

EARTHSPARK INTERNATIONAL

Innovation to solve energy poverty



IRENA/UN - Centre of Excellence for the Sustainable Development of SIDS Caribbean Workshop
28 November, 2018

Microgrids Electrify Communities



Technical
Solutions

Solar Grids.



Smart Meters.



SPARKMETER ⚡

Insights from 10 Years in Haiti

Technical
Solutions

Community
Engagement

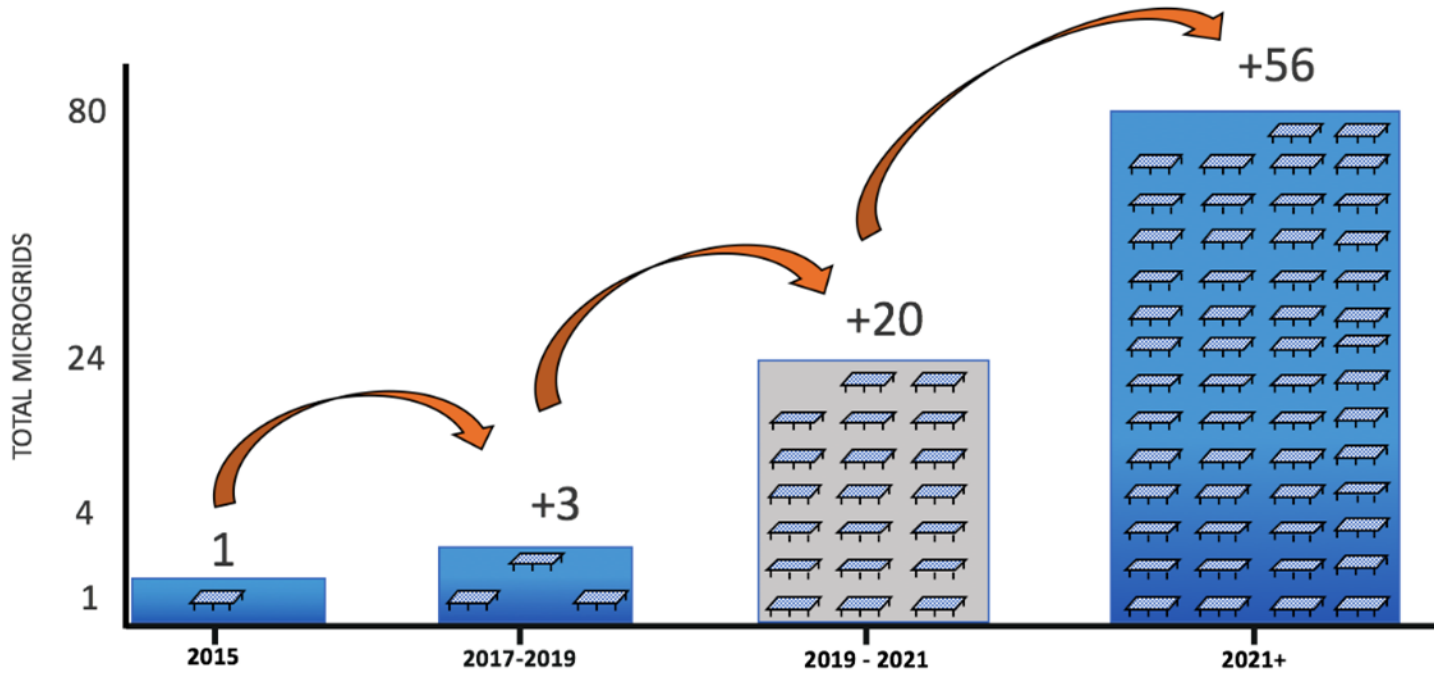
Legal &
Regulatory
Advocacy

All three required

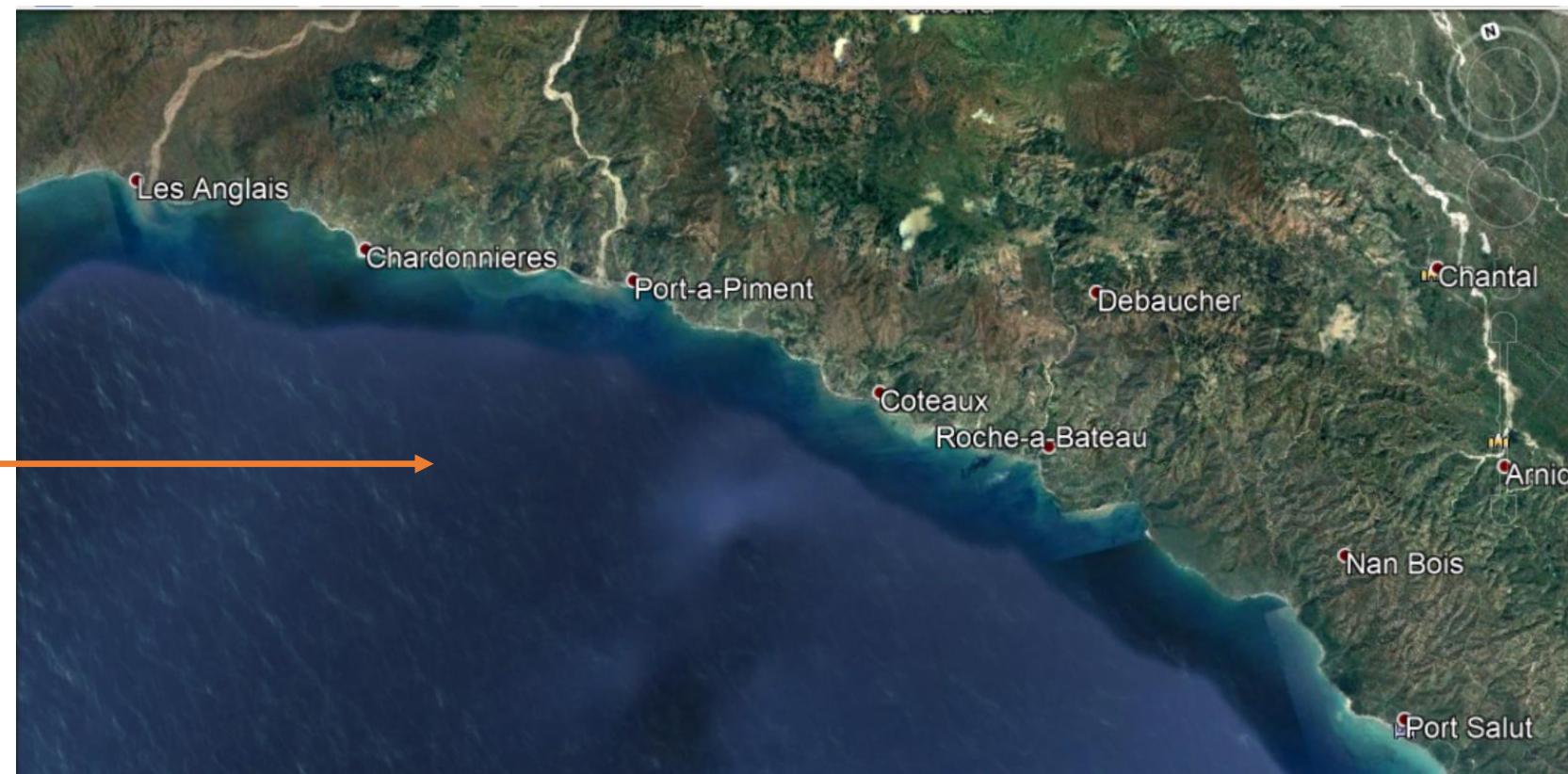
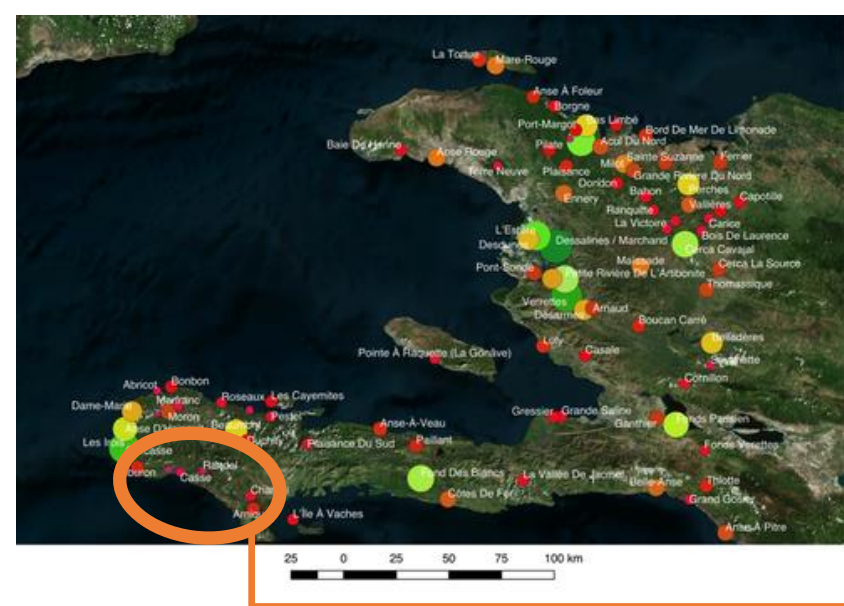


