

Interconnecting Cyclades Interconnecting the future



INDEPENDENT POWER
TRANSMISSION
OPERATOR



European Union
European Regional
Development Fund

ΕΡΑνεΚ 2014-2020
OPERATIONAL PROGRAMME
COMPETITIVENESS • ENTREPRENEURSHIP • INNOVATION



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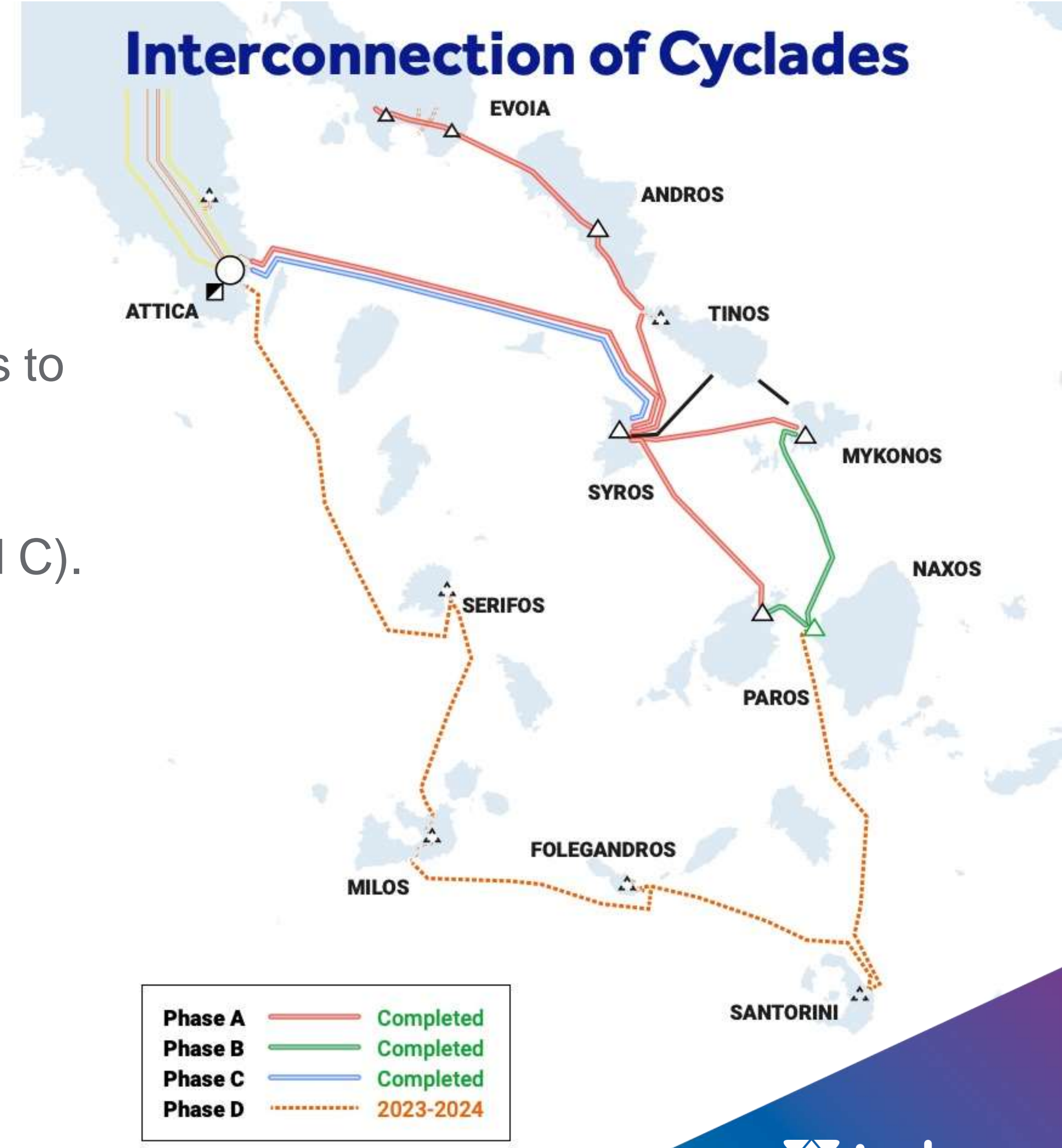
Scope

Cyclades Phase D:

- Connection of Western and Southern Cyclades to the mainland interconnected System.
- Extension of the completed interconnection of Northern Cyclades (Cyclades Phases A, B and C).

