

# Demographics and Medical Needs

# Power Dependence / Medical Preparedness Checklist

# Puerto Rico Government and Key Organizations Contacts



## **Demographic and Medical Needs for Puerto Rico**

The following report focuses on Puerto Rico residents living at home (not hospitalized) who have electricity-dependent medical needs or temperature-sensitive medications.

### **Executive snapshot**

- Puerto Rico is **older than the U.S. average**: in 2024, **24.6**% of residents were 65+ (vs. 18% U.S.). That age mix elevates the share of people relying on powered medical devices at home. <u>Census.gov</u>
- Chronic disease burden is high: credible estimates put adult diabetes prevalence in the 10.9%–20% range (differences reflect methods/years), implying large numbers who may need refrigeration for insulin and other injectables. International Diabetes Federation
- The HHS emPOWER system (Medicare only) has identified tens of thousands of electricity-dependent people in PR—>44,000 according to a 2024 investigative summary—underscoring the at-home vulnerability during outages. empowerprogram.hhs.gov

### 1) Who at home is most at risk when the power goes out?

### A. People using electricity-dependent medical/assistive equipment

Common home devices and typical power needs (plan for the high end to be safe):

- Oxygen concentrators (stationary 5–10 L/min): ~275–600 W continuous. Larger 10-L units draw more; portable units are lower but need frequent battery swaps. Oxygen Concentrator Store
- Portable oxygen concentrators (POCs): often <100 W while running; carry extra batteries and vehicle charger. <u>Limitless Health</u>
- **Ventilators (home):** roughly **50–300 W** depending on model/settings; cannot tolerate interruptions—use battery or UPS with generator fallback. **EcoFlow**
- CPAP/BiPAP: battery-capable; plan dedicated backup packs and spares. readynapacounty.gov
- Nebulizers, suction machines, enteral feeding pumps, infusion pumps, apnea monitors, powered wheelchairs/scooters, positioning beds: all require charging or continuous power; the FDA and Ready.gov provide device-specific outage guidance. <u>U.S. Food and Drug Administration</u>

Practical note: The **HHS emPOWER Map** (used by responders) shows counts of *Medicare* beneficiaries with claims for electricity-dependent DME (oxygen, vents, etc.) by county/ZIP—useful for estimating hotspot neighborhoods in PR. empowerprogram.hhs.gov

### **B.** People storing temperature-sensitive medications

- Insulins should be refrigerated 36–46°F (2–8°C); in emergencies insulin may be used at higher temps until replacement is available (do not freeze). <u>U.S. Food and Drug Administration</u>
- Other home meds commonly needing refrigeration include GLP-1s (e.g., semaglutide/Ozempic),
   biologics (e.g., adalimumab/Humira, etanercept), certain reconstituted antibiotics (e.g., amox/clav),
   and eye drops (e.g., latanoprost). GoodRx

### C. Conditions prevalent in Puerto Rico that intersect with outage risk

Diabetes: 2024 IDF estimate 10.9% of adults (≈346k); alternative analyses suggest ~19–20% in 2021–2022. Refrigeration and device-charging (glucometers/pumps) are key.
 International Diabetes Federation

- Chronic kidney disease / dialysis: PR shows high CKD prevalence (~16.8%) in regional comparisons;
   ~8,000 residents had ESRD circa 2020 (PR Health Dept). Home peritoneal dialysis users need power for cyclers, refrigeration for some supplies, and clean water. <a href="Medscape">Medscape</a>
- Respiratory disease: Puerto Ricans have historically higher adult COPD prevalence than many U.S.
  groups; asthma remains a significant burden—driving reliance on oxygen, nebulizers, and air quality
  control. CDC
- **Aging:** With **one quarter** of PR residents 65+, device dependence (oxygen, mobility, monitoring) is structurally higher. Census.gov

### 2) Device-by-device planning checklist (home users)

### Oxygen concentrator (stationary):

- Target backup: battery/UPS bridging to a generator; plan for 600 W continuous to size safely. Keep spare oxygen cylinders for non-electric fallback. <u>Vitality Medical</u>
- Register with power utility and first responders as a **medical baseline**/priority customer where available; the FDA recommends notifying both. U.S. Food and Drug Administration

#### Ventilator:

 At least one full-capacity external battery + generator plan; test switchover. Keep emergency manual resuscitator (bag-valve) per clinical guidance. <u>U.S. Food and Drug Administration</u>

