



release  
BY SCATEC

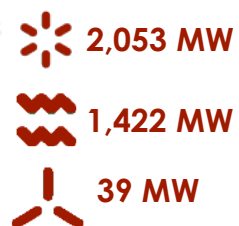
# Customer presentation

May 2021



# Release - A Scatec Company

Scatec – a 6 bn USD company



## Scatec in brief



Develop, build, own and operate  
renewable energy



3.5 GW in operation and  
under construction



11.9 GW  
backlog & pipeline



More than 500 employees in 23  
countries

**15 GW**

Target by end 2025

Listed on Oslo Stock  
Exchange as SCATC

Release is a fully owned  
subsidiary of Scatec

# Scatec's track record: Solar

Utility scale: 1.9 GW in operation & under construction

South Africa, 448 MW



Egypt, 380 MW



Malaysia, 244 MW



Brazil, 162 MW



Ukraine, 133 MW



Honduras, 95 MW



Jordan, 43 MW



Mozambique, 40 MW



Czech Republic, 20 MW



Rwanda, 9 MW



Ukraine, 203 MW



Argentina, 117 MW



- COD expected in Q2 2021 -

Solar hybrid projects

South Sudan, 1 MW



South Sudan, 700kW, 1.4 MWh



# Leaders in ESG



Experience from navigating **complex markets**



Identify **ESG risks** early via dedicated teams on the ground



Comprehensive set of **policies** and **best practice**



**Rating summary: Low risk**

#1 of 450 – Utilities

#1 of 48 – Renewable power producers



**Rating: AAA (top rating)**

Highest scoring range relative to global peers



**Rating: A- (excellent)**

Status: Prime

Prime threshold: C+



**Rating: A**

Carbon Disclosure Project -  
Top score



# Scatec, the ideal partner for miners in Africa

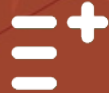
**Multi-technology integrator**  
*wheeling or behind-the-meter*



Hydro, wind



solar PV  
(+ floating PV)



