

# Geothermal Energy in Taiwan



Energy Administration  
Ministry of Economic Affairs

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# Outline

- 1. Background**
- 2. Taiwan's Geothermal Energy Pathway**
- 3. Geothermal Energy Strategies**
- 4. What's Next**
- 5. Conclusion**





## Taiwan's 2050 Net-Zero Transition

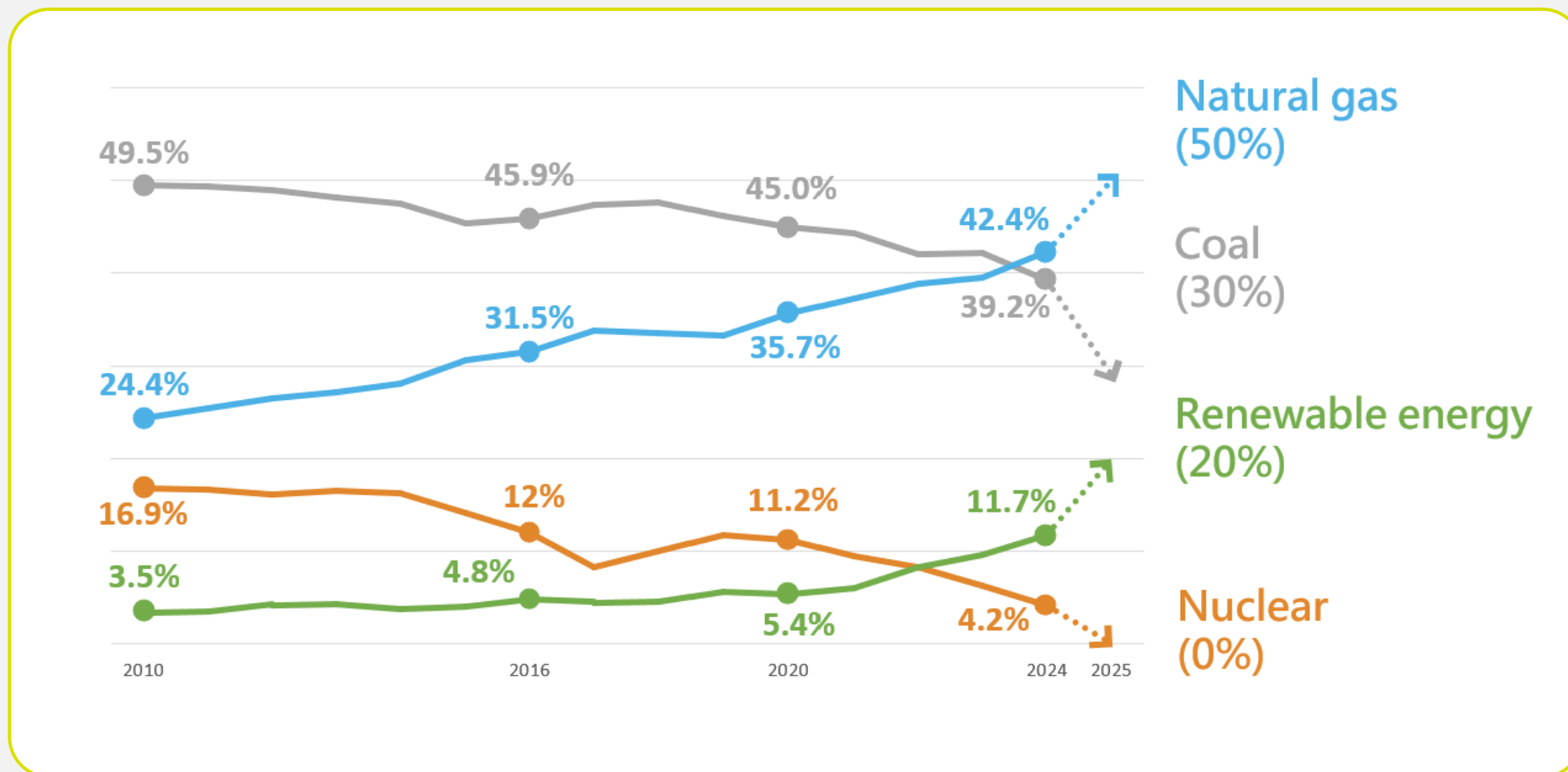
### 12 Key Strategies



As a local, stable, and sustainable green energy source, geothermal energy plays an important role in our strategy.

