

RENEWABLE ENERGY SOLUTIONS

Renewable Energy in Mining, Vancouver, British Columbia



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Who We Are



GROUP STRUCTURE

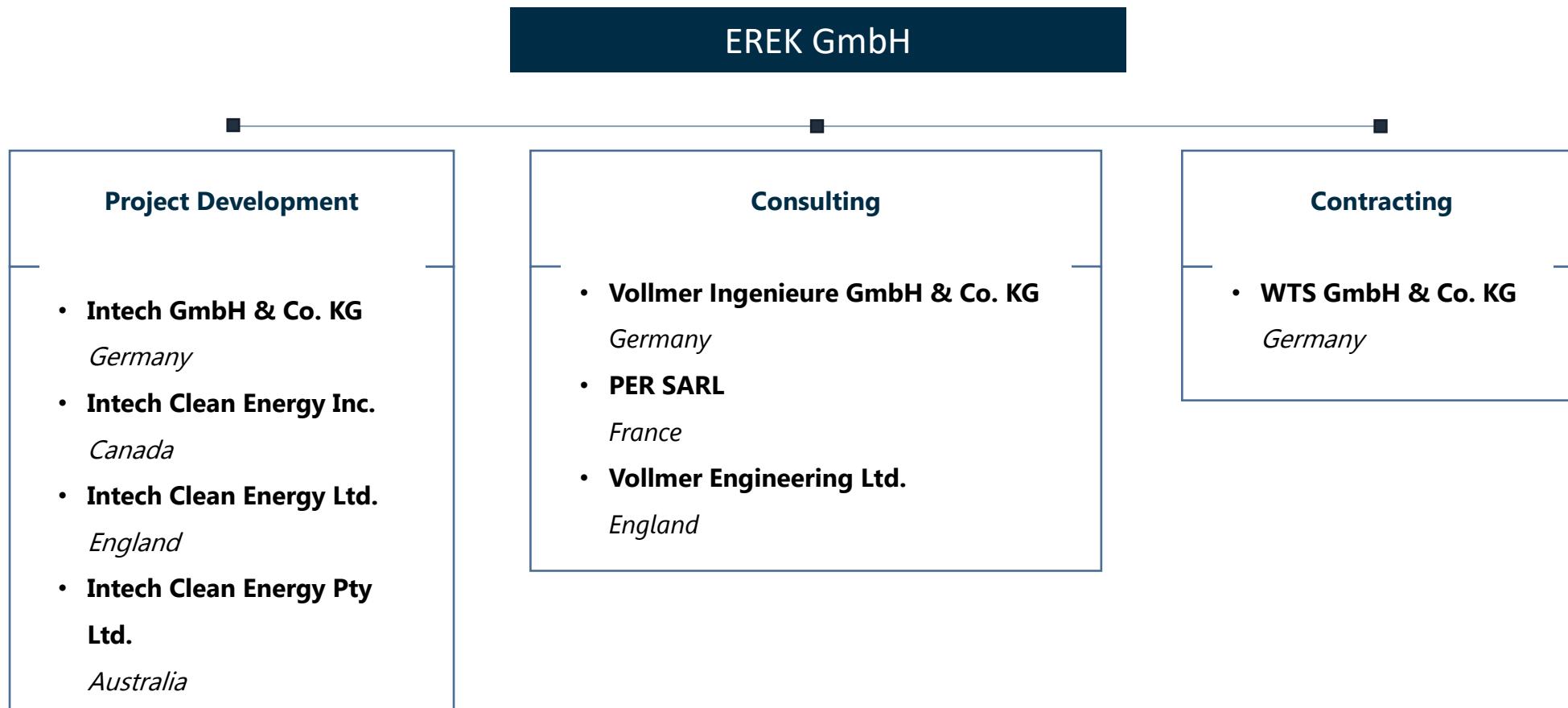
SOLUTIONS



INNOVATIONS

RENEWABLE
ENERGY SOLUTIONS

Group Structure



Who we are

**More than 20 Years Experience
with Renewables**



Feasibility Studies



Energy Efficiency
Assessments



Engineering



Turnkey Projects

Our Solutions

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SOLAR ENERGY

Roof-Mounted PV

Ground-Mounted PV



OFF-GRID

Off-Grid

Hybrid Systems



BIOENERGIES

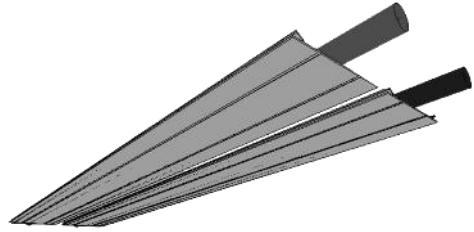
Biomass

Biogas

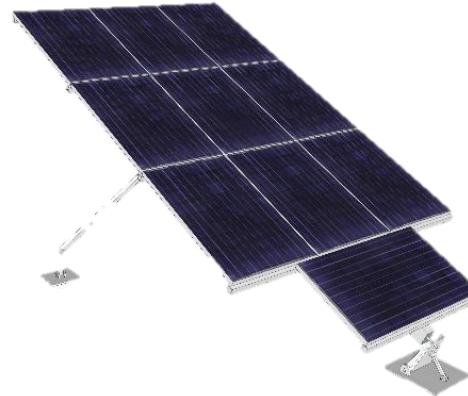


Our Innovations

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Radiant
Ceiling Panels



Solar Tracker



Energy
Container



Floating Solar
Panels



Bioenergy Solutions

DISTRICT HEATING
SYSTEMS
COMMUNITIES AND
INDUSTRIES



PROJECT REFERENCES

DISTRICT HEATING SYSTEM

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CENTRAL FURNACE

- ✓ Biomass boiler / CHP
- ✓ Backup boiler (oil/gas)
- ✓ Buffer tanks

HEAT SUPPLY OF SINGLE OR MULTIPLE BUILDINGS

- ✓ Heat exchanger in each building of the district heating system

SUPERVISION AND REGULATION

- ✓ Of the whole system

Wood-processing Sector



District Heating System, 850 kW

Sawmill, Hainterbach, Germany

- Wood-chip
- District heating connecting wood drying chambers, wood processing facility, office building and 3 private buildings

Biomass Heating System, 1,5 MW

Bathroom Furniture Manufacturer, Schenkenzell, Germany

- Wood residue boiler
- Heating system furniture manufacturing facility and store



Agriculture



Corn drying company, Lauterbourg, France

Planning of a wood-chip heating for the heat supply of a corn drying system, 2 houses, a poultry barn (50 000 chickens) and a pool.



EARL des Chataigniers, Drachenbronn, France

Wood-chip boiler providing heat to 3 poultry houses.
35 kW PV Roof-Mounted

Public Sector



Municipality, Rittershoffen, France

280 kW wood-chip boiler

District heating system connecting townhall, fire department, 2 schools with accommodation, 2 churches, 2 presbyteries.