BESS



**Track record**  
delivering  
challenging projects



Flexible lease  
solution - **Release**

**release**

BY SCATEC

# Release is flexible, simple and innovative

## Rental solar and storage plug-and-play

### Flexible

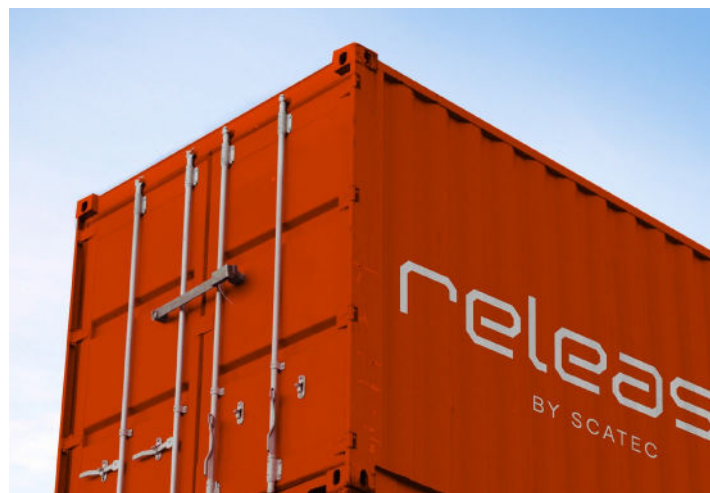


**Redeployable, modular and scalable**

Pre-assembled and containerised

**Quickly installed** (1-2 MW per week)

### Simple



**“All-in-One”** rental contract, including **Battery energy Storage**

You only pay if it works

**Pre-financed** – option to extend or buy-out

### Innovative

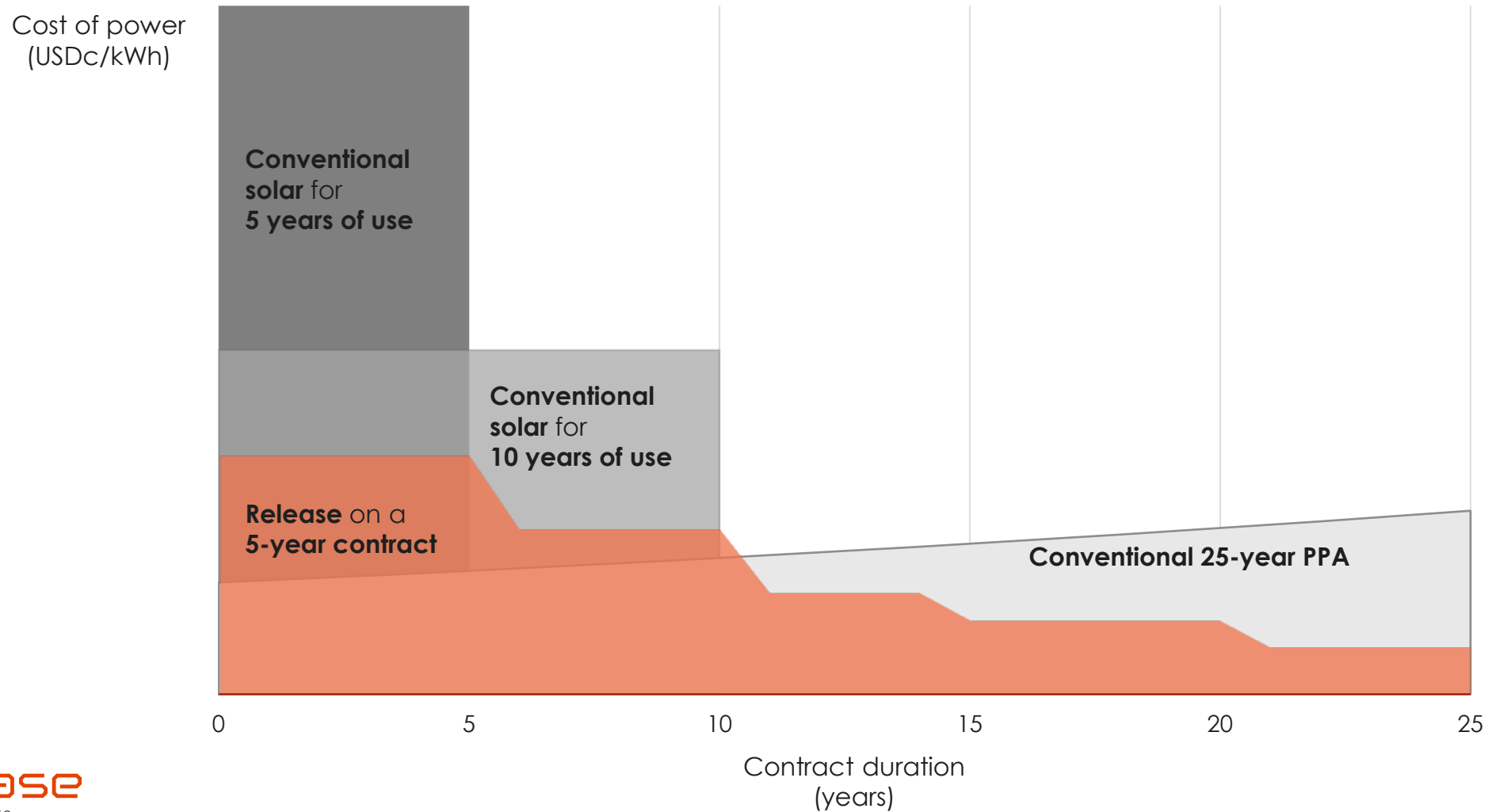


**Short-term rental** possible

**Utility-scale** - only movable solar with trackers and bi-facial modules

**Integrated** with existing infrastructure and **monitored 24/7**

# Solving for a shorter project life





# Leasing – a flexible alternative

## EPC

- Heavy investment requires financing capacity
- Requires purchasing and technical competence from buyer
- Time consuming
- Requires O&M and service plan from buyer
- Best value if and in long term perspective
- Captive power provides flexibility on contracting and permits/licenses required

