


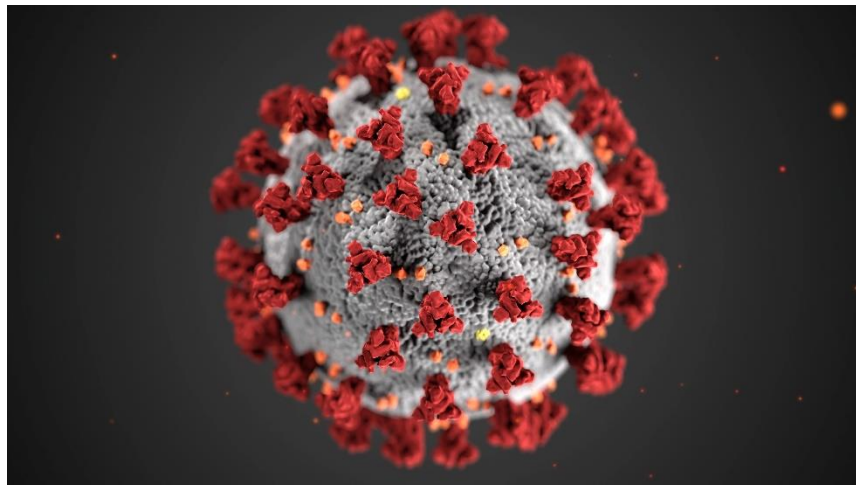
# Swissgrid: Ready for the digital future

Balance sheet press  
conference



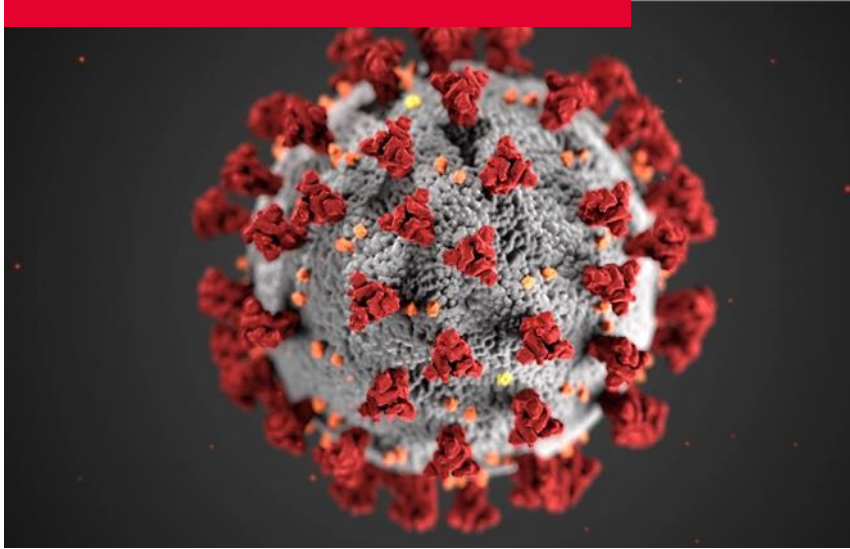
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# The year 2020 in review





# COVID-19: The measures we adopted early are paying off



The **measures we** adopted early have proven themselves.



Thanks to **our** flexible and digital work environment, switching to home office **went very smoothly**.



**We guaranteed business activity** at all times in the critical phases of the pandemic.



# Modernisation of the grid infrastructure for security of supply and grid stability



Transportation of hydropower from Wallis Canton to consumer centres: Construction work on the Chamoson–Chippis cable and Nant de Drance connection is running according to plan.



Beznau–Birr cable (incl. partial cabling in Gäbihübel near Riniken) was put into operation a year ahead of schedule.