# Background-2050 Net-Zero Emissions Policy

Clear **targets** and **pathways** for the energy transition to increase green energy and reduce coal.





# Pathway of Geothermal Energy in Taiwan

Sihhuantziping, Taiwan



# Taiwan's Geothermal Energy Pathway-1

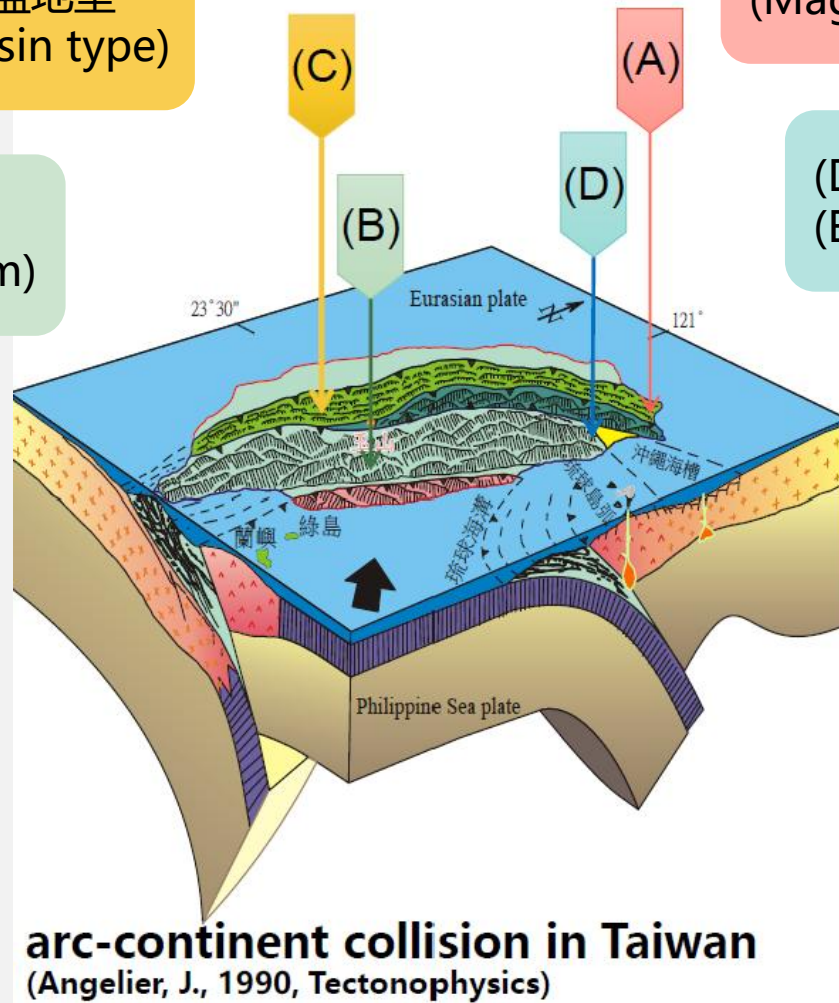
## Geological & Geothermal Framework in Taiwan

(C) Sedimentary Rock 沉積盆地型  
(Orogenic belt/foreland basin type)

(B) Metamorphic Rock 熱岩上升型  
(Geopressed geothermal system)

