

Achieving 50% Renewable Energy

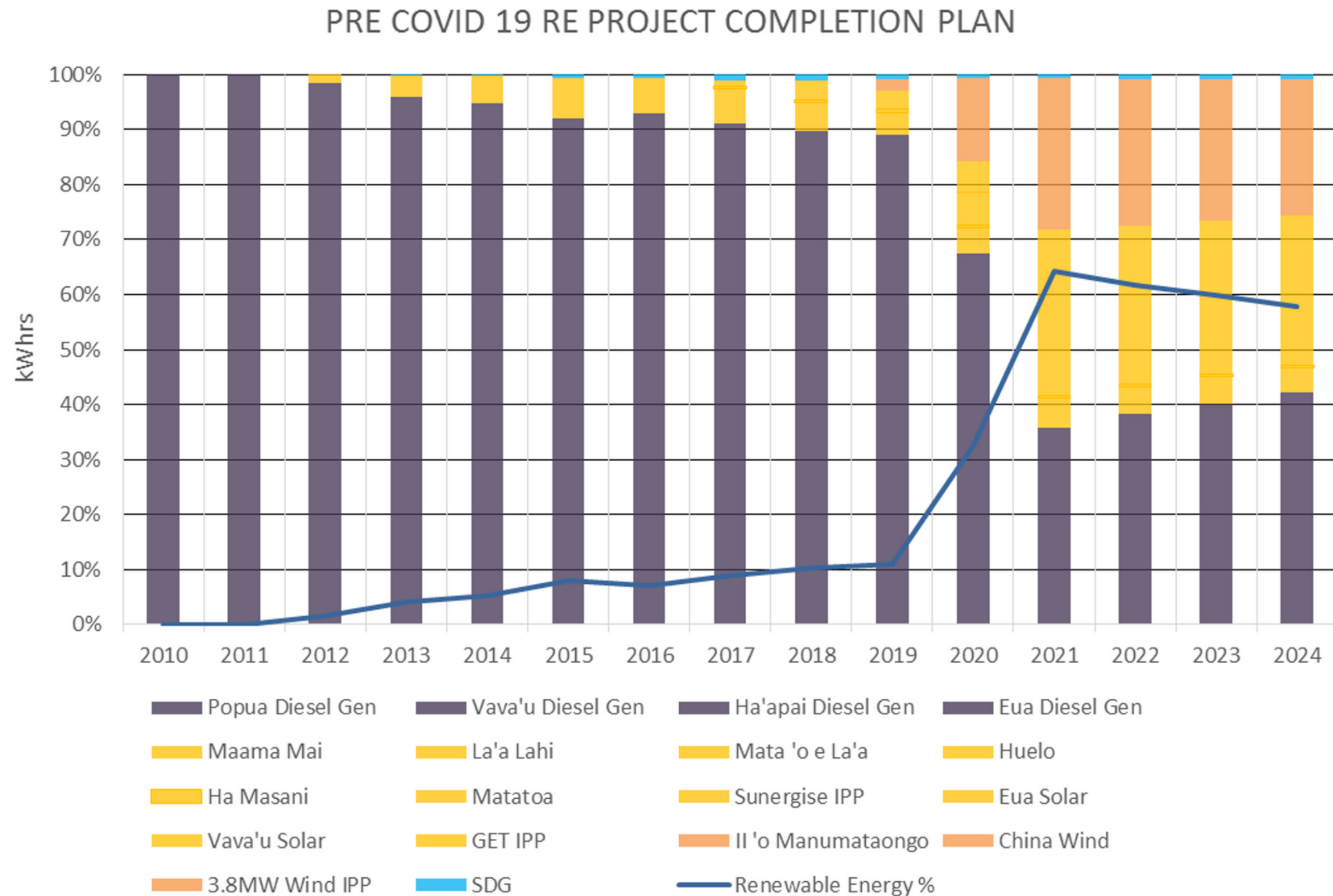


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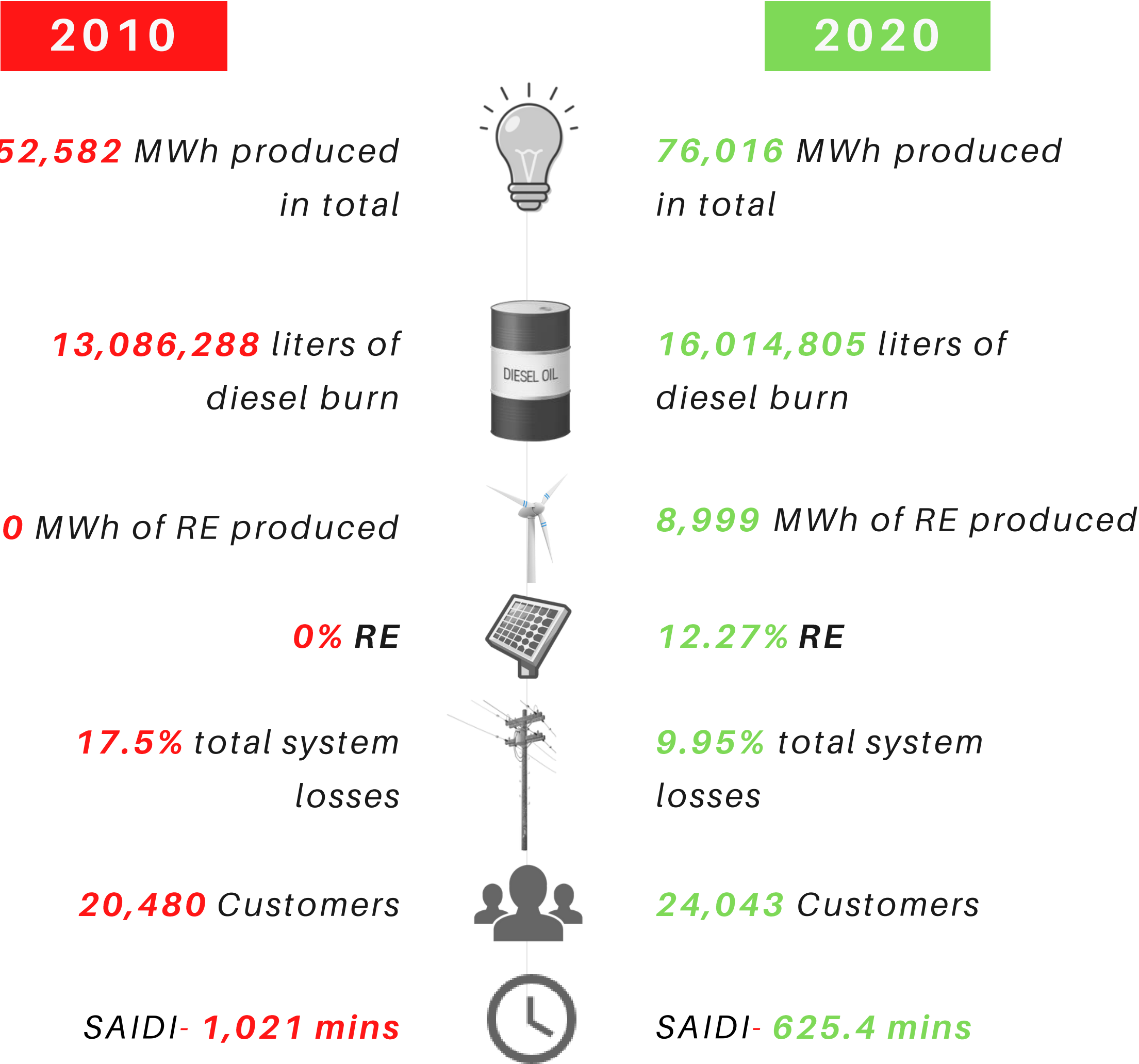


PRE COVID-19 RE PROJECT COMPLETION PLAN



The on-grid electricity situation

2010 vs 2019



	Project No	RE Projects	Project Status	Target Completion Date (Pre-COVID 19)	Latest Completion Target	Accumulated RE%
 SOLAR PROJECTS	8	 Sunergise NZ IPP 6MW Solar - Tongatapu, Liukava, Fualu, Masilamea	CONSTRUCTION PHASE	2020	3 different plans (Sept, Oct 2021)	23.44%
	9	 Green Energy Technology (GET) IPP 6MW	AGREEMENT SIGNED	July 2020	March 2023	34.77%
	10	 'Eua & Vava'u Island Solar 650KW	DETAILED DESIGN PHASE	End of June 2021	March 2022	35.71%
 WIND PROJECTS	11	 Niutoua Wind IPP 4.5MW	AGREEMENT NEGOTIATION	Dec, 2020	Sept, 2023	50.64%
	12	 China Wind IPP 2.8MW	SITE MOBILIZATION	Dec, 2020	Sept, 2022	57.34%
 BATTERY ENERGY STORAGE PROJECTS	13	 Tongatapu Load Shifting Battery Energy Storage Project	CONSTRUCTION PHASE	Nov, 2020	Sept, 2021	All RE above current RE level not possible without this storage component
	14	 Tongatapu Stabilizing Battery Energy Storage Project	CONSTRUCTION PHASE	Dec, 2020	Sept, 2021	All RE above current RE level uneconomic without this storage component

In Summary

- 50% Target now targeted for completion by 2025
- Covid-19 continues causing major problems for project implementation.
- Efforts to achieve 70% target by 2030 already underway
- Essential enabling projects (digitization and decentralization) ongoing.
 - Institutional and Regulatory Reform (Energy Bill)
 - Centralized Control (Grid Code)
 - Enterprise Resource Planning Improvements (RE Maintenance)