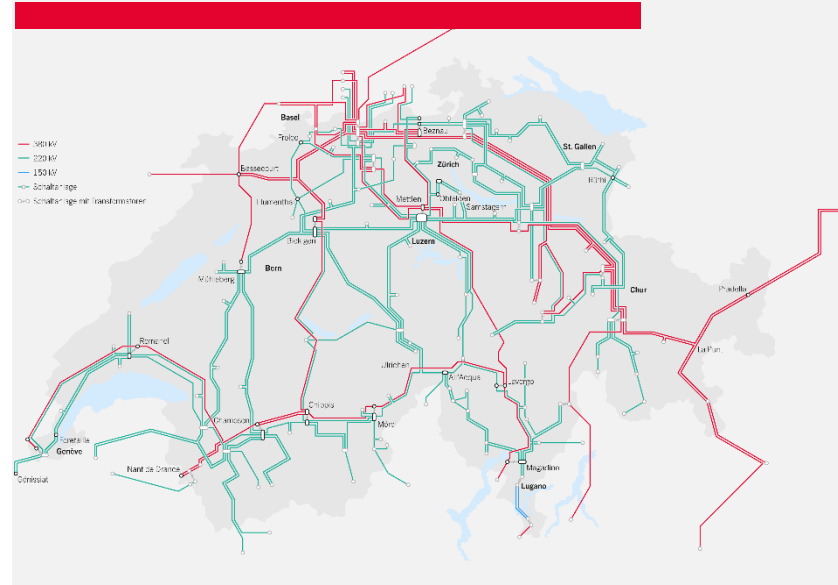
Successful renewal of substations: Swiss gas-insulated switchgears in Innertkirchen require significantly less space than open-air switchgears.



# Product development for more market efficiency and grid security



New voltage stability concept is proving itself: Financial incentives are increasing voltage stability in the grid.



Cross-border trade has been enhanced through automated intraday capacity allocation.



High demands from the SAFA agreement: Entry into force of the Transmission Code & Balancing Concept is the first important step.

# Compatibility of Swiss legislation with EU law



## Lack of an electricity agreement

The gaps in legislation between Switzerland and Europe are getting wider: Swissgrid is increasingly being excluded from European processes.



## Implementation of Clean Energy Package

Unplanned flows are increasing and the ability to import energy into Switzerland is decreasing.



## Revision of the Energy Act

The legal framework must support the integration of renewable energies. The transmission grid is a deciding factor in this.



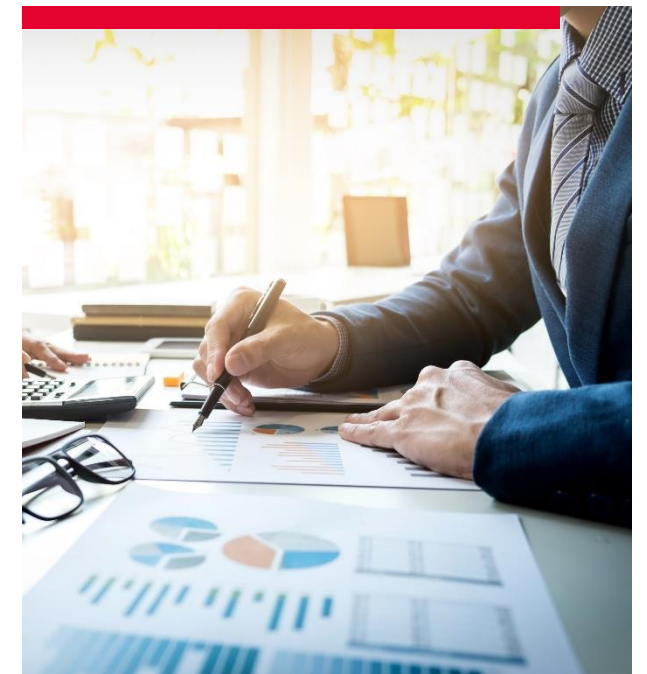
# Electricity flows through us. For Switzerland. Today and tomorrow.

Swissgrid has made its contribution to Swiss–European negotiations. Now it is up to the politicians.

Swissgrid is prepared for the future and pushing ahead with digitalisation and process automation.

Swissgrid is developing market products and market solutions to increase market efficiency and grid security.

Swissgrid's finances are very robust.





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# Financial Report 2020 & Financial Outlook 2021

Doris Barnert, CFO / Head of Corporate Services  
Aarau, 23 April 2020



## Key points from the 2020 annual financial statements

CHF m	2020	2019	Diff. 2020–2019
EBIT	116.7	102.4	14.3
Company results	75.7	28.8	46.9
Total assets <sup>1)</sup>	3,072.3	2,994.0	78.3
Equity ratio <sup>2)</sup>	39.1%	38.3%	0.8
Distribution of profits	37.9	31.5	6.4
Free <b>cashflow</b>	-7.0	166.8	-173.8

Swissgrid's financial metrics are developing very satisfactorily.