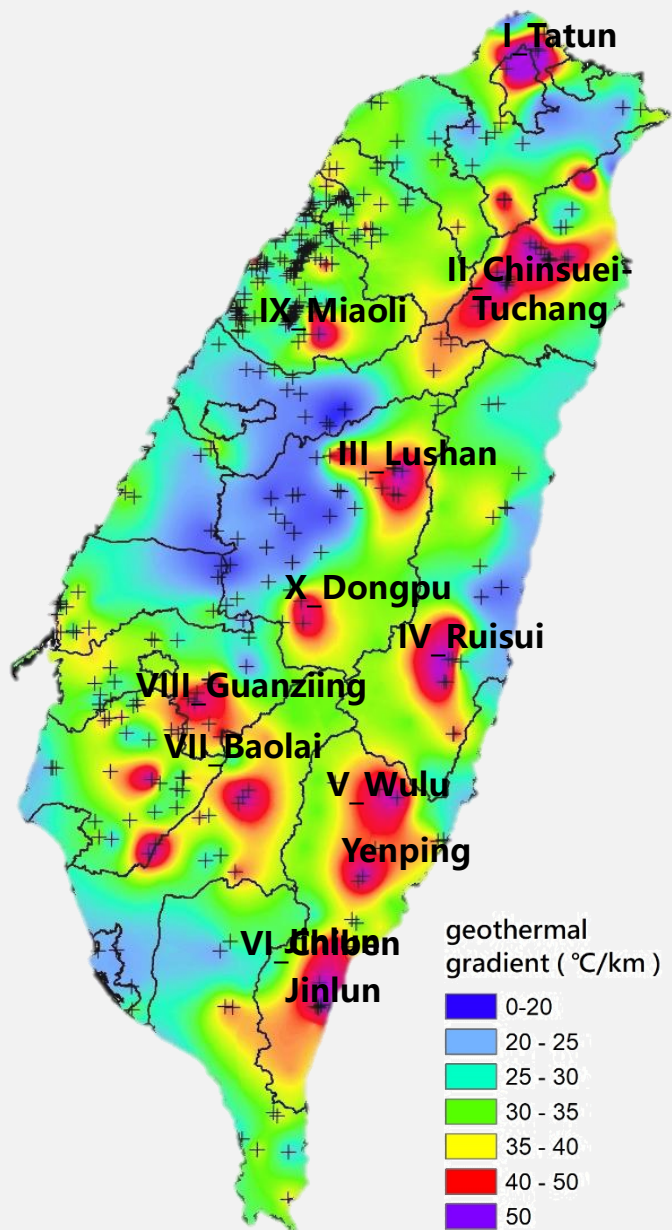
(A) Volcanic Rock 火山高溫型  
(Magmatic-volcanic field type)

(D) Extensional region 張裂盆地型  
(Extensional domain type)