#### CPAP/BiPAP:

 Dedicated battery pack(s) sized for 1–2 nights; vehicle DC adapter; note that one missed night may be tolerable, but plan to resume quickly. <u>readynapacounty.gov</u>

### Feeding/infusion pumps, suction, nebulizer:

 Keep charged spares, manual backups (gravity feeds, MDI spacers), and sterile water; follow FDA outage guidance. <u>U.S. Food and Drug Administration</u>

### Powered mobility (wheelchairs/scooters):

 Rotate charge cycles; identify community charging sites (clinics, shelters); maintain manual mobility aids as fallback. Ready.gov

### 3) Temperature-sensitive medications at home

#### Cold-chain at home: what to know

- Insulin: keep between 36–46°F; during outages, keep cool (not frozen)—use insulated bag with cold packs; replace if potency is uncertain once supply resumes. <u>U.S. Food and Drug Administration</u>
- GLP-1s/biologics/eye drops/reconstituted antibiotics: check the package insert; most require 2–8°C before first use; many tolerate room temp for a limited window once opened—track dates. GoodRx

### Home strategies if the grid fails

- Use **small battery-powered coolers/mini-fridges** or **coolers with ice packs**; rotate ice from community cold hubs if available; avoid direct ice contact to **prevent freezing**. <u>CDC</u>
- Prioritize **life-sustaining meds** (e.g., insulin) if refrigeration options are limited; FDA emergency guidance allows continued use **until replacement is available**. <u>U.S. Food and Drug Administration</u>

### 4) Outage readiness for households (non-hospital)

### Core steps (authoritative guidance)

- 1. **Inventory** all items that need electricity (devices + chargers + refrigerated meds). Ready.gov
- 2. **Talk to your clinician and supplier**: ask for written outage plans, battery options, and non-electric alternatives (e.g., oxygen tanks). <u>U.S. Food and Drug Administration</u>
- 3. Power plan:
  - o **Short outages (hours):** UPS/battery packs, car inverter/charger.
  - o Long outages (days): inverter-generator or community charging; know fuel safety.
  - Sizing rule of thumb: add up watts (use 600 W for a stationary concentrator, 300 W planning allowance per CPAP/ventilator unless you have exact specs), include 20–30% headroom.
     Vitality Medical
- 4. **Notify** utility and fire department that someone in the home is **device-dependent**; ask about medical baseline/priority restoration lists. <u>U.S. Food and Drug Administration</u>
- 5. **Documentation & go-kit**: device manuals, prescriptions, med lists, chargers/batteries, cooler + cold packs, backup oxygen cylinders, disinfectants, distilled/boiled water for device cleaning. Ready.gov

### **Helpful checklists** (download & print for clients):

• FDA home-device outage guide (PDF); ADA National Network emergency power planning for people using assistive/medical tech. <u>U.S. Food and Drug Administration</u>

### 5) Estimating the scale in Puerto Rico (for planning)

- Baseline population context: ~3.2 M residents; 24.6% aged 65+ in 2024 (older age → higher device use).
   Census Reporter
- **Electricity-dependent at home**: emPOWER has identified >44,000 electricity-dependent *Medicare* beneficiaries in PR (oxygen, vents, dialysis devices, beds, etc.). This **undercounts** younger and non-Medicare residents. Centro de Periodismo Investigativo
- Condition drivers:
  - Diabetes: ~346k adults (IDF 2024) to ~20% (alt. 2021–2022 estimate). Many will store insulin/GLP-1s. International Diabetes Federation
  - CKD/ESRD: High CKD prevalence (~16.8%); ~8,038 with ESRD (2020 PRDOH est.). Dialysis centers exist island-wide; home PD users face water/power risks. Medscape
  - Respiratory: Elevated COPD in Puerto Ricans; asthma remains common—raising reliance on oxygen/nebulizers. CDC

### 6) What to tell households (simple script you can hand out)

- "If it plugs in or stays cold, list it." Write down every device/med that needs electricity or refrigeration.
   Mark the wattage/temperature from the label. Ready.gov
- Ask your doctor/supplier for an outage plan and non-electric backup (e.g., oxygen tanks).
   U.S. Food and Drug Administration
- 3. **Power pairs**: Battery/UPS for instant bridge + generator or community charging for long outages. Keep cords, inverters, vehicle adapters. <u>Vitality Medical</u>
- 4. **Cold-chain**: Keep insulin/biologics **cool, not frozen**; use insulated bags and cold packs; rotate ice; **replace** when possible. <u>CDC</u>
- 5. **Register & alert**: Tell the utility and local fire station about your device; ask about medical priority lists. U.S. Food and Drug Administration

