociological impact related to the hurracaines (lack of electricity and the impact on mental health) This was a wonderful week! Mariana García- Justicia Energética
- Next Energy Week 2024 should be in Ponce because that a good location to have the participants to go on a tour to a community in need of assistance.
- Keep the interactive action plans
- Maybe consider sino Ted Talks type sections





Post Event Survey (4/4)

Any suggestions? (2/2)



- It has to be repeated next year!!!
- Including more local community leaders and endusers to be part of the conversations and development of deliverables.
- For PR Energy Week next year, I'd love the opportunity to have a site visit to a few of the communities that need the most investment.
- Leave the Thought Summit as an exclusive event and open up the others to more accesible tickets

which will draw larger crowds. Also liked the format/room of last years Wednesday night event much better.





What is a North Star metric for equity that gets us playing to win at what matter most? (1/2)



- Consistency
- Equal access
- Increase resilience for LMI communities
- Equity
- Special needs
- We need to develop a robust, sustainable and affordable to everyone energy/power system that will boost the economic development of the island and, at the end, create better opportunities for everyone and equal accessibility to growth.

- Diversity and Inclusiveness
 amongst owners and operators in
 the decisions being made for
 communities
- Equal access at equal cost to resources.
- Regenerative
- Saying yes to the needs of the community
- Equal access to reliable, resilient, affordable and clean energy
- .
- Efficiency
- Affordable energy





What is a North Star metric for equity that gets us playing to win at what matter most? (2/2)



- Clear visibility of most vulnerable and a breakdown of the needs.
- How can we provide the same access with no barriers
- Option
- by providing reliable, consistent, dependable energy with a defined plan for lowering costs every 12 months by at least 10%.
- Having equal opportunity for the privilege and unprivileged.
- Good paying jobs in the RE field
- Constant Power day by day, measured
- Energy/water \$ burden for

all family households

- Affordable reliable energy for all
- Opportunity availability
- Same benefit to all
- MWs installed

Beth



Day 2 - Who's willing to volunteer?



Anthony Perez

Joaquin Altenberg Luis Quijano Rafael Roig Loraima Tom King Zach Wilson

Cristian Hernandez

Abimarie María Elena Wanda Rios Joana Magdalena

Jema Teresa Morales

Jay Hasty

Gus Fusaro

Cim Howell

Adiel Morales



Which Puerto Rico mayors are leading best on resilience, energy and equity?



Gardy Colón Orocovis

Luis Javier Hernández

Ramon Hernandez - Juana D

San Sebastian Major

Miguel Romero Edward O'Neill

Luis Javier Hernández Vil

Cim Howell



PR Community Action Challenge - Who's willing to volunteer?



Maria Elena **Abimarie** Mariette Sanchez Wanda Rios Jemaris Martes Soleil Thon Jeanne López Loraima Jonathan Castillo C. P. Smith

Ana Maria Ruiz

Claudia Villar-Leeman



PR Community Action Challenge - Who's willing to volunteer?



Claudia Villar-Leeman Wanda Rios Loraima



PR Cities Stakeholder Challenge - Who's willing to volunteer?

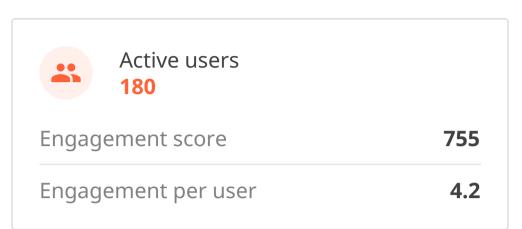


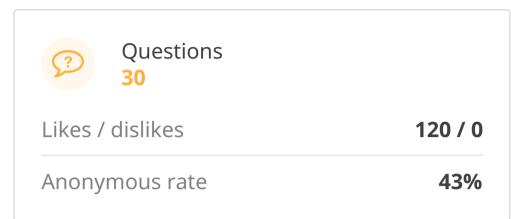
Mindy Horowitz
Roberto Muniz Adiel Morales

Jason Negron Soleil Thon
Jemaris Martes
Randy - comment
Olga Abinader



Event summary report Puerto Rico Energy Week 2023





| Poll votes 605 | |
|----------------|----|
| Polls created | 19 |
| Votes per poll | 32 |

Popular questions

Table #2

0 7 14 16

To ensure we have a successful \$1b funding implementation M1: Mapping and prioritizing beneficiaries M2: Data collection and demand modeling M3: Create a map with the updated information M4: Firsts installs and quickly deployment of projects.

Table 1 - Lifting Voices of Communities

0 7 14 1

Empowering municipalities to know about funding opportunities. M1: Identify community 15 leaders, M2: Engage majors to support leaders, M3: Have leaders identify and compile RFP/RFI sources, M4: Training system for municipalities

Anonymous

0 🕩 13 👈

Table 1: M1-Define list of questions for vulnerability index, M2-Find/integrate existing data, M3-vulnerability GIS maps/metrics

Table 7 - Build on Success

0 7 12 16

M1 create collaborative mechanisms for data collection, stakeholder engagement, and outreach M2 Develop capacity building program M3 prioritize greatest need, farthest distance from substation M4 RFP & Award

Anonymous

0 7 11 16

T4: PEOPLE VOICE M1: Use PR100 to identify the island Regions and community leaders. M2: Train the Trainers. M3: Convene Workshop to gather the community needs. M4: Summarize and share information with the government to address specific needs.



| Influer | ntial users | |
|---------|--|------------------------|
| T | Table 1 - Lifting Voices of Communities | 4 2 6 21 |
| T | Table #2 | 4 2 6 16 |
| T | Table 7 - Build on Success | 4 1 6 12 |
| T | Table 2 - Tiered Permit Study | 4 1 6 9 |
| T | Table 5 - starting small in the South East Communities | 4 1 1 6 |

