



Assessment of COVID-19 impacts on Vietnam power sector

USAID Vietnam Low Emission Energy Program II (V-LEEP II)
Nguyen Trong Nghia

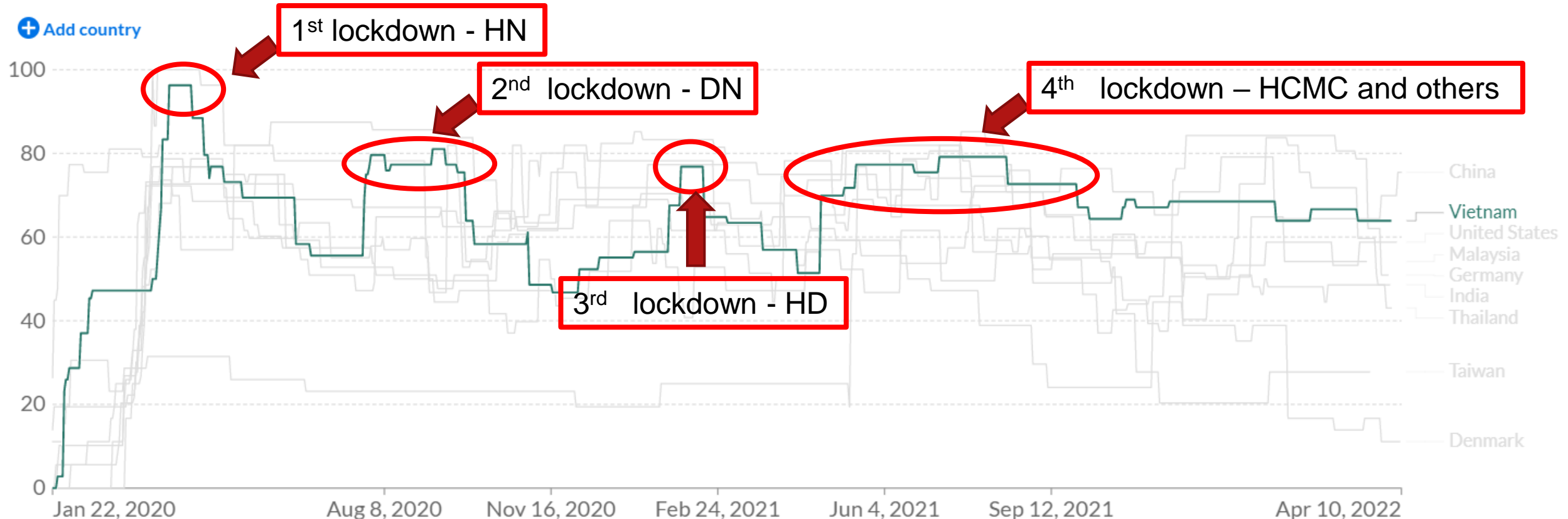
Government of Vietnam's responses to COVID-19 have impacted the power sector

COVID-19 Stringency Index

The stringency index is a composite measure based on nine response indicators including school closures, workplace closures, and travel bans, rescaled to a value from 0 to 100 (100 = strictest).
If policies vary at the subnational level, the index shows the response level of the strictest subregion.