### 7) Community & responder tools for Puerto Rico

- **HHS emPOWER Map**: monthly counts of electricity-dependent *Medicare* beneficiaries by area—ideal for targeting wellness checks and charging hubs. <a href="mailto:empowerprogram.hhs.gov">empowerprogram.hhs.gov</a>
- AARP PR caregiver guide: consolidated tips and contacts for at-home care. <u>AARP States</u>
- Local home-care infusion/oxygen services (example listing for southern PR) for in-home support.
   Hospital Damas

### 8) Quick planning table (wattage & backup horizons)

| Need at home Plan for watts             |                      | Minimum backup you should aim for   |  |
|---|----------------------|---|--|
| Oxygen concentrator (stationary 5–10 L) | 300–600 W            | Battery/UPS for <b>15–30 min</b> + generator/charging for <b>24–72 h</b> . Vitality Medical                 |  |
| Portable oxygen concentrator <100 V     |                      | 2–4 fully charged batteries + vehicle DC cable.  Limitless Health   |  |
| Ventilator (home)                       | 50–300 W             | At least <b>one full-capacity</b> external battery + generator; test switchover. <u>EcoFlow</u>             |  |
| CPAP/BiPAP                              | ~30–90 W<br>(varies) | Dedicated battery pack(s) for 1–2 nights; resume ASAP.  readynapacounty.gov                                 |  |
| Refrigerated meds                       |                      | Cooler + ice packs; avoid freezing; follow FDA emergency guidance. <u>U.S. Food and Drug Administration</u> |  |

### Appendix: Why this matters so much in Puerto Rico

- Recurrent, sometimes long-duration outages have historically jeopardized cold-chain meds and home devices (e.g., post-Maria). <u>WIRED</u>
- High elder share and metabolic/renal disease burden increase the number of households needing electricity or refrigeration to stay safe. <u>Census.gov</u>

# **Power-Dependence Medical Preparedness - Home Checklist**

## **English Handout / Checklist**

## **Medical Equipment & Medications Inventory**

| Device / Medication                          | Needs<br>Electricity<br>(Yes/No) | Wattage /<br>Charging Needs | Refrigeration<br>Required? | Backup / Alternative<br>Available? |
|--|----------------------------------|-----------------------------|----------------------------|------------------------------------|
| Oxygen concentrator (stationary)             |                                  |                             |                            |                                    |
| Portable oxygen concentrator / oxygen tank   |                                  |                             |                            |                                    |
| Ventilator                                   |                                  |                             |                            |                                    |
| CPAP / BiPAP device                          |                                  |                             |                            |                                    |
| Infusion / feeding pump                      |                                  |                             |                            |                                    |
| Nebulizer                                    |                                  |                             |                            |                                    |
| Suction machine                              |                                  |                             |                            |                                    |
| Powered wheelchair / scooter                 |                                  |                             |                            |                                    |
| Electric bed / motorized bed features        |                                  |                             |                            |                                    |
| Insulin                                      |                                  |                             | Yes                        |                                    |
| GLP-1s / Biologics / Other refrigerated meds |                                  |                             | Yes                        |                                    |
| Eye drops (refrigerated)                     |                                  |                             | Yes                        |                                    |
| Reconstituted antibiotics / vaccines etc.    |                                  |                             | Yes                        |                                    |

### **Emergency Power / Cold-Chain Preparedness Checklist**

- Inventory **all** devices & refrigerated medicines in use at home.
- For each device, record **model**, **power draw (watts)** or charger type.
- Consult your healthcare provider / supplier about non-electric backups (e.g. oxygen tanks, manual pumps).
- For short outages: have battery / UPS / car inverter options ready.
- For longer outages: ensure generator / community hub access plans.
- Cold storage plan: insulated cooler / cold packs / small backup fridge if possible.
- Keep medication inserts/labels and prescriptions accessible.
- Have backup supply of batteries, chargers, fuel.
- Mark and register home with utility / local emergency responders as "medical power-dependent" if possible.
- Prepare a "go-kit": copies of prescriptions, device & charger manuals, med list, contact information, etc.