Islands to be interconnected:

- Santorini
- Folegandros
- Milos
- Serifos



Project overview (1/2)

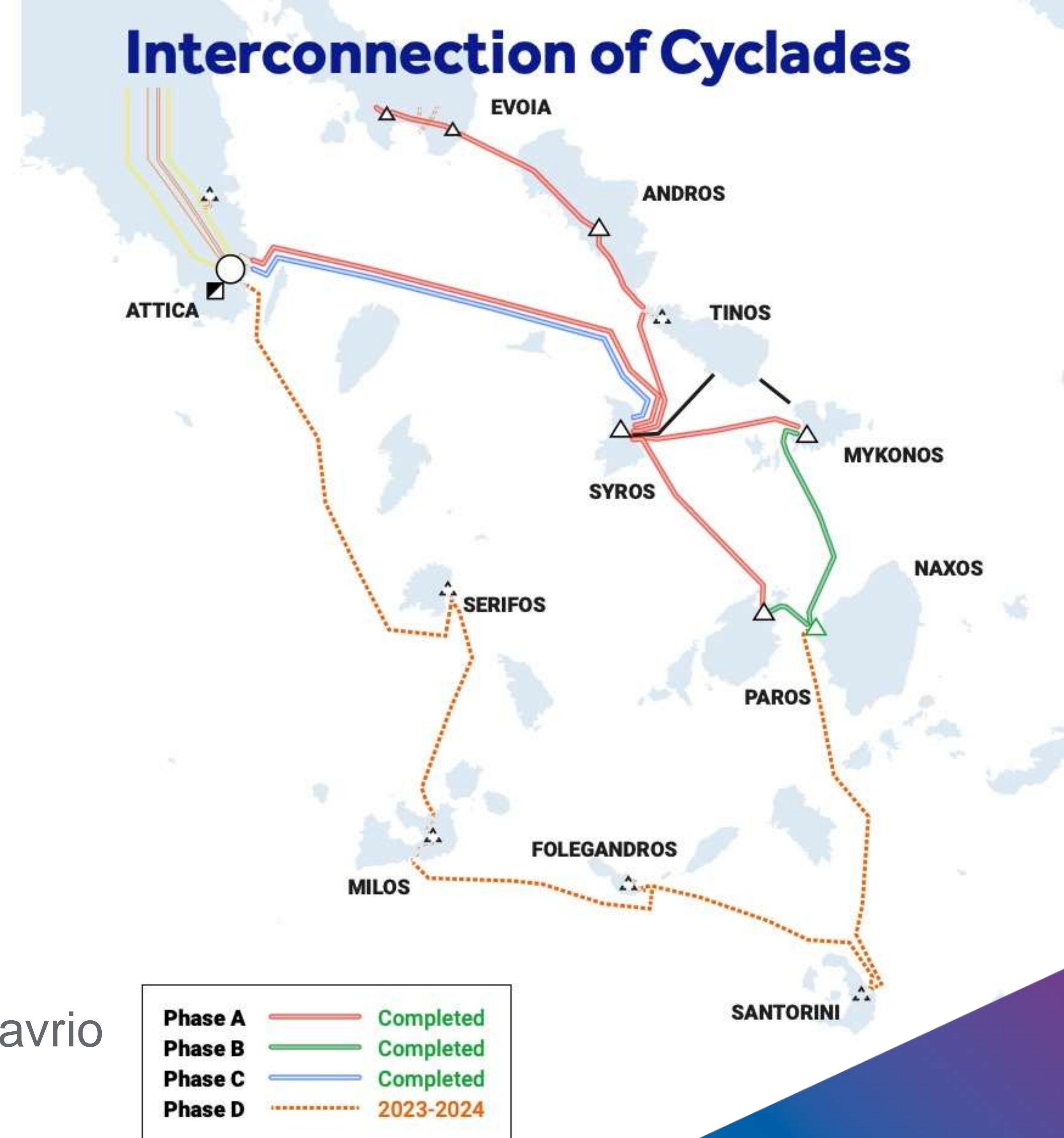
Main equipment:

- 5 underground and submarine cable circuits (~370km)
- 4 GIS substations (on the islands)

Interconnection topology:

Closed loop

- to the interconnected System of Northern Cyclades (via Naxos S/S) and
- to the mainland interconnected System (via Lavrio EHV S/S in Attica)



Project overview (2/2)