<https://geotex.geologycloud.tw/english>

# Taiwan's Geothermal Energy Pathway-2



Storage Potential  
**40GW**

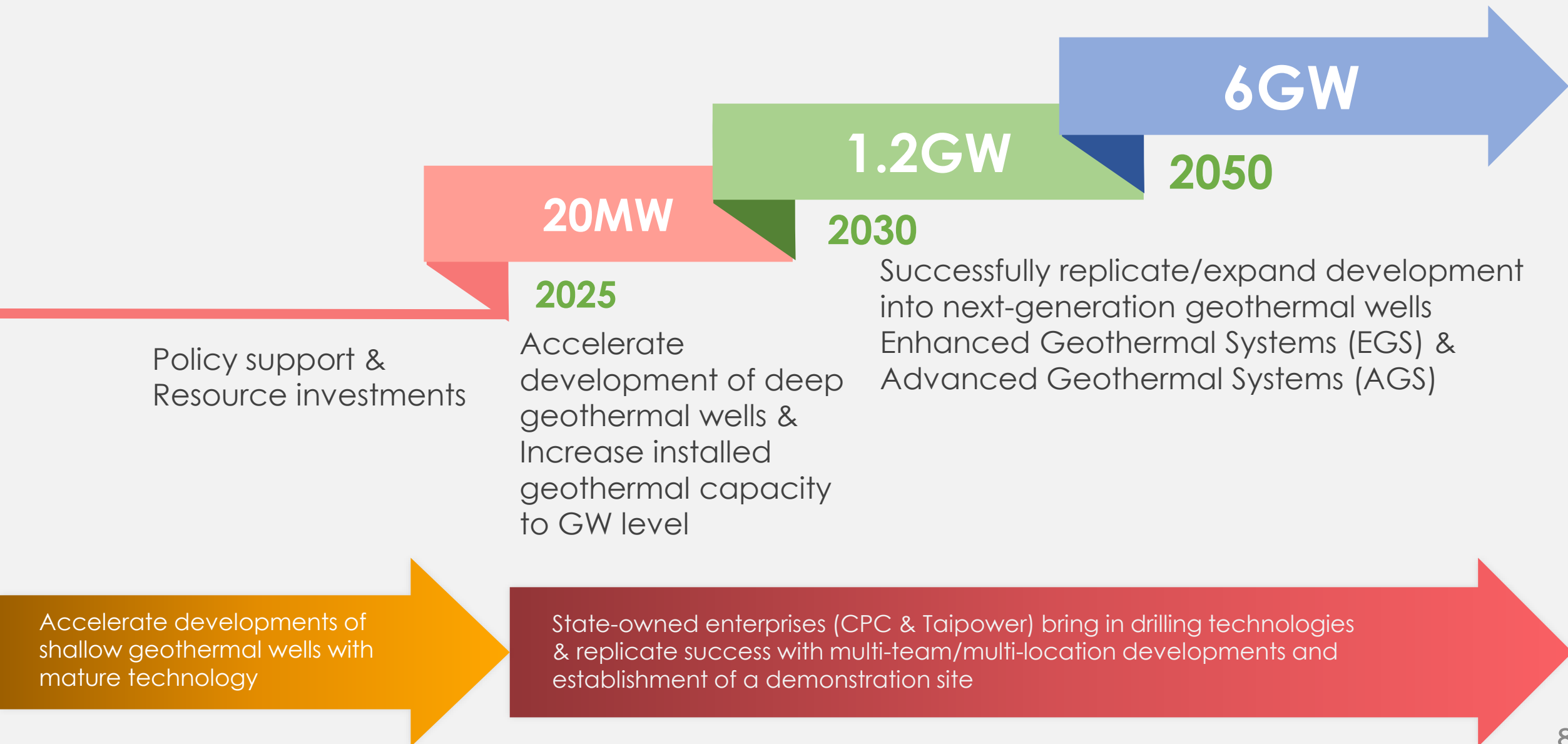


Install Capacity Target  
**6~8GW**

## Best-10 areas for AGS in Taiwan: Geothermal Everywhere

	unit	Potential Regions									
		I	II	III	IV	V	VI	VII	VIII	IX	X
		I Tatun	Chinsui-Tuchang	Lusan	Reisuei	Wulu-Yenping	Chiben-Jinlun	Baolai	Guanzilin	Miaoli	Dongpu
Volume	m <sup>3</sup>	809	2,774	1,096	1,237	1,900	2,011	1,412	1,254	431	780
Average Temp.	°C	235	227	236	219	225	215	212	215	217	219
Heat Content	10 <sup>18</sup> J	245.2	795.0	322.0	334.7	530.8	531.1	360.2	324.3	133.6	209.2
Power available	GWe	2.7	8.5	3.7	3.5	5.6	5.4	3.6	3.3	1.2	2.2