### **Important Safety & Use Notes**

- Avoid freezing refrigerated meds; keep in safe temperature range as per product guidelines.
- Test switchover of power (battery → generator / backup) before emergencies.
- Rotate backup batteries / fuel periodically.
- For devices with continuous power needs (like ventilators, oxygen concentrators), aim for redundancy (battery AND backup generator).
- Store cold packs / ice so they are ready when needed.

# Emergency Contact & Registration

| • | Doctor / medical supplier:                         |
|---|--|
| • | Local utility medical baseline / priority contact: |
| • | Local shelter location with power backup:          |
| • | Nearest community cooling / recharging hub:        |
|   | Key medications list:                              |

## **Important Safety Notes**

- Avoid freezing refrigerated meds; follow product temperature guidelines.
- Test power switchover (battery → generator) before emergencies.
- Recharge/rotate backup batteries; store fuel safely and legally.
- For continuous-power devices (ventilators, oxygen concentrators), plan redundant power (battery AND generator).
- Keep cold packs/ice ready; avoid direct contact that could freeze meds.

## **Emergency Contacts & Registration**

| Contact Type                             | Name / Phone | Notes |
|--|--------------|-------|
| Doctor / medical supplier                |              |       |
| Utility medical baseline / priority      |              |       |
| Nearest shelter with backup power        |              |       |
| Nearest community cooling / charging hub |              |       |
| Key medications list                     |              |       |

### Who to Contact for Sargassum - Landfills/Solid Waste - Environmental Permitting and Electricity System

Following is a "who-to-work-with" map for Puerto Rico across sargassum, landfills/solid waste, environmental permitting, and the electricity system—plus the top elected officials. This is grouped by mission, included the current leaders, and the best official contact lines (phone, email, address, or contact page).

### **Executive leadership (decision makers)**

### Governor of Puerto Rico — Jenniffer González Colón

La Fortaleza (Office of the Governor) main line: (787) 721-7000 • Address: Calle Fortaleza 63, San Juan, PR 00901 • Mailing: PO Box 9020082, San Juan, PR 00902-0082 • Site: fortaleza.pr.gov. pr.gov

### Chief of Staff / Secretary of the Governorship — Francisco J. Domenech

("Secretario de la Gobernación"; also serves as AAFAF executive director.) Public confirmation via multiple local sources; official channels route through La Fortaleza main line above. Wikipedia

### **Environment, coasts & sargassum**

**Dept. of Natural & Environmental Resources (DRNA/DNER)** — *Primary environmental authority (coasts, CZM, wildlife, permits formerly under EQB)* 

Secretary: **Waldemar Quiles** (2025). DRNA central contacts directory available; use agency portal for program lines.

**EPA Region 2 – Caribbean Environmental Protection Division (CEPD)** — Federal environmental regulator in PR; Clean Air/Water, solid waste oversight, enforcement

Address: City View Plaza II, Suite 7000, #48 Rd. 165 km 1.2, Guaynabo, PR 00968-8069 • Region 2 citizen hotline (877) 251-4575 • Media/enforcement contacts listed on Region 2 site and PR landing page. US EPA

**University of Puerto Rico Sea Grant Program** — Applied coastal science & community engagement (beach management, sargassum response, CZM support)

Director: **Ruperto Chaparro Serrano • (787) 832-4040 ext. 5260 • ruperto.chaparro@upr.edu •** Mayagüez campus. <u>Sea Grant Puerto Rico</u>

**CARICOOS (Caribbean Coastal Ocean Observing System)** — *Near-real-time ocean/coastal data; sargassum tools & bulletins* 

Exec. Director/PI: Julio M. Morell • (787) 899-2048 x255 • julio.morell@upr.edu • General: contact@caricoos.org, (787) 832-4040 x.6350 • UPRM R&D Center, Mayagüez. Caricoos

**NOAA – Sargassum resources & coordination** — *SIR risk maps, AOML reporting, regional webinars* SIR portal (AOML/USF/NASA); SECART 2025 Sargassum webinar series; contact forms via NOAA pages. <a href="mailto:cwcgom.aoml.noaa.gov">cwcgom.aoml.noaa.gov</a>