## Leasing

- ✓ Limited upfront payments - no financing requirement
- ✓ Short term flexible contracts – one contract only
- ✓ O&M services and return-option of equipment to vendor
- ✓ Guaranteed performance
- ✓ Buy-out option
- ✓ Captive power – relying on Lessee existing permits/licenses
- ✓ Immediate delivery of equipment from professional vendors
- ✓ Premium paid for flexibility

## Power Purchase Agreement

- Long-term commitment – no flexibility
- Time consuming
- Contract heavy – significant obligations on Buyer
- Requires stand-alone generation licenses, land rights, permits and licenses from vendor
- Low cost per MWh – while high break-up cost

Leasing means a flexible contract duration and reduced financial commitments



# Technical specifications

## PV Modules



We use the latest PV technology: bifacial modules to optimise performance.

- Supplier: JA Solar (or similar Tier 1)
- Power Class: 400 Wp
- Technology: Mono PERC, double glass, framed
- Warranty: 12-year product warranty + 30-year linear power output warranty

## Trackers



The tracker structure is made from corrosion resistant galvanised steel with automatic stowing to safe angle under strong winds, using the same tracker control used in several of our utility scale projects.

- Supplier: Cambridge Energy Partners
- Model: Release Nomad Savanna
- Technology: Single-Axis, East-West tracker. - 45 to +45 degrees with back-tracking
- Wind speed tolerance: 44 m/s
- Slope tolerance: 15 %



## Inverters

We use string inverters with less downtime and easy replacement.

- Supplier: Huawei
- Model: SUN2000-60KTL-M0
- Power: 66 kWac (@30°C)



## LVAC Combiner Box

Standard AC Combiner Box (integrated within the compact substation), with adjustments for each project.

Supplier: Various. Assembly and testing by Rubicon  
AC Power input: 10 x 66 kWac