32400 2
3217
MALAYSIAN
1000

Resilience at Scale



Why Micro-grids over T&D?



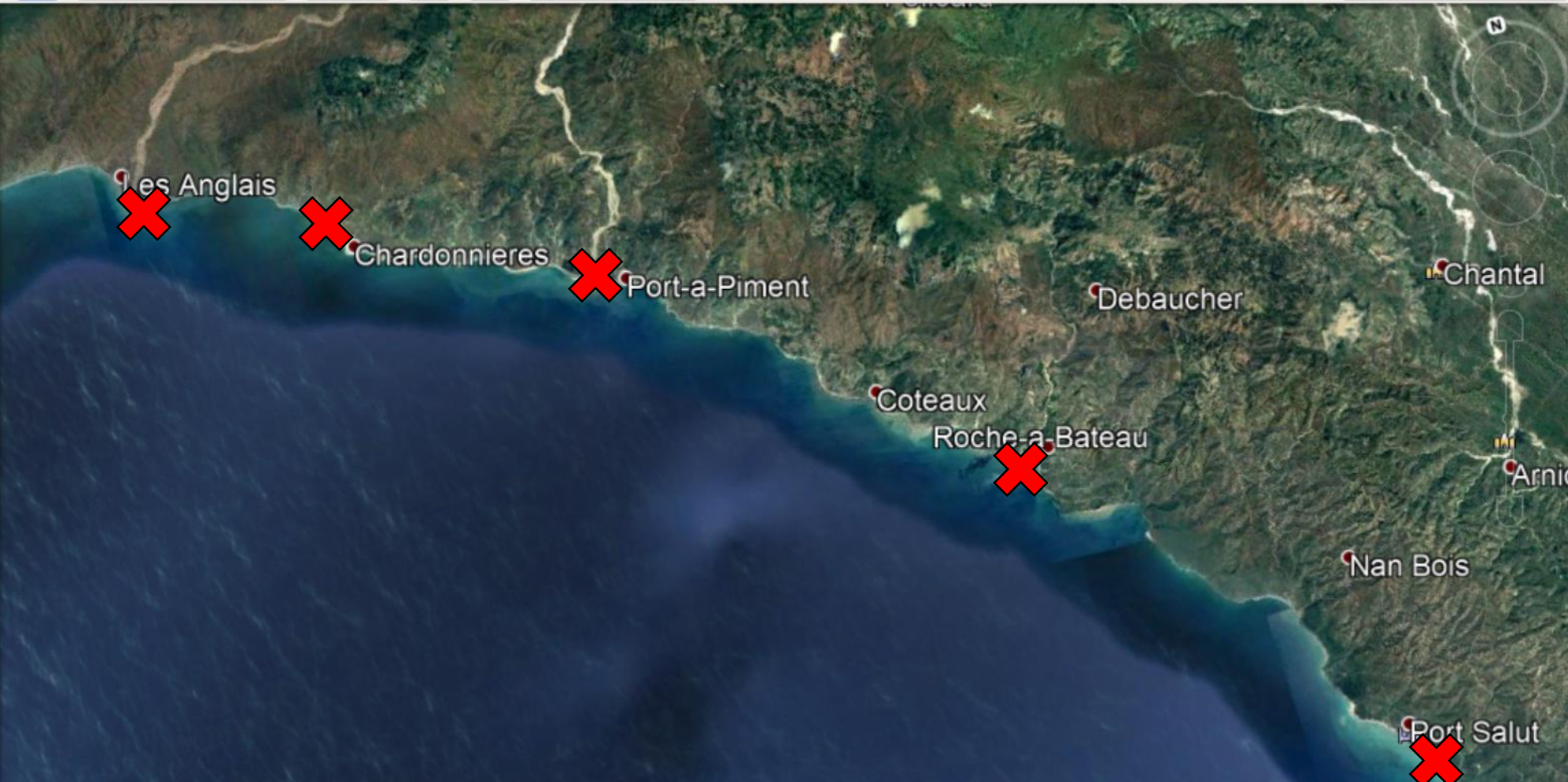
Why Micro-grids over T&D?