### Solid waste, landfills & recycling

**Solid Waste Authority (ADS)** — Statutory lead on solid waste planning; core programs have been consolidated under DRNA in recent reforms; legacy ADS resources remain useful for municipal coordination. Use DRNA first for policy/permitting; ADS channels (public pages/social) still point communities to services. <a href="corrienteverde.com">corrienteverde.com</a>

**EPA Region 2** — Landfill compliance/enforcement; recent actions with PREPA/Genera for CAA compliance also illustrate federal engagement in plant waste streams. Media contact example (Region 2): <a href="mailto:vega.carlos@epa.gov">vega.carlos@epa.gov</a>, (646) 988-2996. <a href="mailto:US EPA">US EPA</a>

### Land use, permits & planning (site control, buildings, coastal work)

**OGPe – Permits Management Office (DDEC)** — Construction permits, use of land, environmental consultations routed through Single Business Portal (SBP)

Portal: permisos.pr.gov (contact and workflows) • Complaints line noted on site; OGPe supports concierge process for strategic projects. <u>permisos.pr.gov</u>

Junta de Planificación (Planning Board) — Territorial plans, coastal setback policy integration, land-use maps Main: (787) 723-6200 • Emails listed for public-records/info requests (e.g., avipr@jp.pr.gov; comentariosjp@jp.pr.gov) • Address: Centro Gubernamental Roberto Sánchez Vilella, Ave. De Diego Pda. 22, Santurce. Government of Puerto Rico

### Electricity generation, transmission & distribution

**Energy "Czar" & P3 Authority (AAPP/P3A)** — Policy coordination across LUMA (T&D) and Genera (legacy generation); privatization contract oversight

Executive Director / Energy Czar: Ing. Josué A. Colón Ortiz • P3A site has contact page and main line 787-722-2525 • Office address posted on government "Transición 2024" page. NotiCel

**Puerto Rico Energy Bureau (PREB/NEPR) – Public Service Regulatory Board** — Independent regulator (rates, IRP, interconnection, microgrids)

Contact: (787) 523-6262 • nepr@jrsp.pr.gov • Address: World Plaza, 268 Ave. Muñoz Rivera, San Juan, PR 00918. Energia Puerto Rico

**PREPA/AEE (legacy public corporation & grid owner)** — Owner of T&D and legacy assets; interfaces with LUMA and Genera; Executive leadership engages on fuel, contracts, litigation

Recent federal/commission filings reference PREPA leadership communications; PREPA exec contacts often route via agency or P3A/NEPR dockets. (Use PREPA board/exec emails when listed in filings; e.g., Mary Zapata Acosta noted in 2025 filing.) Energia Puerto Rico

**LUMA Energy (Transmission & Distribution Operator)** — All customer-side grid operations; interconnections; outages

Customer line: **1-844-888-5862** • **support@lumapr.com** • CEO: **Juan Saca** (publicly identified across LUMA releases and third-party letters). **Luma Energy** 

**Genera PR (Generation Operator for legacy assets)** — Dispatch & O&M of PREPA thermal fleet; fuel handling interfaces

Main: (787) 474-2400 • Corporate contact via website. Genera PR

### Water & wastewater (environmental interfaces)

**PRASA / AAA – Puerto Rico Aqueduct & Sewer Authority** — *Permitting interfaces for cooling water, wastewater, emergency water needs at hubs* 

Executive President (2025): Ing. Luis Reinaldo González Delgado (per AAA news posts) • Customer service (787) 620-2482; main switchboard (787) 620-2277 • Address: 604 Ave. Barbosa, Edif. Sergio Cuevas Bustamante, Hato Rey • Zone phone list available on AAA site. <a href="mailto:acueductos.pr.gov">acueductos.pr.gov</a>

### Emergency management (for debris, public works missions, power & cooling hubs)

**NMEAD – Emergency Management & Disaster Administration Bureau** — *Incident coordination; ESFs; debris ops; community lifelines* 

Central Office: **(787) 724-0124 •** Commissioner (2025): **Dr. Ángel Jiménez Colón •** Website contact page lists regional directors. <u>manejodeemergencias.pr.gov</u>

**U.S. Army Corps of Engineers (South Atlantic Division / Antilles Office)** — Emergency power missions; coastal and dredging permits (Section 10/404/408)

Media/public inquiries: **cesad-pao@usace.army.mil** (division PAO) • Frequent coordination with PREPA and PR agencies. **sad.usace.army.mil** 