- The equity ratio is solid and has increased
- Total equity amounts to CHF 1,154 Mio.
- At CHF 178.1 million, the investment volume is significantly higher than in the previous year
- The increased investments, in combination with reduced net revenues due to the pandemic, mean the free cashflow is less than expected
- The bank is rated at AA or AA-; the fedafin rating is Aa+
- Swissgrid is economically strong and solidly positioned for the future

1) Total assets not including fiduciary items

2) To calculate the equity ratio, the total assets are adjusted for balance sheet items held on a fiduciary basis and the net volume – and tariff – related timing differences are taken into account

# Outlook of financial expectations\*

Key figure	2022 2025		Expectation
	2021		
EBIT	↗	→	Increasing for 2021 due to the imminent finalisation of the transmission grid takeover. Increasing slightly from 2022.
Net income	↗	→	Increasing for 2021 due to the imminent finalisation of the transmission grid takeover. Increasingly slightly from 2022.
Equity ratio	→	→	Increase from the current 39.1% to over 40%.
Net financial debt	→	→	Stable at around CHF 1.4 billion.
Interest coverage ratio	↘	↗	Decreasing for 2021 due to the imminent finalisation of the transmission grid takeover. Increase due to falling financial expenses and moderate increase in EBITDA.

\* The year 2021 will primarily be influenced by the forthcoming finalisation of the transmission grid takeover.  
The expectations for 2021 as well as 2022–2025 are both to be understood in the context of the 2020 annual results.  
Assumption: WACC (Weighted Average Cost of Capital) = 3.83%



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# The energy revolution will not succeed without a high-performance grid



- The energy system finds itself in the biggest upheaval in its history
- Electricity will play a central role in this revolution
- The transmission grid forms the backbone of the Swiss power supply
- The energy revolution cannot succeed without a high-performance extra-high-voltage grid
- The energy revolution requires innovative technologies to sustainably guarantee secure and stable grid operation
- Swissgrid is developing digital solutions in order to take advantage of the transformation in the electricity system and ensure secure grid operation



# Efficiency and grid stability thanks to digital solutions

## System operation



## Grid expansion



## Maintenance



# System operation

## Equigy: Contribution to grid stabilisation and Energy Strategy 2050



- Crowd balancing platform Equigy: An innovative solution for integrating decentralised units, e.g. electric cars, heat pumping technology, battery storage, photovoltaic
- First European cooperation to use Blockchain technology
- Joint venture founded by Swissgrid, TenneT (Netherlands/Germany) and Terna (Italy) in 2020
- Extended to include APG (Austria) in 2021
- Various pilot projects at an international level
- Successful Swiss pilot project with Alpiq in 2020
- Next project in the pipeline: Focus on cooperation between transmission grid and distribution grid operator