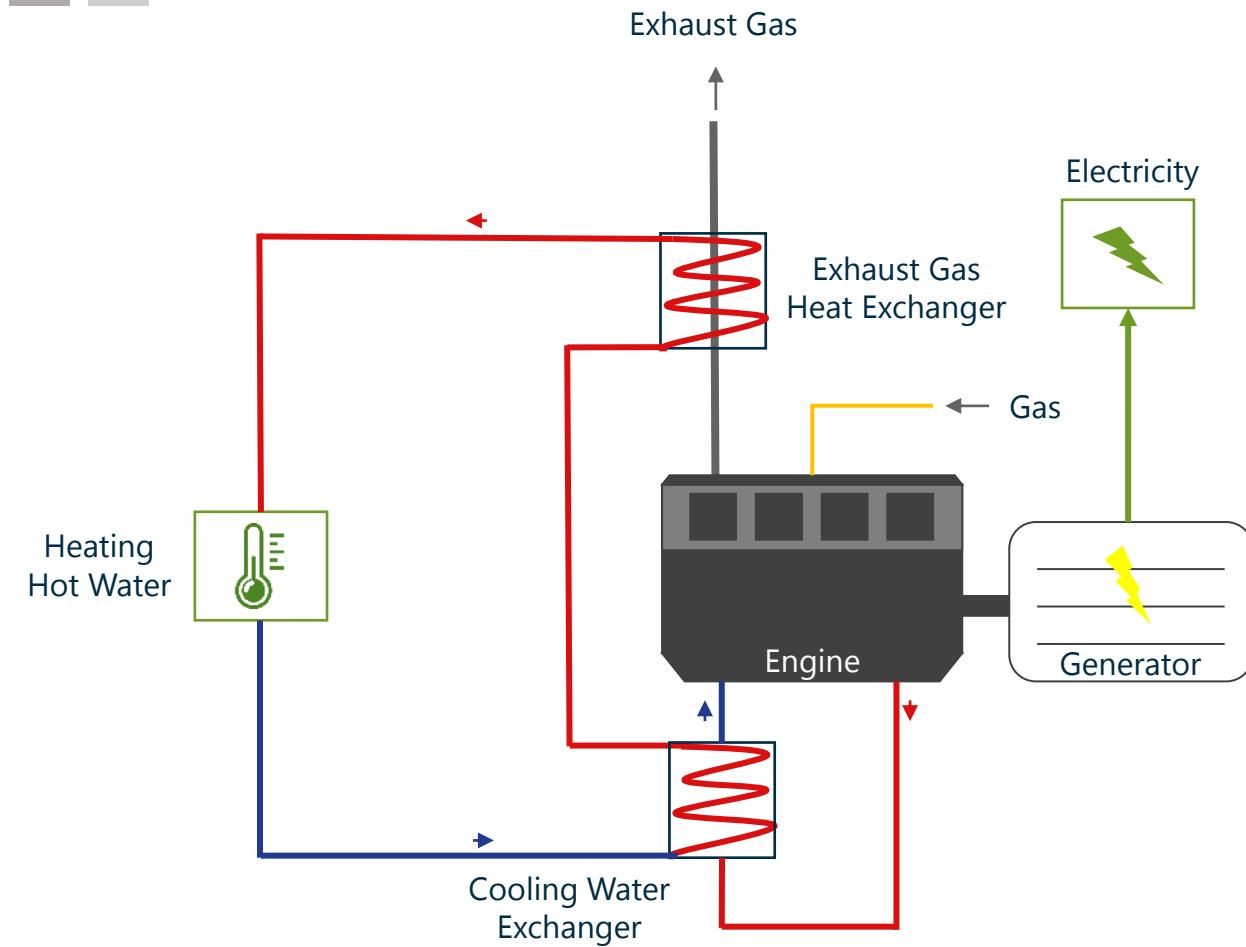


CHP SYSTEMS

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COGENERATION

- ✓ Combined heat and power
- ✓ Energy efficient and sustainable



CHP DISTRICT HEATING SYSTEMS

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CHP District Heating System

Municipality of Seelbach, Germany

- 500 kW Wood-chip boiler
- CHP motor 30 kW electric/69 kW thermal
- District heating connected to the multifunctional hall, sports hall, townhall, church, school and accommodation buildings

CHP District Heating System

Municipality of Willstätt- Legelshurst, Germany

- CHP motor 30 kW electric/69 kW thermal
- District heating connected Kindergarten, primary school, multifunctional hall, town hall, village hall, presbytery, 4 residential buildings

Energy Efficiency



BUILDING SERVICES

Energy Efficiency Services

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STUDIES / CONSULTING

- Energy assessment studies
- Profitability calculations
- Implementation of renewables



DESIGN

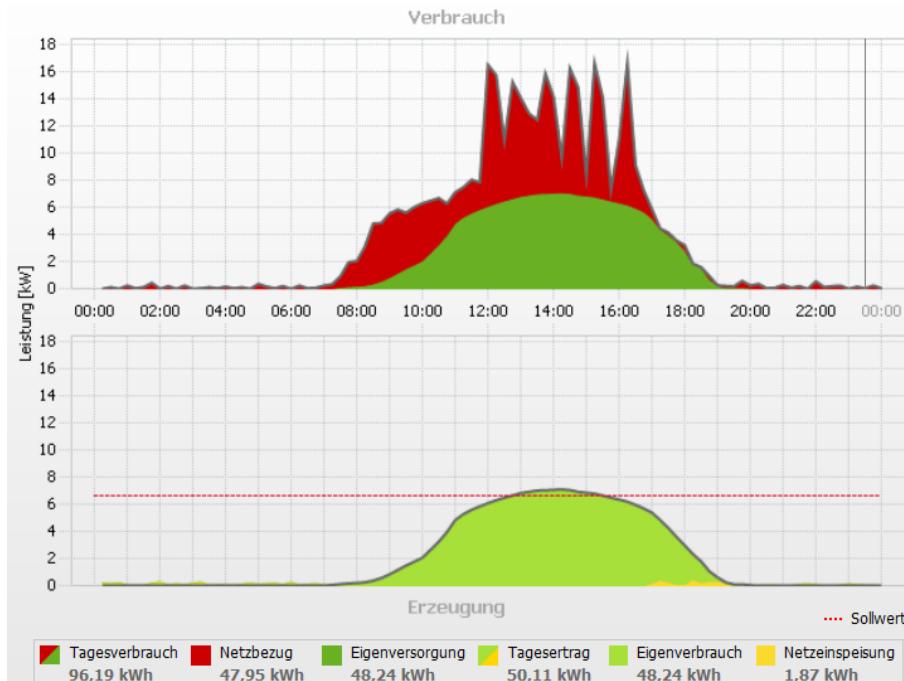
- Building services, heating, cooling, ventilation
- District heating systems