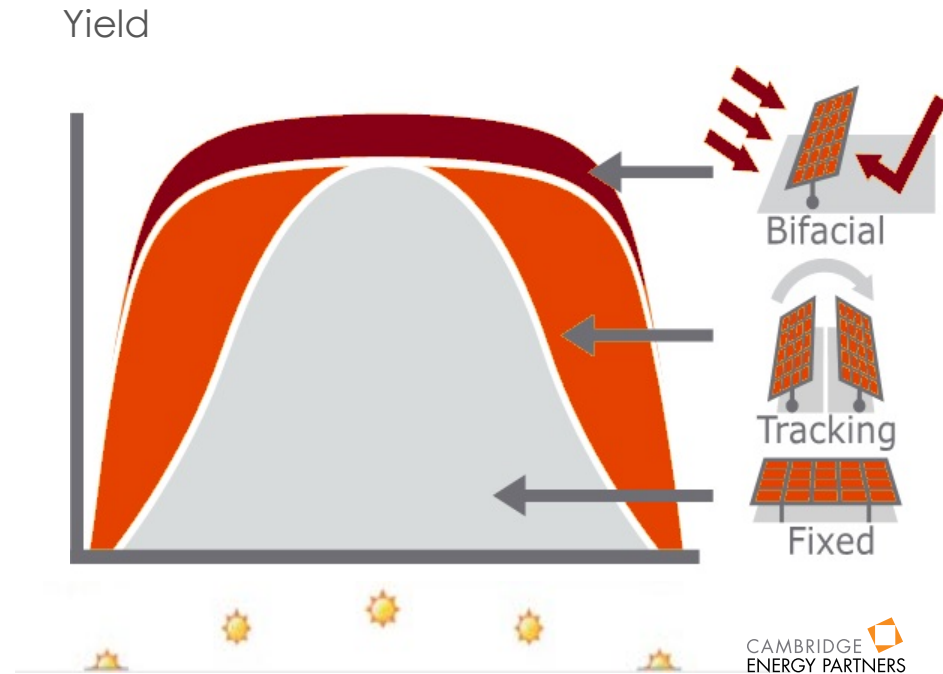


## Compact Substation

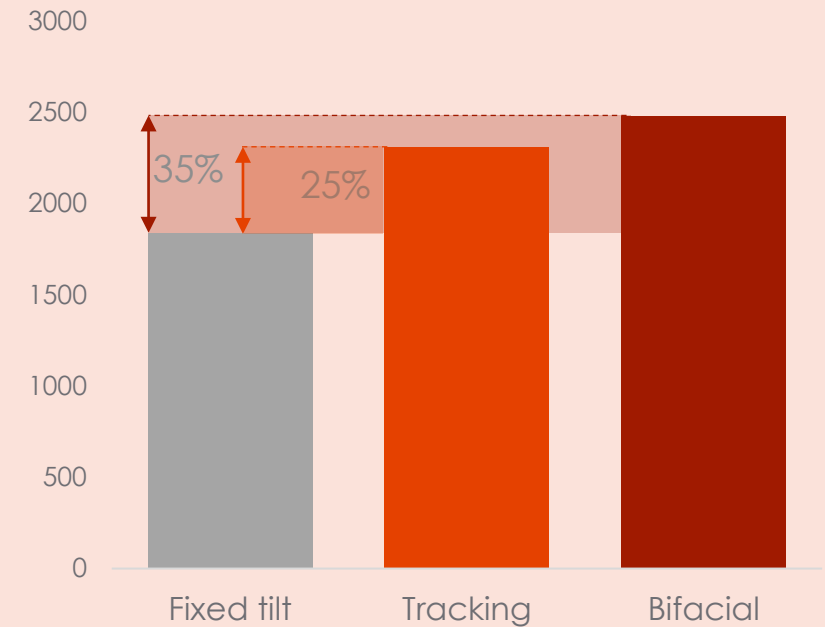
Per 1-2 LVAC combiner and BESS.  
11 kV, 600-1600 kVA each  
Supplier: Zest Weg or similar

# The world's first movable solar tracker

30-40 % higher yield vs other movable systems



Energy Production (example)  
kWh/ kWp/ yr



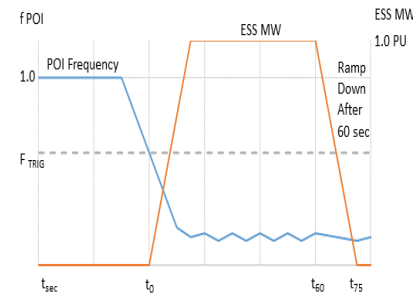
# Solar PV + storage: Further fuel savings, engine optimisation and system stability

Battery storage (BESS) increase fuel savings and support overall system

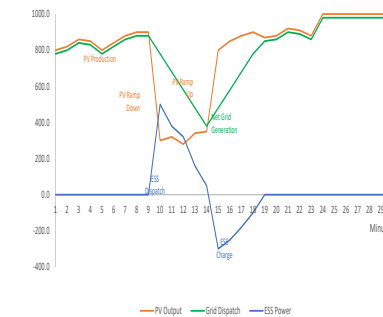
- Solar power dispatchable during evening/night
- Support to the existing generators and power system
- Generators running at more efficient load
- Provides spinning reserve and thus allows engines to be turned off during the day
- Enables a larger solar PV system compared to a PV-only solution
- Ultimate choice of supplier and BESS technology subject to its functionalities in the project