Our World
in Data

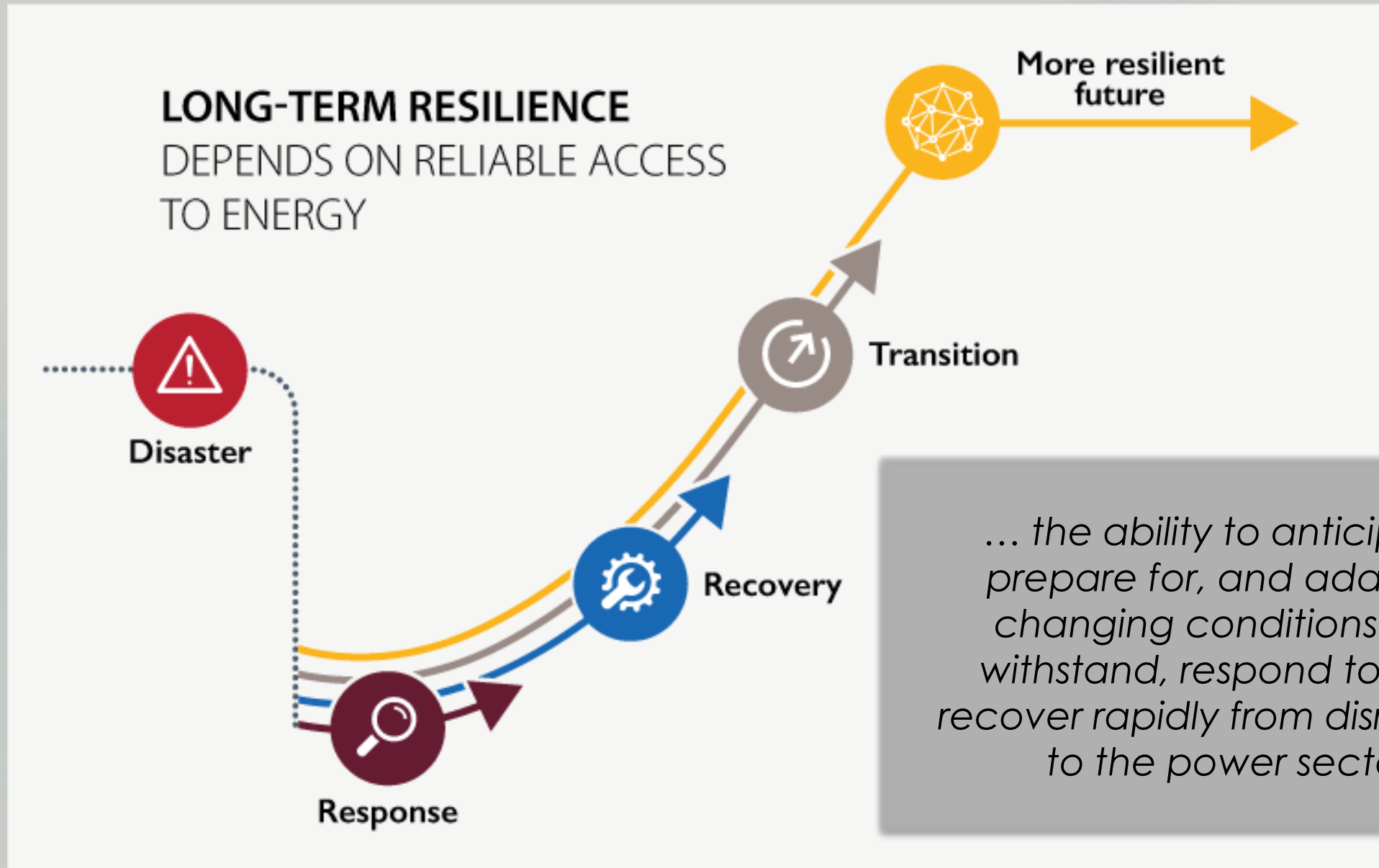
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Source: Oxford COVID-19 Government Response Tracker, Blavatnik School of Government, University of Oxford - Last updated 11 April 2022, 09:10 (London time)

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COVID-19: From Response to Resilience