# System operation

## Digital Line Rating (DLR) optimises operational use of the grid infrastructure

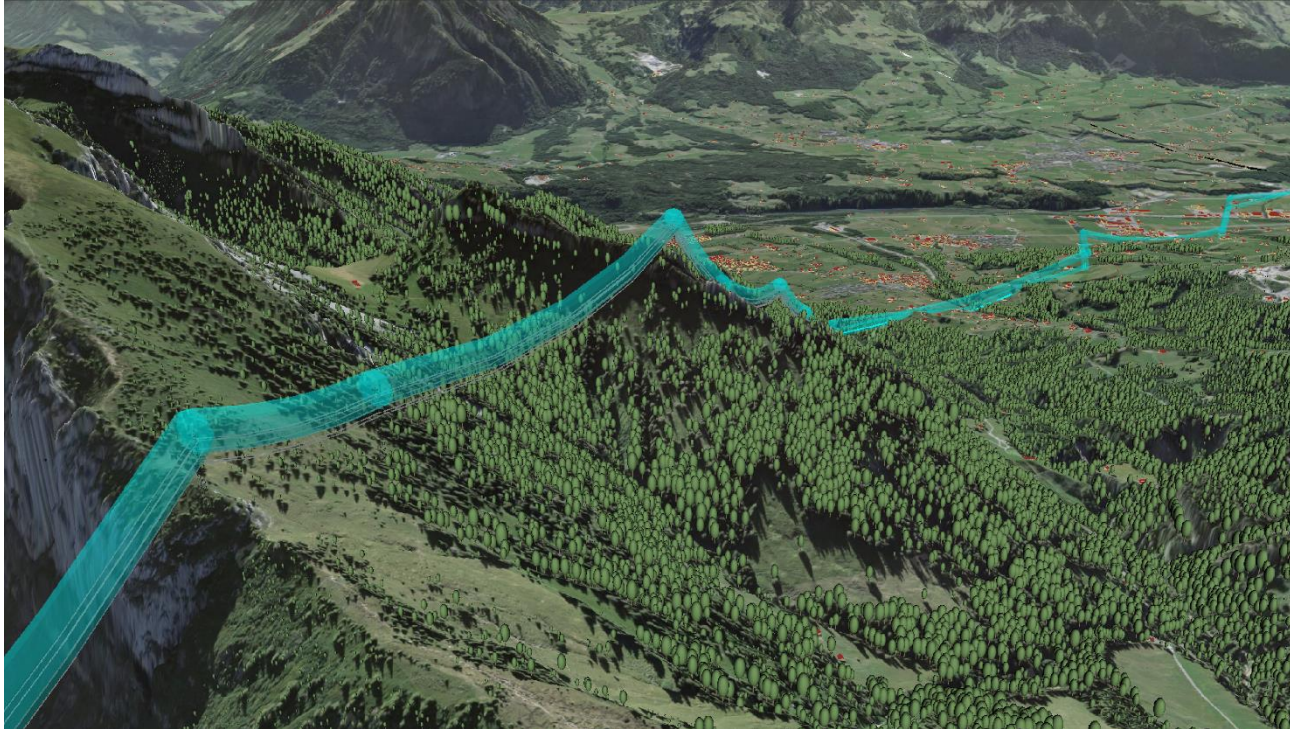


- With Digital Line Rating, the **use of real-time measurement data and regional weather prognoses** are tested in order to determine the maximum permitted current intensity and optimised accordingly
- Current, temperature, angle of inclination and accelerations can be measured on or in the transmission line without the need for external supply
- Goal: To model and forecast thermodynamic behaviour more effectively using sensor data and a cloud application
- **Benefit: Optimise operational use of the existing grid infrastructure, reduce bottleneck warnings and redispatch costs**