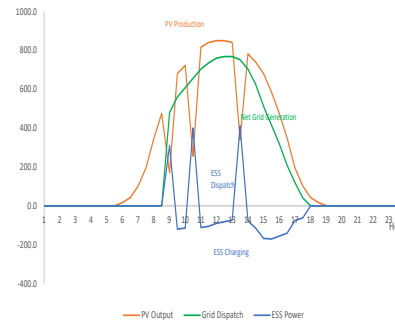
Frequency response



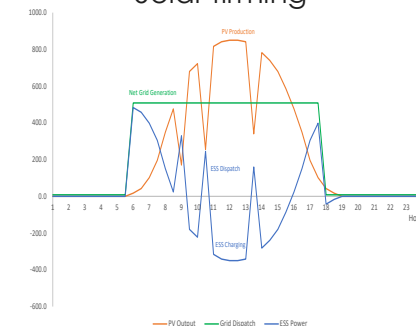
Ramp rate control



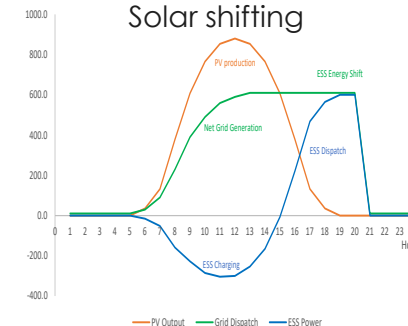
Solar smoothing



Solar firming



Solar shifting



# Storage is an integrated part of the Release offering

A battery solution adds benefits in combination with solar for diesel integration

	Fuel saving	Mixed power generation	24/7 solar power
<i>PV in % of total power consumption</i>	10-30%	40-50%	70-90%
Customer need:	Saving fuel costs	Unstable grid / power solution and inefficient generator utilisation	Remote locations with very expensive fuel supply
Storage solution:	None	Small battery mainly for power supply stabilisation	3-4 x standard PV capacity and large-scale battery

Cost reductions will enable wider use of batteries over the next 3-5 years, and increase solar PV share in energy mix



# Execution Philosophy

## Suggested split of responsibilities

### Release

- Procures and delivers equipment to nearest port
- Provides full installation of equipment at site
- Guarantees performance and availability of equipment for contract duration
- Provides 24/7 monitoring and regular maintenance

### Customer

- Obtains necessary permits
- Provides land and prepares the site (clearing, basic earthworks)
- Handles customs clearance for equipment and delivery of equipment to site
- Performs day-to-day maintenance tasks on site (module cleaning, vegetation control, simple electric works)
- Assists in local accommodation, identifying local workers, and machinery

The proposed split allows the customer to perform works it will likely be able to perform at a lower cost than Release.

The customer's interest and ability to taking on this scope can be discussed further.

## Timeline for execution

The overall timeline from signature to commissioning is approximately 6 months, of which ~4 months are related to transport.

**Signature date**

**Effective date**

Delivery by Lessor

Manufacturing and logistics

System (solar generators)

8 wks

BOS (balance of system)

8 wks

BOP (balance of plant)

10 wks

System logistics

5 wks

BOS & BOP logistics

7 wks

Delivery at port entry

Activities by Lessee

Clearance and transportation

2 wks

Delivery date

Pre-installation work

7 wks

Site readiness

Installation by Lessor

Installation commencement

Solar generator

6 wks

BOS/BOP electrical system

6 wks

Connection outage

Mechanical completion

Tests on completion

2 wks

**Completion date**

# 16 MW of Release projects under construction



## 8.7 MW – Torex Gold Mexico

International customer  
Project to be completed Q4  
2021



## 7.7 MW – ZIZ, off-grid utility in Chad

Customer backed by FMO  
First containers shipped in  
March 2021 – full delivery  
within Q3



# TOREX GOLD

## Business case

Customer	Torex Gold, Toronto, Canada
Project location	MML mine, 180 km SW of Mexico City
Installed Capacity	8.5 MW <sub>DC</sub>
Contract term	<b>Flexible 10-year lease</b> with <b>buy-out option</b> from <b>year-3</b> and BESS option
Current power supply	National grid
Target COD	<b>December 2021</b>
Estimated Savings	US\$ 1m p.a.