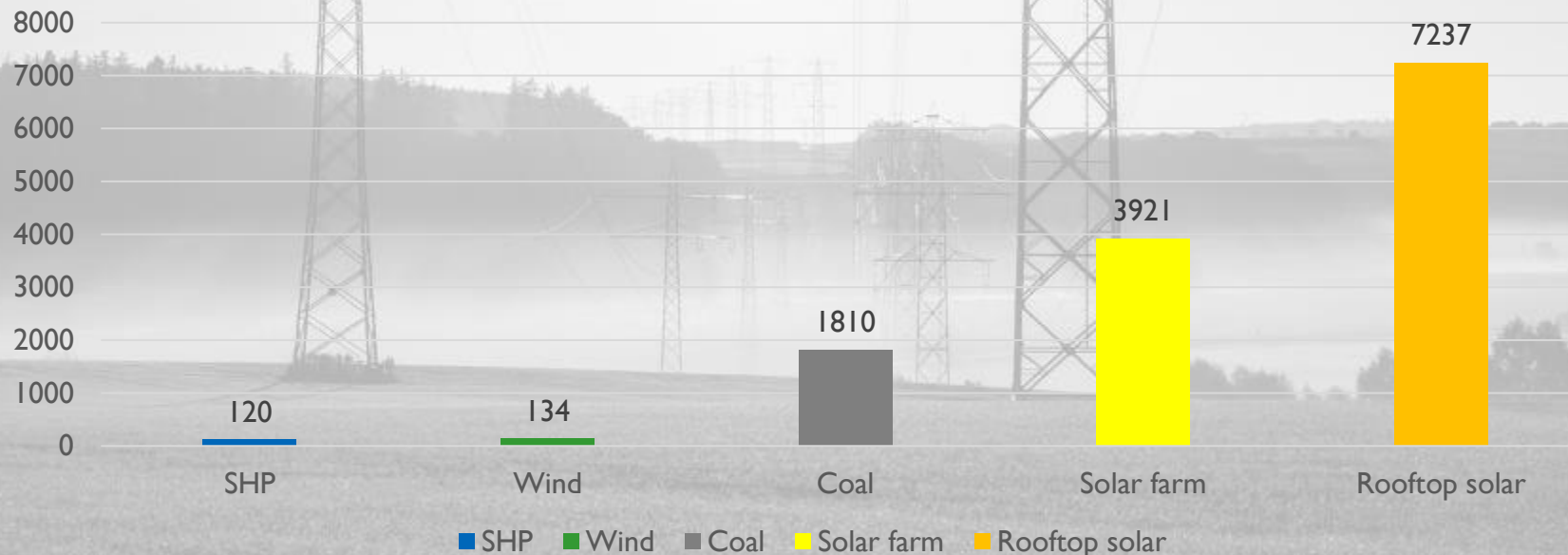


Power system overview 2020

Due to COVID-19, demand has been much lower than expected

Annual demand	Max daily demand	System installed Capacity
245.85 bil.kWh	797.54 mil.kWh	61,268 MW
Increase only 2.43% vs 2019 Planned growth: 9.09%	Increase only 1.72% compared to 2019	Not including 7.2 GW _{AC} of RTS

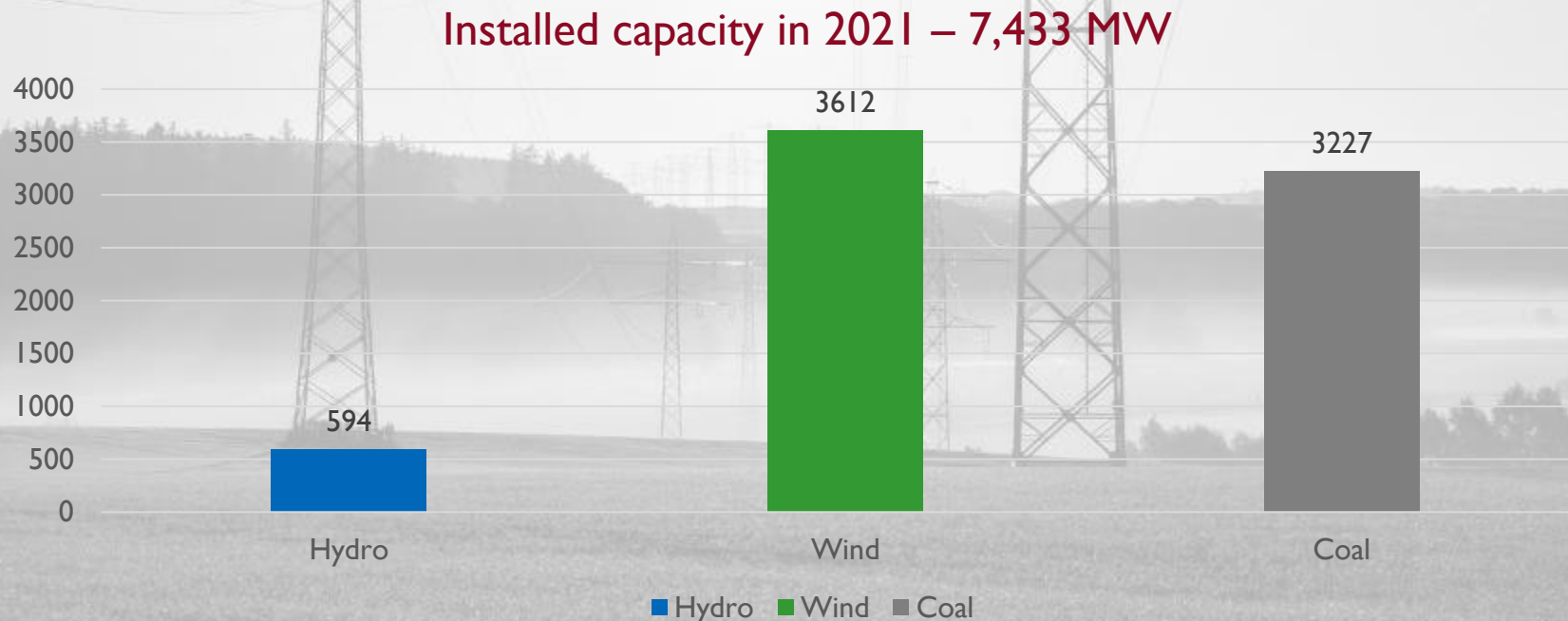
Installed capacity in 2020 - 13,222 MW – including RTS