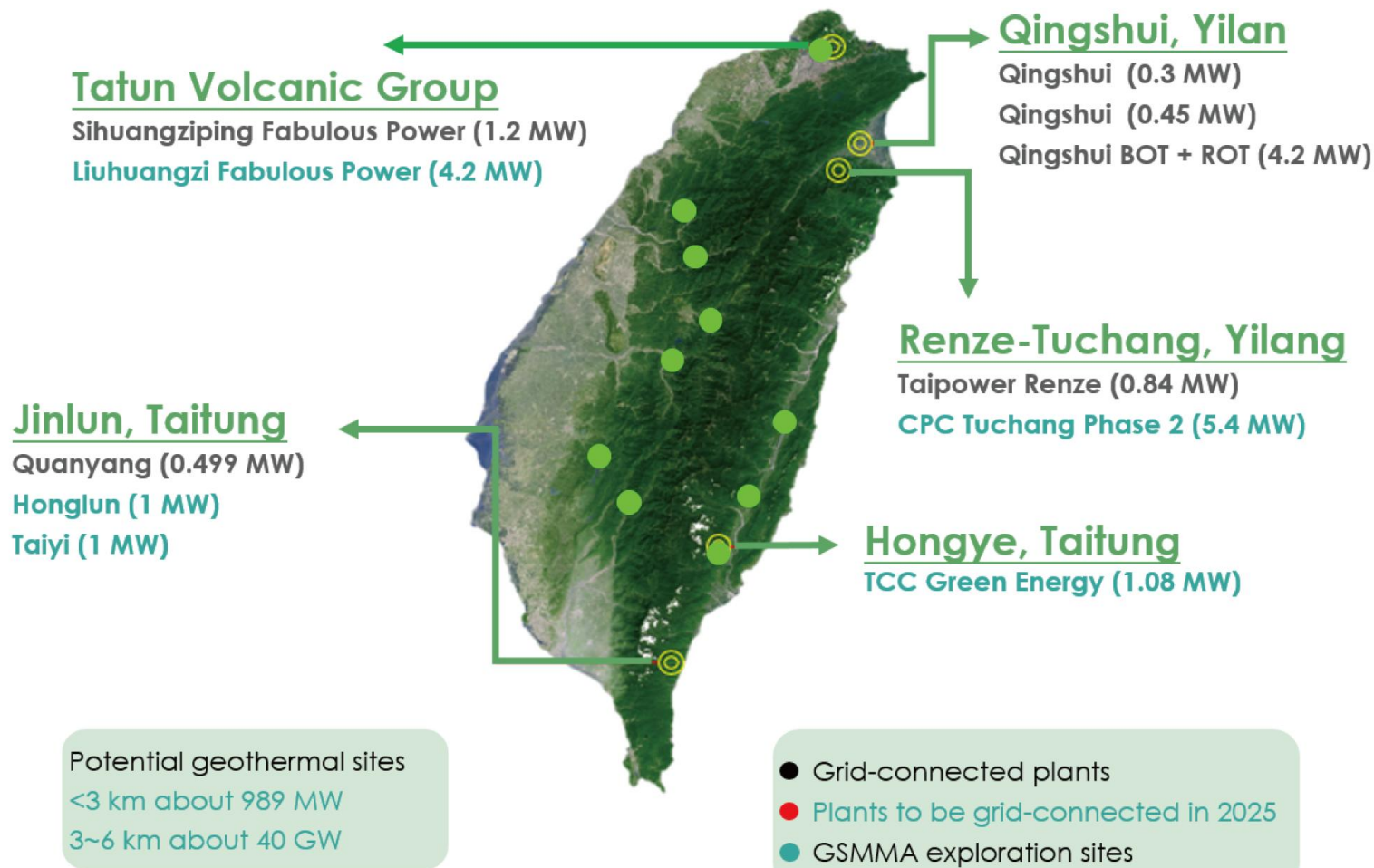
# Taiwan's Geothermal Energy Pathway-3





# Taiwan's Geothermal Energy Pathway-4

As of 2025, installed capacity totaled **7.49MW**



Qingshui Geothermal Power Plant



Taipower Renze Geothermal Power Plant



Quanyang Geothermal Power Plant



Sihuangziping Pilot Geothermal Power Plant



Qingshui BOT Geothermal Power Plant



# Strategies of Geothermal Energy in Taiwan

# Geothermal Energy Strategies-1

## Regulations to support geothermal development

- June 2023: Amendment of the Renewable Energy Development Act
- May 2024: Issuance of the Geothermal Exploration Development Permit and Management Regulation



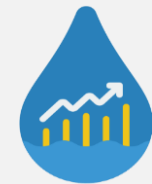
The geothermal power generation application process undergoes a **central government review**, with joint evaluations conducted alongside **local governments** and **relevant ministries/agencies**.



