

27 MAY 2021, BANGKOK, THAILAND

Perspective from ABB Thailand

"Think Resilience, Think Thailand: A Prime Business Location for Swiss Investors"

Gianandrea Bruzzone - Country Managing Director & Head of Electrification

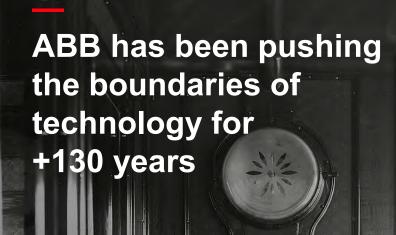




ABB is a leading global technology company that energizes the transformation of society and industry to achieve a more productive, sustainable future.

By connecting software to its electrification, motion, process automation and robotics & discrete automation portfolio, ABB pushes the boundaries of technology to drive performance to new levels.





Long history of continuing association with the development of Thailand's utility and industry sectors since 1978

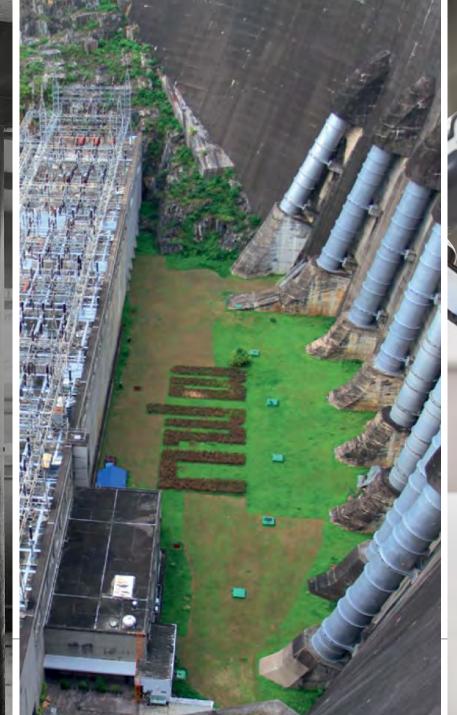




ABB in Thailand



>500

People work for ABB in TH



3

Oversight countries (Myanmar, Cambodia, Laos)



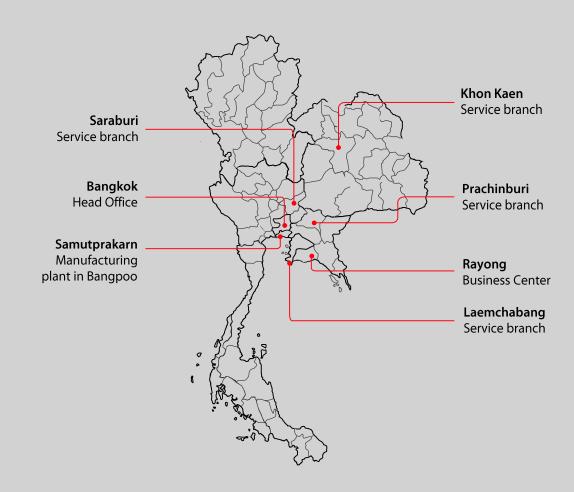
\$250 MUSD

Annual TH revenues



7

Office locations in TH





Digital technologies are driving new innovation in industrial markets

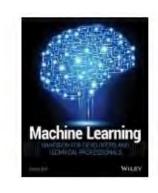
Virtual / Augmented reality



Software-defined machines



Al and Machine learning



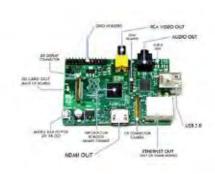
Time-sensitive networking



Big data



Inexpensive computing



Cloud computing



Cybersecurity



Connectivity



Blockchain

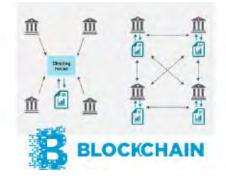






ABB helps societies to meet the growing demand for sustainable and reliable energy and water supply, transportation solutions, buildings and industries.

https://abbsmartsocieties.com/



ABB and **5G** application

ABB Ability Remote Insights

Opportunity



- Remote support and services through VDO Collaboration App.
- Multi cameras with connectivity reaching multiple site locations at the same time.

Business Scope & Roles



- **ABB**: Offering Service agreement with customers.
- **Ericsson**: Support on the 4G/5G coverage and data usage.

Collaboration



- 5G coverage area to ensure stability of data communication.
- Ensure data cybersecurity together with Ericsson.

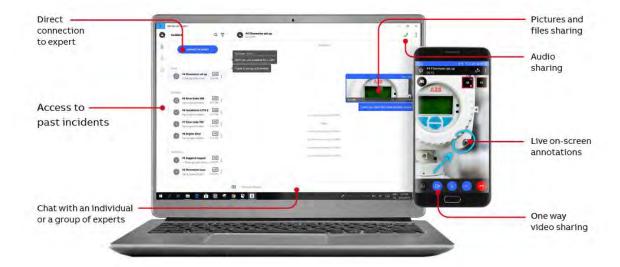




ABB robots help accelerate COVID-19 vaccine development in Thailand

Challenge



Thailand's Mahidol University and the Institute of Molecular Biosciences needed a rapid and safe way of testing and handling various samples for vaccine development.

Solution

An ABB YuMi cobot and IRB 1100, an industrial robot work together as part of the Al-Immunizer system to handle samples of virus as well as antibodies



Application

The robots can perform tasks such as take samples by pipette, mix sample according to designed formulas and transporting them to test stations, performing repetitive actions that avoids risks to operators



ABB's PCS100 UPS-I commissioned for AstraZeneca COVID-19 vaccine production in Thailand.

Siam Bioscience's new vaccine manufacturing facility for Thailand and Southeast Asian countries



- ABB's PCS100 IPS-I to ensure operational efficiency and constant supply of high-quality power at Siam Bioscience's new manufacturing facility in Nonthaburi, Thailand.



The new manufacturing facility is expected to produce 200 million doses per year for Thailand and Southeast Asian countries.



ABB's fast charging solution to shape the future of e-mobility in Thailand

PEA Volta EV charging station



- PEA joins hands with Bangchak Corporation to install 124 of ABB's Terra 54 fast chargers at 62 sites across Bangchak's petrol stations and PEA offices within 2021.
- EV stations located in 40 provinces across the country.



- ABB Terra 54 fast chargers can charge a vehicle's battery up to 80% of the average charging capacity of the electric vehicle within 15 to 30 minutes.
- The charger is compatible with all EVs currently on the market





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