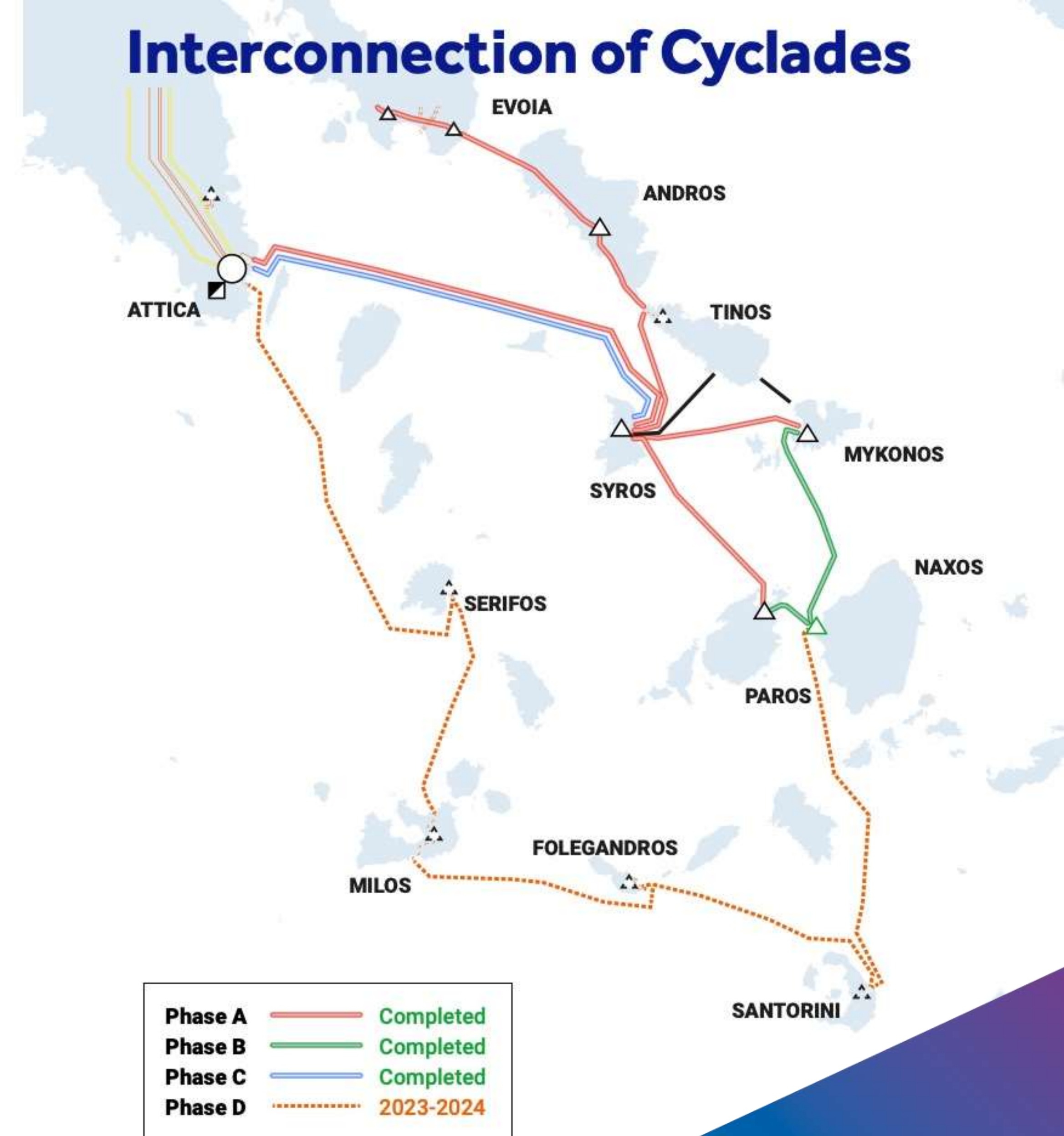
Milestones:

- Tender process completion: 2021
- Santorini-Naxos interconnection: 2023
- Project completion: 2024

Budget:

- 408M€

(383M€ transmission projects and 25M€ network projects)



Interconnection sections

Land cable transmission lines (approx. 19km)

- Lavrio, Serifos, Milos from Serifos, Milos to Folegandros, Folegandros, Santorini and Naxos

Submarine cable transmission lines 150kV (approx. 350km)