Use Case:

- Micro-grid if < 7 km
- T&D if > 7 km

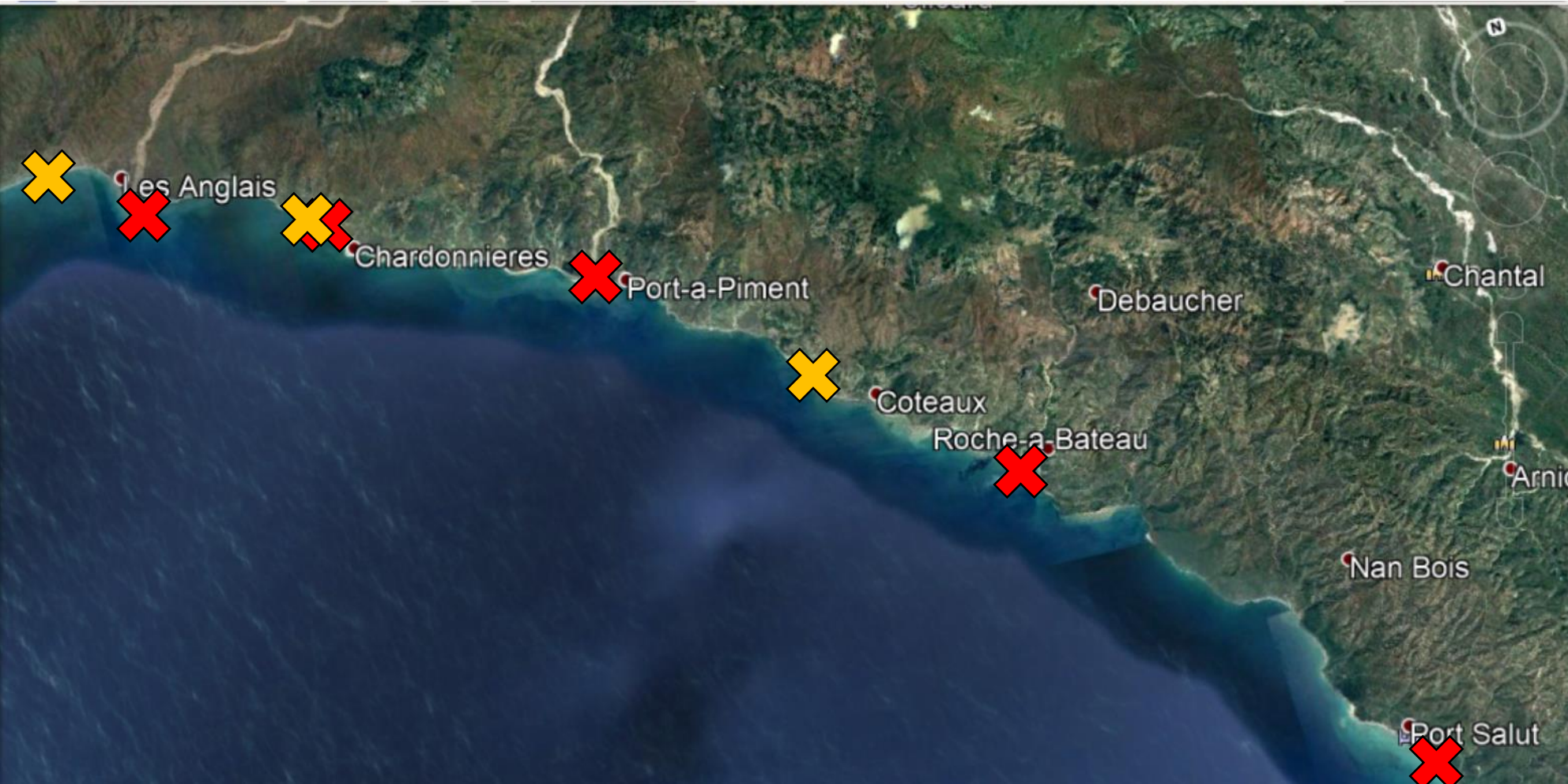
Why Micro-grids over T&D?





Post-Hurricane Matthew:

X Bridges destroyed

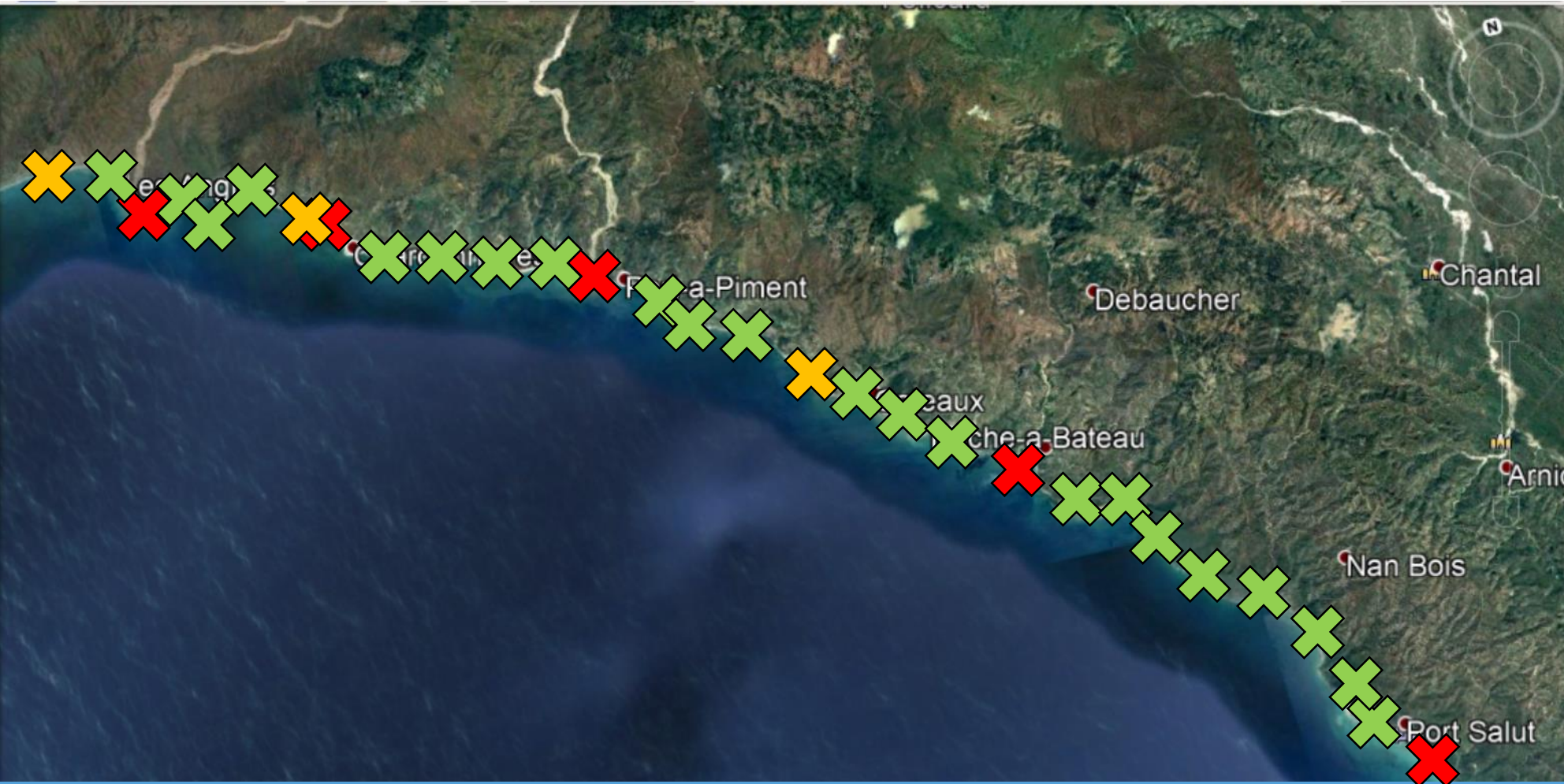
Why Micro-grids over T&D?






Post-Hurricane Matthew:

-  Bridges destroyed
-  Landslides

Why Micro-grids over T&D?



Post-Hurricane Matthew:

-  Bridges destroyed
-  Landslides
-  Tree-fall

Why Micro-grids over T&D?

Why Micro-grids over T&D?

Resiliency

Why Micro-grids over T&D?

**Pre-Hurricane
Matthew (high tide):**



**Post-Hurricane
Matthew:**



Why Micro-grids over T&D?