### How to route specific workstreams

- Sargassum removal & beach management: DRNA (coasts/CZM) for permits & policy → Municipality coordination → NOAA/Sea Grant/CARICOOS for science & monitoring → NMEAD if emergency debris ops. Sea Grant Puerto Rico
- Landfills / MSW / transfer stations: DRNA (solid waste programs post-consolidation) + EPA Region 2 for federal compliance; municipalities for local ops and siting. <u>corrienteverde.com</u>
- New generation / microgrids / interconnection: PREB (regulatory filings, IRP/microgrids) → P3A
   (contractual/governance) → LUMA (T&D) → Genera PR (if interfacing with legacy plants) → PREPA as asset owner. Energia Puerto Rico
- Permits & siting (Cat-5 buildings, coastal structures): OGPe (SBP) for permits; Planning Board for landuse plan alignment; DRNA for environmental/coastal; USACE for federal waters/jurisdictional fill. permisos.pr.gov

### Quick contact block (copy/paste)

- La Fortaleza (Governor's Office): (787) 721-7000 Calle Fortaleza 63, San Juan 00901 PO Box 9020082, San Juan 00902-0082. <a href="mailto:pr.gov">pr.gov</a>
- Chief of Staff (Secretario de la Gobernación): Francisco J. Domenech (route via La Fortaleza main).
   Wikipedia
- DRNA: Agency portal & directory; Secretary Waldemar Quiles (2025).
- PREB (Energy Bureau): (787) 523-6262 nepr@jrsp.pr.gov World Plaza, 268 Ave. Muñoz Rivera, San Juan 00918. Energia Puerto Rico

- P3 Authority (AAPP): 787-722-2525 p3.pr.gov (contact). Exec. Dir. / Energy Czar: Ing. Josué Colón.
   p3.pr.gov
- LUMA Energy: 1-844-888-5862 support@lumapr.com CEO Juan Saca. <u>Luma Energy</u>
- Genera PR: (787) 474-2400 genera-pr.com (contact). Genera PR
- OGPe (Permits): permisos.pr.gov (SBP). permisos.pr.gov
- Planning Board: (787) 723-6200 avipr@jp.pr.gov comentariosjp@jp.pr.gov Ave. De Diego Pda. 22, Santurce. Government of Puerto Rico
- PRASA/AAA: Service (787) 620-2482 Switchboard (787) 620-2277 604 Ave. Barbosa, Hato Rey. acueductos.pr.gov
- EPA Region 2 (PR office): City View Plaza II, Suite 7000, Guaynabo 00968-8069 Hotline (877) 251-4575. US EPA
- NMEAD: (787) 724-0124 Commissioner Ángel Jiménez Colón. manejodeemergencias.pr.gov
- Sea Grant PR: Dir. Ruperto Chaparro (787) 832-4040 ext. 5260 ruperto.chaparro@upr.edu. Sea Grant Puerto Rico
- CARICOOS: contact@caricoos.org (787) 832-4040 x.6350 Exec Dir. Julio Morell (787) 899-2048 x255. Caricoos School

### Notes & gotchas

- In 2018–2020 reforms, **EQB functions were folded into DRNA**; when in doubt on environmental permits, start with DRNA and OGPe for process routing. <a href="mailto:corrienteverde.com">corrienteverde.com</a>
- Power sector operations are split: LUMA (T&D operator), Genera PR (legacy generation O&M), PREPA (asset owner/public corporation), P3A (contract oversight), PREB (regulator). Recent 2025 events and filings frequently list CEO Juan Saca (LUMA) and show active P3A←>LUMA correspondence. Reuters

# **Puerto Rico Government & Key Organizations - Contacts & Workflows**

Quick-reference for sargassum, landfills/solid waste, environmental permitting, and electricity system.

