

WÄRTSILÄ IN CENTRAL AMERICA AND THE CARIBBEAN

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WÄRTSILÄ HAS STRONG PRESENCE IN THE REGION

Wärtsilä has a decades long and successful history in Central America and the Caribbean.

Wärtsilä equipment is used today for a significant percentage all power generation in the Caribbean ranging from small power plants in smaller islands up to large plants such as a 430 MW Flexicycle dual fuel gas power plant in the Dominican Republic.

Wärtsilä is widely recognized as the leading supplier for the region with over 4500 MW installed in Central America and the Caribbean alone.



Since the early 1990s Wärtsilä has offered more than just equipment.

One of the first large projects constructed as a fast track turnkey project by Wärtsilä was Nejapa Power in 1993 in El Salvador. At the time the country was coming out of a long civil conflict and efficient new power generation was urgently needed. Wärtsilä took on the challenge and built a power plant that was further expanded to over 160 MW (very important for the country at the time). Nejapa Power is still in operation today, and newer and more efficient plants – including natural gas plants, solar photovoltaic plants and energy storage solutions – are now being developed and offered by Wärtsilä.

A similar story can be told about numerous other countries in the region. In fact Wärtsilä's power generation equipment is used in nearly all countries and islands in the region. Wärtsilä's power plant construction business alone in this part of the world has been worth billions of dollars over the years, and the value is even higher when all the recurring Service business for the entire lifetime of the power generation facilities is taken into account.



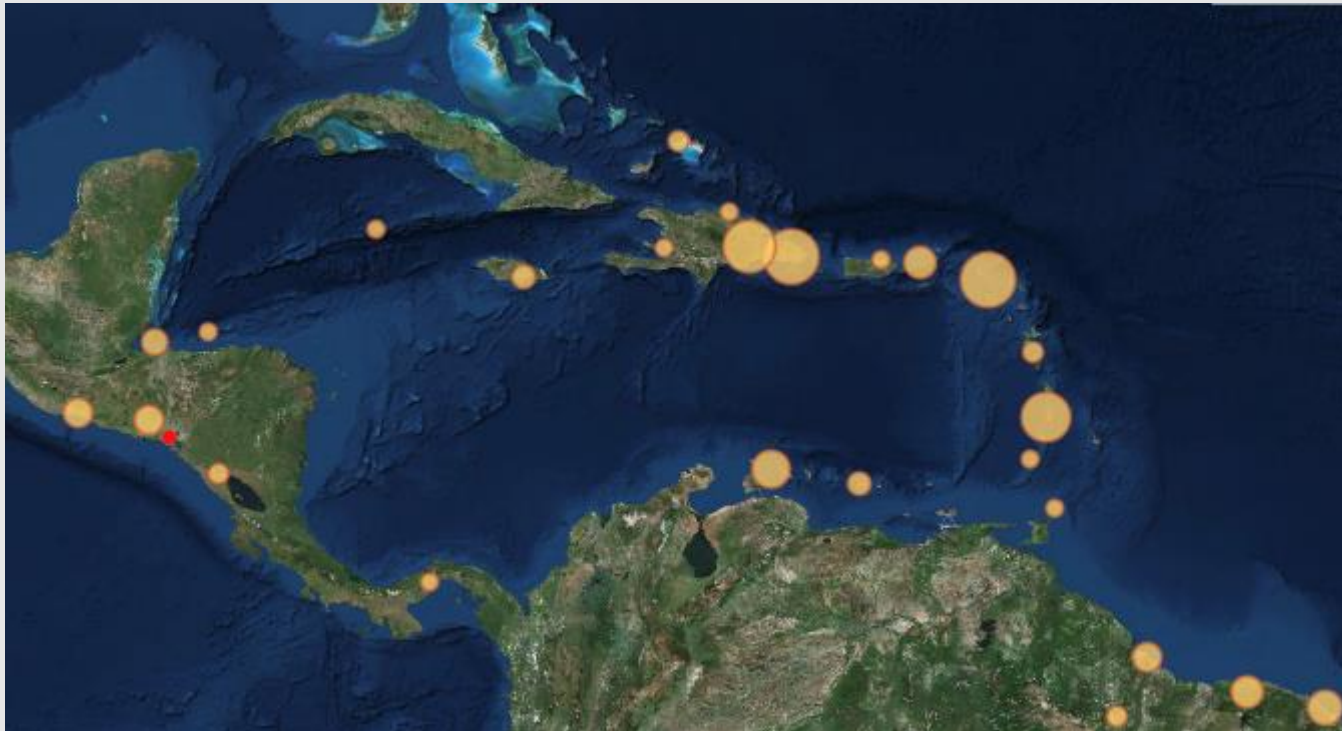
CENTRAL AMERICAN REGION*

Guatemala	373 MW
Honduras	554 MW
El Salvador	437 MW
Nicaragua	64 MW
Panama	146 MW