Power system overview 2021

Due to COVID-19, demand has been lower than expected

Annual demand	Max daily demand	System installed Capacity
256.73 bil.kWh	880.37 mil.kWh	78,121 MW
Increase only 3.91% vs 2020 97.8% of Planned growth	Increase only 9.6% compared to 2020	Including 7660 MW of RTS

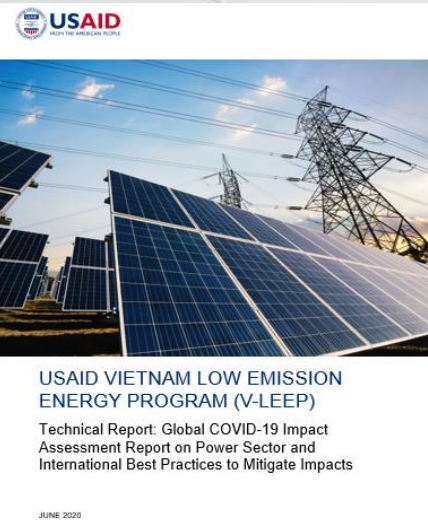


USAID V-LEEP implemented COVID-19 impact assessment

Mar 2020 – Jan 2021

Mar - Apr

International review



Apr - May

Develop questionnaires

4 groups of entities

- Public administration
- Generation units
- Transmission companies
- Distribution companies

May - Jun

Select interviewees

Selection criteria

- Geographical distribution
- Generation technology
- Ownership

Jul - Nov

Implement interviews

Engaging method

- In person
- Email exchange
- Virtual meeting

Nov - Jan

Final report

Process:

- Draft report
- Consultation workshop
- Final report

- Approval of scope of work by MOIT and USAID in March 2020 (USAID rapid response support)
- USAID through V-LEEP provided support to MOIT agencies for creating virtual centers to ensure business continuity



Main findings

COVID-19 has had impacts on all aspects of the power sector, from production and business activities to the maintaining of sufficient power supply to different economic sectors and activities of social life.

Impact on operation

- Load **increased** sharply in the residential sector (6.5%), slightly **increased** in the industrial sector (1%) and **decreased** significantly in the commercial sector (-12%).
- Load changes led to a **change in mobilization** of power sources in the power system.

Impact on projects

- All ongoing projects are affected in terms of progress due to **land clearance delay**, the **interruption of supplies** of equipment and **lack of suppliers' experts**.
- Although online communication has been applied but it was **not as efficient as** face-to-face communication.

Impact on revenue

- The **targets (KPI)** assigned to the power agencies in the business plan at the beginning of the year are all related to the power output.
- Therefore, when the demand decreased nationwide due to the impact of COVID-19, all agencies in the power sector will be **affected in terms of business performance, revenue and profit**.
- Only **existing renewable energy** projects were not affected by issues related to COVID-19 due to priority dispatch.



Recommendations

The power sector has had appropriate response plans to ensure sufficient power supply in terms of stability, adequacy and reliability.



- ✓ Response approach was consistent from the top level down (GVN, MOIT, EVN, PPC, unit)
- ✓ Flexible, suitable COVID-19 response plan for each individual entity (EVN → GENCO2 → S.B2 HPP)
- ✓ Protecting core workforce (operator of all entities)
- ✓ Increased online working mode (EVN-GENCO3 - camera monitoring for installation of equipment)
- ✓ Flexibly adjusted maintenance plans (EVN-GENCO1-DHD)
- ✓ Supply chain management mitigated the impact of delayed equipment (EVN-NPT-CPMB)
- ✓ Creativity in the working model mitigated the impact caused when experts are not allowed to come
- ✓ Greater interactions with customers via online platforms (EVN-PCs)

Thank you for your attention!

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