| Agency   | Role  | Leader   | Phone          | Email                                    | Address / Website   |
|--|---|--|----------------|--|---|
| La Fortaleza –<br>Governor's<br>Office                             | Executive<br>leadership, policy<br>coordination                             | Gov. Jenniffer<br>González Colón;<br>Chief of Staff:<br>Francisco J.<br>Domenech | (787) 721-7000 |  | 63 Calle Fortaleza, San Juan, PR 00901 • PO Box 9020082, San Juan, PR 00902-0082 • fortaleza.pr.gov |
| DRNA – Dept.<br>of Natural &<br>Environmental<br>Resources         | Coasts, CZM,<br>sargassum policy,<br>wildlife;<br>environmental<br>programs | Secretary:<br>Waldemar<br>Quiles Pérez   |                |  | drna.pr.gov   |
| EPA Region 2  - Caribbean Environmental Protection Division (CEPD) | Federal<br>environmental<br>regulator; Clean<br>Air/Water, RCRA             |  | (877) 251-4575 |  | City View Plaza II, Suite<br>7000, Guaynabo, PR 00968-<br>8069 • epa.gov/pr                         |
| OGPe – Permits Management Office                                   | Construction & environmental permits via Single Business Portal             |  | (787) 765-2900 | servicioalclientepermisos@ddec.pr.gov    | permisos.pr.gov   |
| Planning<br>Board  | Territorial plans, zoning   |  | (787) 723-6200 | avipr@jp.pr.gov; comentariosjp@jp.pr.gov | Centro Gubernamental<br>Roberto Sánchez Vilella,<br>Santurce • jp.pr.gov                            |
| PREB – Puerto<br>Rico Energy<br>Bureau                             | Independent regulator (rates, IRP, interconnection)                         |  | (787) 523-6262 | nepr@jrsp.pr.gov                         | World Plaza, 268 Ave.<br>Muñoz Rivera, San Juan, PR<br>00918 • energia.pr.gov                       |

| Agency                                   | Role  | Leader   | Phone  | Email                    | Address / Website                             |
|--|---|--|--|--------------------------|---|
| P3 Authority                             | Contract oversight<br>(LUMA, Genera) &<br>energy<br>coordination  | Exec. Director /<br>Energy Czar:<br>Ing. Josué A.<br>Colón Ortiz | (787) 722-2525   |                          | p3.pr.gov                                     |
| PREPA                                    | Legacy grid & assets  |  |  |                          | aeepr.com                                     |
| LUMA Energy                              | Transmission & distribution operations; customer interconnections | CEO: Juan Saca   | 1-844-888-5862   | support@lumapr.com       | lumapr.com                                    |
| Genera PR                                | 0&M of legacy generation  |  | (787) 474-2400   |                          | genera-pr.com                                 |
| PRASA / AAA – Aqueduct & Sewer Authority | Water/wastewater interfaces (cooling, discharge)                  | Executive<br>President: Ing.<br>Luis R. González<br>Delgado      | (787) 620-2482<br>(service); (787)<br>620-2277<br>(main) |                          | 604 Ave. Barbosa, Hato Rey • acueductospr.com |
| NMEAD –<br>Emergency<br>Management       | Incident coordination, debris ops, community lifelines            | Commissioner:<br>Dr. Ángel<br>Jiménez Colón                      | (787) 724-0124   |                          | manejodeemergencias.pr.go<br>v                |
| Sea Grant<br>Puerto Rico<br>(UPR)        | Applied coastal<br>science;<br>sargassum<br>outreach              | Director:<br>Ruperto<br>Chaparro<br>Serrano                      | (787) 832-4040<br>ext. 5260                              | ruperto.chaparro@upr.edu | seagrantpr.org                                |
| CARICOOS                                 | Coastal/ocean<br>data; sargassum<br>tools                         | Exec. Dir.: Julio<br>M. Morell                                   | (787) 832-4040<br>x.6350                                 | contact@caricoos.org     | caricoos.org                                  |

### **Approval & Coordination Workflows**

A. Sargassum removal & beach management: Municipality  $\rightleftarrows$  DRNA (Coasts/CZM)  $\rightarrow$  OGPe (permits)  $\rightarrow$  NMEAD (emergency)  $\rightarrow$  Sea Grant + CARICOOS + NOAA.

B. Landfills & solid waste: Municipality/operator  $\rightarrow$  DRNA (solid waste programs)  $\rightleftarrows$  EPA Region 2  $\rightarrow$  OGPe (construction).

C. New generation, microgrids & Cat-5 buildings: Proponent  $\rightarrow$  PREB  $\rightarrow$  LUMA  $\rightarrow$  P3A  $\rightarrow$  Genera PR  $\rightarrow$  OGPe/Planning Board  $\rightarrow$  NMEAD.

D. Coastal structures: DRNA + OGPe + Planning Board + USACE + EPA → Municipality.

Notes: EQB functions consolidated into DRNA; use DRNA as primary environmental authority with OGPe (SBP).

Prepared for Vortex Energy Group LLC • Compiled: 2025-09-23