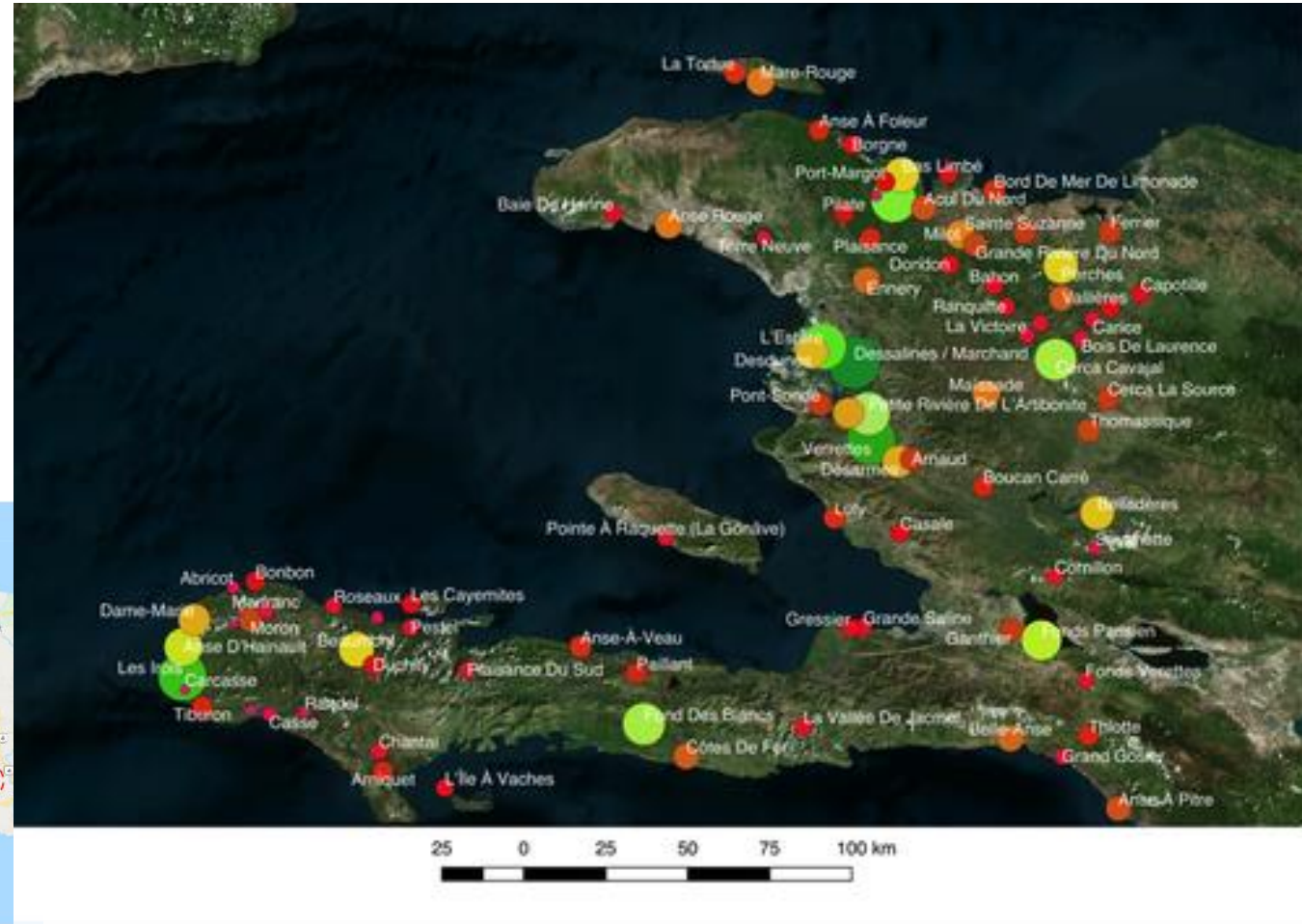
Tree-fall damage:



Other Resiliency Considerations

Business Processes:

- Regional planning
- Effective contingency reserve
- Labor contracts



Other Resiliency Considerations

Business Processes:



Other Resiliency Considerations

Customer resiliency:



Other Resiliency Considerations

PV Generation:

- Roof vs ground mounted?
- Quick removal vs reinforced connections?



Other Resiliency Considerations

Future Interconnection:

- Provide both resiliency and grid stability
- Align with long term planning

MINISTÈRE DES TRAVAUX PUBLICS, TRANSPORT ET COMMUNICATION
ANARSE - CELLULE ENERGIE

Consultation sur la Convention de concession (y compris le Cahier des Charges) et le Protocole d'Accord pour Mini-réseaux

Pour recueillir et rassembler les commentaires du public, nous demandons aux parties prenantes d'utiliser le tableau ci-dessous. Lorsque vous formulez vos commentaires, veuillez-vous faire référence aux Articles, aux paragraphes, etc., spécifiques de la Convention de Concession (CC), du Cahier des Charges (CdC), et du Protocole d'Accord (MOU). Pour toutes questions, veuillez contacter...

THANK YOU

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