# Grid expansion

## Quicker agreement in sight thanks to 3D Decision Support System

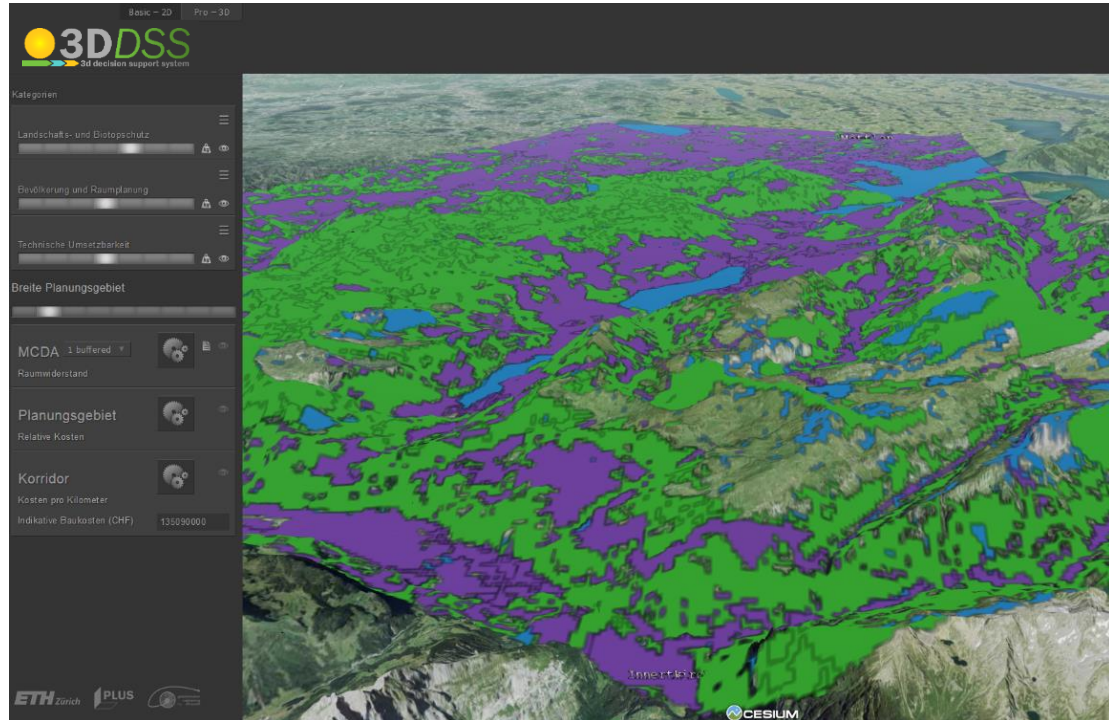


- Goals:
  - Find alternatives with the greatest acceptance and feasibility
  - More transparent prioritisation of the various aspects ensures objective discussion
- Project: Swissgrid is using the 3D DSS concept with the ETH Zürich Spin-Off Gilytics in the Flumenthal–Froloo und Innertkirchen–Mettlen projects
- Benefit: Contributes to quicker agreement in the search for new lines

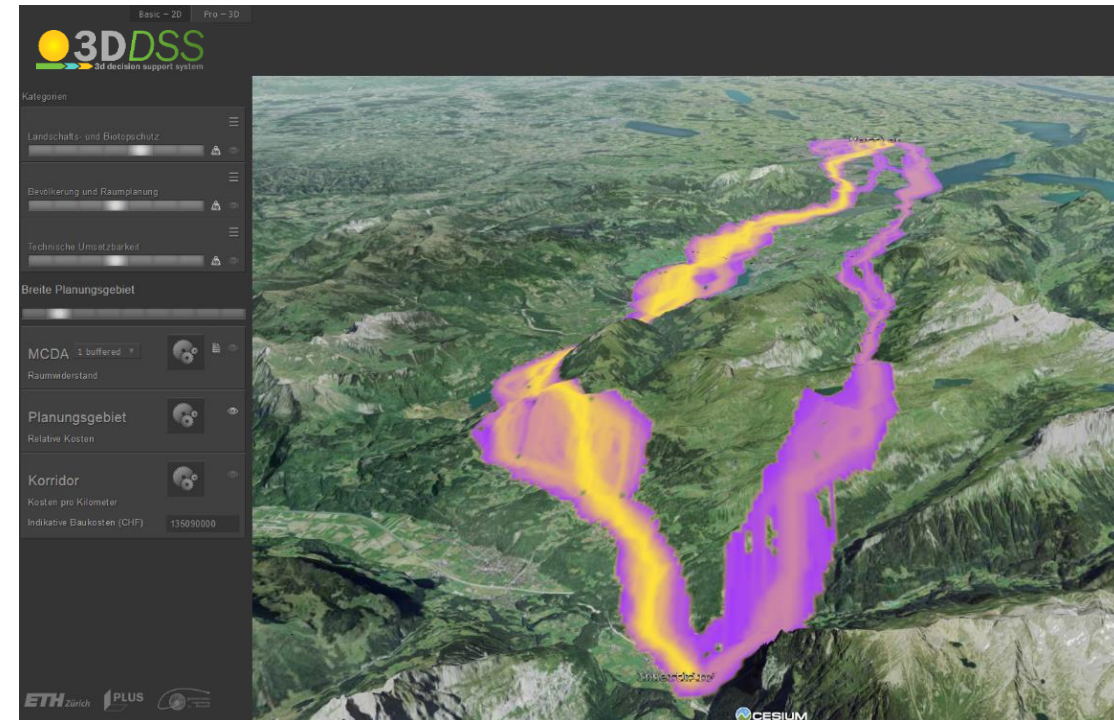


# Grid expansion

## 3D DSS offers new possibilities in planning



1. Analyses and evaluates criteria. Every layer represents a criterium.
2. Adds up the various layers.



3. Calculates the pathway with the highest acceptance.
4. Limits the planning area and corridor.



# Maintenance

## Standardised measurement of the corrosion status



- Until now, it has hardly been possible to conduct mechanical checks of the degree of corrosion on steel structures with the naked eye
- A new **automatic process makes this possible without the need to shut off the cable**
- A drone equipped with an embedded sensor scans the surface of the steel elements automatically and identifies the areas where the steel thickness has decreased
- Benefit: Corrosion analyses can be conducted more securely and in a more standardised manner



# Maintenance

## More efficiency – less risk



- Project expected to run from December 2020 until mid-2021
- The project **increases precision and efficiency in corrosion measurement**
- Since the cables do not need to be shut off during the measurement, the project has a **positive effect on system operation and helps to avoid bottlenecks**



**Swissgrid is using digital solutions to support the success of the energy revolution**





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# Balance sheet press conference 2021

Q&A session



# Thank you for your attention!

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