CONSTRUCTION MANAGEMENT

- Building supervision
- Building inspection

Project References

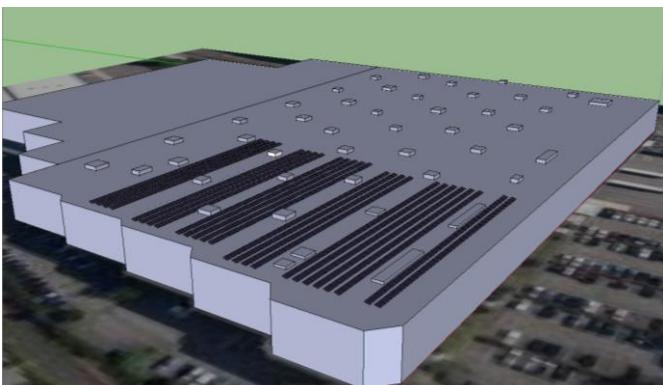


Volksbank, St. Georgen, Germany

Heat supply and renewable energy

- Substitution of the heat supply, the building automation system including the ventilation control
- Intuitive user interface has been added to facilitate the system control
- 10kW PV plant on the roof for self-consumption

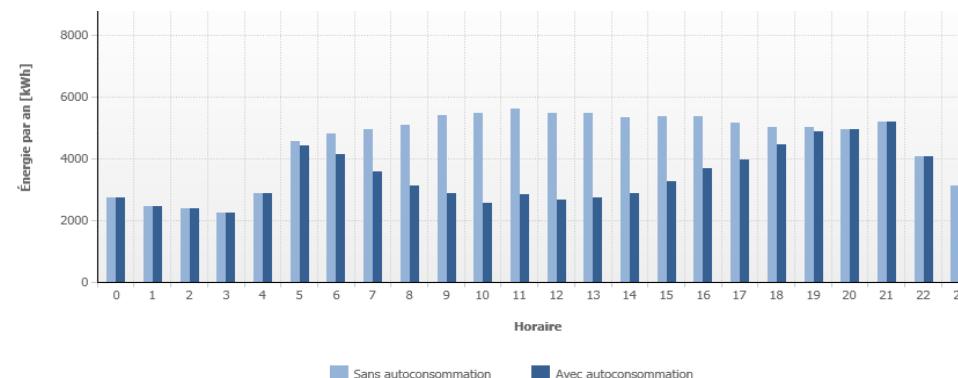
Project References



Energy survey of industrial building BMW, Strasbourg, France

Energy savings and renewable energy

- Recommendations for energy savings: lighting, insulation, heat recovery
- 200 kWp photovoltaic system with 90% self-consumption



Énergie annuelle prélevée sur le réseau		Juillet - Juillet
Sans autoconsommation	1 914 MWh	108 MWh
Avec autoconsommation	1 718 MWh	81 818 kWh