**Total installed capacity by
Wärtsilä in this area:**

4500 MW

* Does not include Mexico



CARIBBEAN REGION*

Anguilla	19 MW
Antigua and Barbuda	79 MW
Aruba	99 MW
Bahamas	50 MW
Belize	24 MW
Bermuda	44 MW
Bonaire	17 MW
British Virgin Islands	56 MW
Cayman Islands	21 MW
Curaçao	109 MW
Dominica	12 MW
Dominican Republic	1436 MW
Grenada	21 MW
Guadeloupe	16 MW
Guyana	145 MW
Haiti	35 MW
Jamaica	244 MW
Martinique	90 MW
Puerto Rico	15 MW
St. Kitts and Nevis	11 MW
St. Lucia	76 MW
St. Vincent	15 MW
Surinam	153 MW
Trinidad and Tobago	76 MW
Turks and Caicos	35 MW
US Virgin Islands	29 MW

* Does not include Colombia and Venezuela

SUCCESS FACTORS AND CHALLENGES IN THE CARIBBEAN

- **What enabled our success in the region?**
 - Establishing strong local presence, hiring local professionals that know the market
 - Low personnel turnover
 - Product and solutions portfolio that truly fits the market needs
 - Going beyond the scope of a typical EPC contractor
- **Challenges in the Caribbean/Central America**
 - Storms, natural disasters – Can be mitigated with proper engineering and robust build
 - Availability of natural gas still limited, but improving. Fuel flexibility has been key for engine power plants.
 - Macroeconomic factors – low economic growth, high indebtedness of certain countries. Difficulties in financing the projects.



Reciprocating engines have always been the preferred power generation technology for small island grids and small countries because of their high efficiency, robustness, and ease of maintenance. Our engine plants can provide base load, operate as peaking units, and balance intermittent renewable energy generation.



In the past heavy fuel oil was the ideal fuel (cheapest)



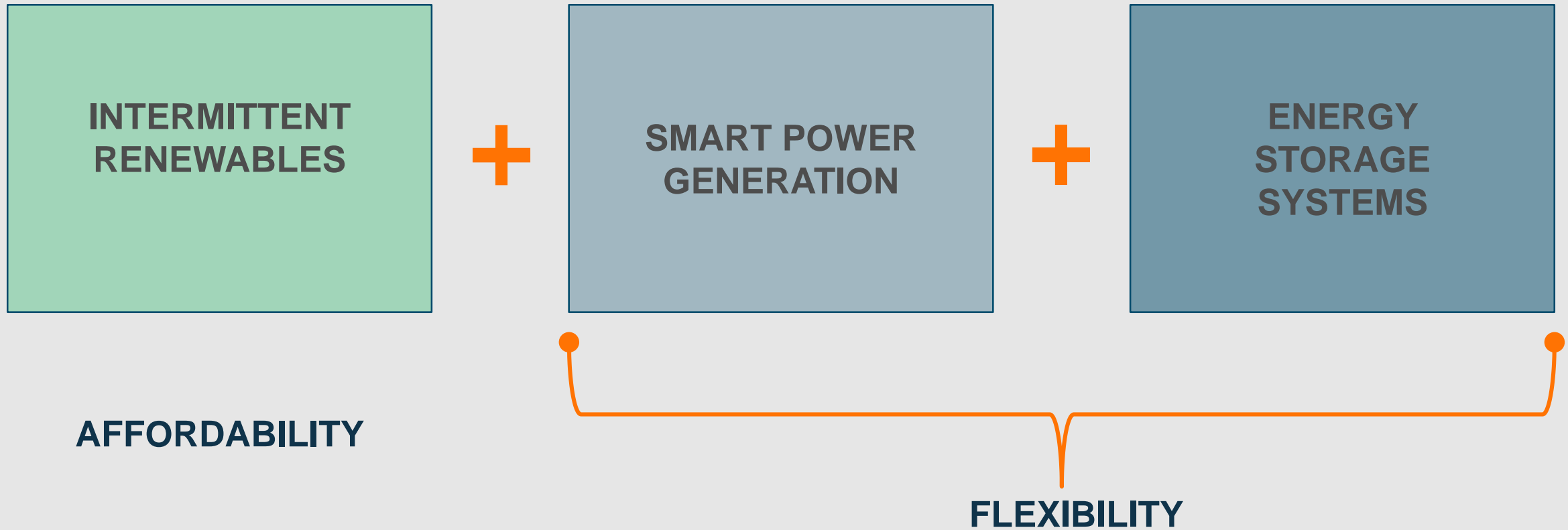
Oil is being replaced by LNG or other liquefied gases as the ideal fuel (much cleaner)



Today the ideal target is to move gradually towards a renewable energy future.

Wärtsilä's ultra-flexible reciprocating gas engine technology is becoming more and more relevant in many market areas, including large countries. Wärtsilä's engine power plants and energy storage solutions truly complement and enable further integration of renewable energy. **Today Wärtsilä's energy solution portfolio includes Engine plants, LNG infrastructure Solar PV, Energy Storage and hybrid solutions.**

FUTURE POWER SYSTEMS





WÄRTSILÄ