# Case study: IOM MALAKAL - South Sudan

Scatec commissioned a combined solar and storage plant for the Humanitarian Hub in Malakal, managed by International Organization of Migration. The hub hosts more than 34 organisations involved with humanitarian projects. The hybrid system will cover up to 90 % of the Hub's energy demand with solar energy, reduce costs, pollution and carbon emissions, and provide a more reliable and robust energy supply.

## Impact

- CO<sub>2</sub> emissions reduced by 80-90 %
- Initial cost reductions of ~20 %\*
- A robust and reliable energy supply

## Technical solution

- Hybrid solar PV and battery solution integrated with existing diesel generators
- Guaranteed plant performance
- 24/7 monitoring, maintenance support

## Commercial structure

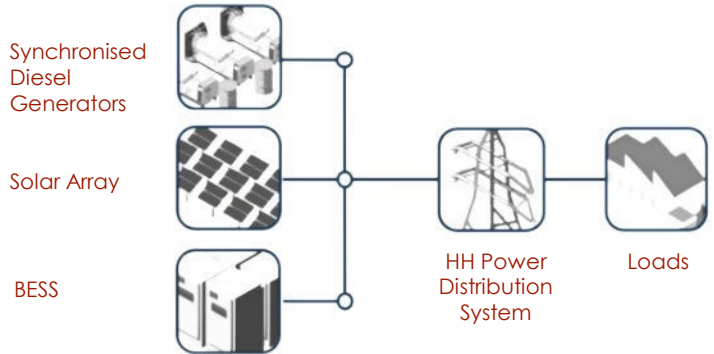
- A 3-year initial leasing contract
- Solar energy on a monthly invoice
- In case of extension beyond 10 years, the plant is transferred to IOM

\* further reductions as tariff is reduced over time



## System specifications

Solar DC capacity	700 kWp
Mounting structures	Fix-tilt; 15°
Battery system	1368 kWh Tesla Power Pack 2
Diesel generators	Synchronised the existing generators
Control system	Tesla Micro grid Controller





# Partnership with IFC on utilities in Africa

Exclusive partnership agreement with  IFC to offer  
Release to utilities in Africa



IFC provides financing and guarantee structures to support the rental contracts



Operating out of a joint company in the Netherlands

Most advanced project in a  
West-African country

36 MW solar and 24 MWh of storage at 3 sites

5-year Build-Own-Transfer model

Scheduled delivery 2021



# Remote Monitoring

## Through Scatec Global Control and Monitoring Centre (CMC) in Cape Town, South Africa

- Scatec offices in Cape Town, South Africa hosts our world-class CMC facility. The CMC is active 24/7 and, thanks to Release design and communication hardware and software, we will be able to detect any faults or alarms in real time

- The Release plant will be monitored alongside Scatec's 2GW of operating plants

- Greater monitoring and diagnostic analysis will provide invaluable data for designing future large scale deployment

- Monitoring is critical to optimising power performance and fault detection



# Release – making solar simple

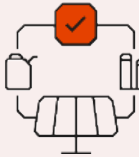
## Why choose Release



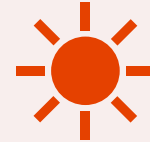
Reduced energy costs



Limited upfront investments



Reduced fuel dependency

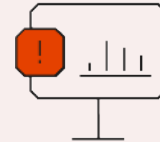


Clean energy

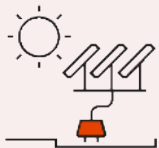
## Benefits



Flexible contract durations



24/7 monitoring and technical support



Quick installation  
Modular and scalable



Guaranteed availability and performance

[www.releasesolar.com](http://www.releasesolar.com)

We finance – you lease

Video of a Release installation on our demo  
site in Stellenbosch, South Africa:

<https://youtu.be/mgLEMWjevKM>

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