Accelerate Review Process



Effective Management

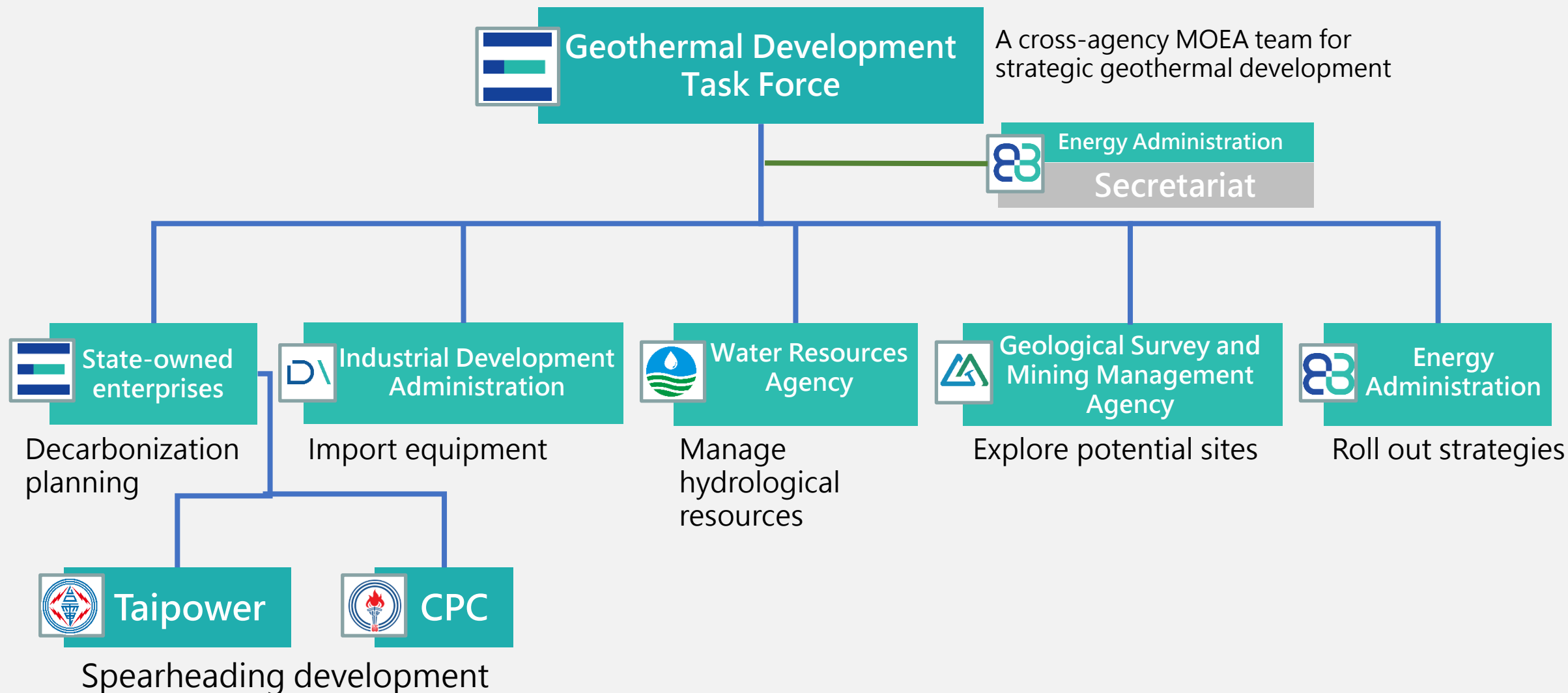


Sustainable Development



# Geothermal Energy Strategies-2

## Cross-agency collaboration



# Geothermal Energy Strategies-3



CPC Yuanshan Well No. 1 in Yilan  
est. 4000 meters

## CPC Corporation, Taiwan's Prospects and Strategies



International and Academic  
Collaboration for Exploration



Importing International Drilling  
Technology and Equipment



Partnerships

## Taipower's Prospects and Strategies

### Four-Arrows Action

#### Arrow 1

Scaling Up and  
Integrating  
Demonstration  
Sites

#### Arrow 2

Bringing Drilling  
Expertise to Local  
Fields

#### Arrow 3

Global Teamwork  
for Next-Generation  
Technologies

#### Arrow 4

Boosting Local  
Cooperation to  
Drive Private  
Projects



# What's Next



# Conclusion

- Accelerating the promotion of geothermal development from three aspects: **incentive measures**, **information disclosure**, and **regulatory streamlining**.
- Creating **an investment-friendly environment** by simplifying administration and improving public convenience.
- Accelerating **energy transition** and achieving **net-zero emissions** by cooperating with all partners.





# THANK YOU



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