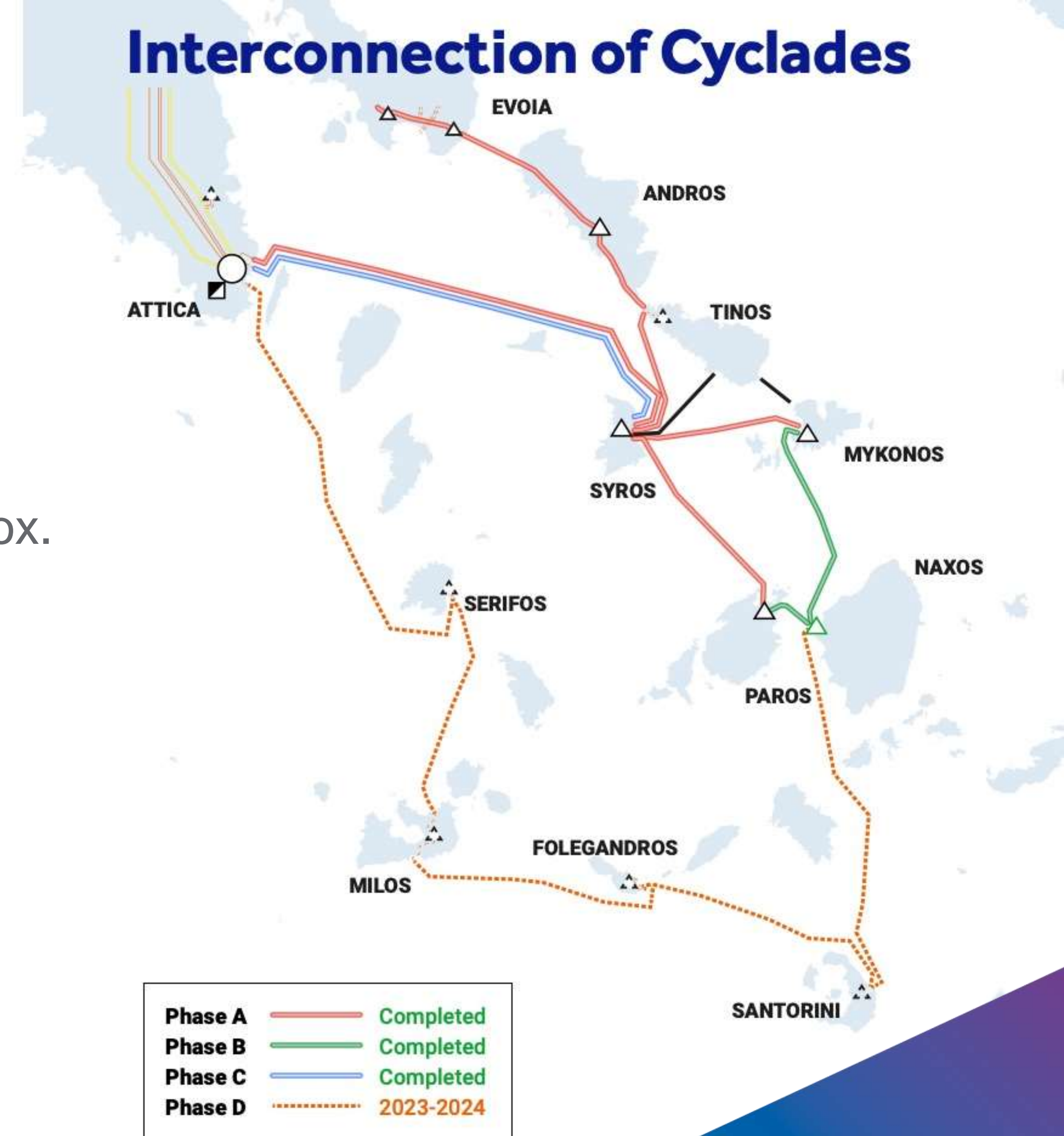
- Lavrio-Serifos, Serifos-Milos, Milos-Folegandros, Folegandros-Santorini and Santorini-Naxos

Construction of 4 new GIS 150kV S/Ss

- Serifos, Milos, Folegandros and Santorini

Installation of a Dynamic Reactive Power Compensation Unit (SVC) -100/+50MVar

- Santorini



Benefits

Allow the reliable supply of Western and Southern Cyclades.

Create an additional strong connecting route to the mainland interconnected System for all the Cycladic Islands.

Permit the substitution of local conventional power stations (oil-fired).

Reduce CO₂ emissions:

- ~100kt/y in 2025 (first year of full operation)
- ~120kt/y in 2030

Increase the margin of new RES development in Cyclades.

Total margin of new RES units development (installed capacity in MW)