Solar Energy Solutions



PROJECT REFERENCES

Roof-Mounted or Ground Mounted PV



OFF-GRID SOLUTIONS



ENERGY CONTAINER



PROJECT REFERENCES



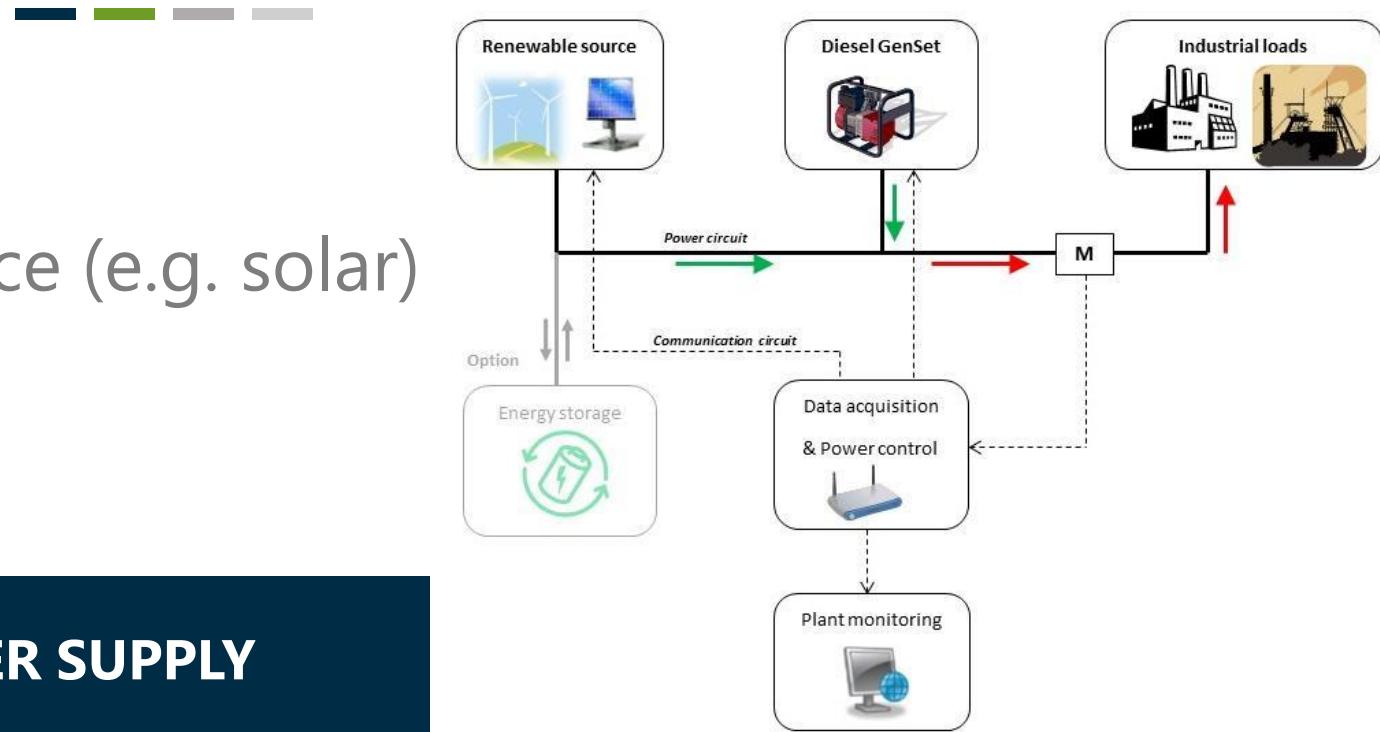
OFF-GRID SYSTEMS

- Turnkey Solution:
 - Renewable energy source (e.g. solar)
 - Battery storage
 - (Backup generator)

1 UNINTERRUPTED POWER SUPPLY

2 ENERGY INDEPENDENCE AND SECURITY

3 QUALITY AND PERFORMANCE



Off-Grid

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Energy Container



All-in-One Solution

Energy Container

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PV PANELS

- Ground-mounted
- Roof-mounted
- Solar Trackers



EXTRA FUEL TANK (OPTIONAL)



BACKUP GENERATOR



MONITORING



WATER PURIFICATION (OPTIONAL)



Autonomous energy generator designed by Intech and adapted for any off-grid application

ENERGY CONTAINER

EC30

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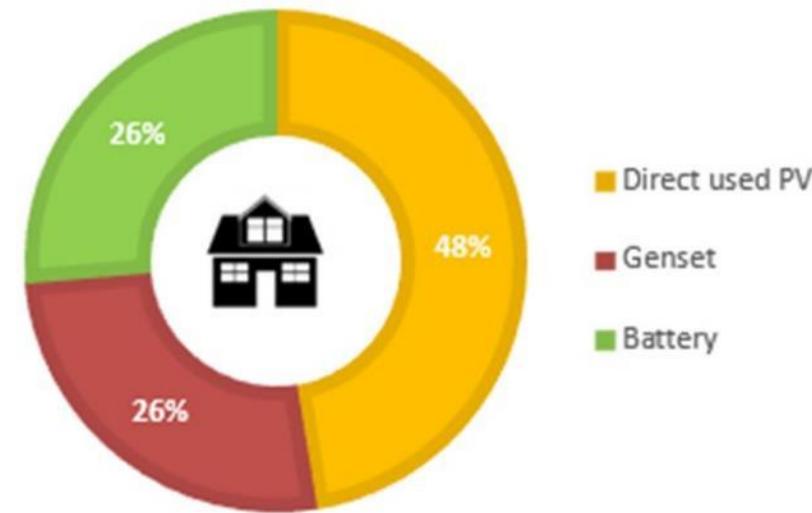
- **Power**

- 3-phase power use
- 30 kW PV solar array
- 17 kW battery inverter
- 100 kWh AGM battery storage
- 40 kVA back up Genset

- **Configuration**

- Inverters & battery installed in 20' container
- PV solar panels ground mounted

Energy Distribution for
30,000 kWh annual electricity usage*



* Agricultural profile load, in Canada



THANK YOU FOR YOUR ATTENTION

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