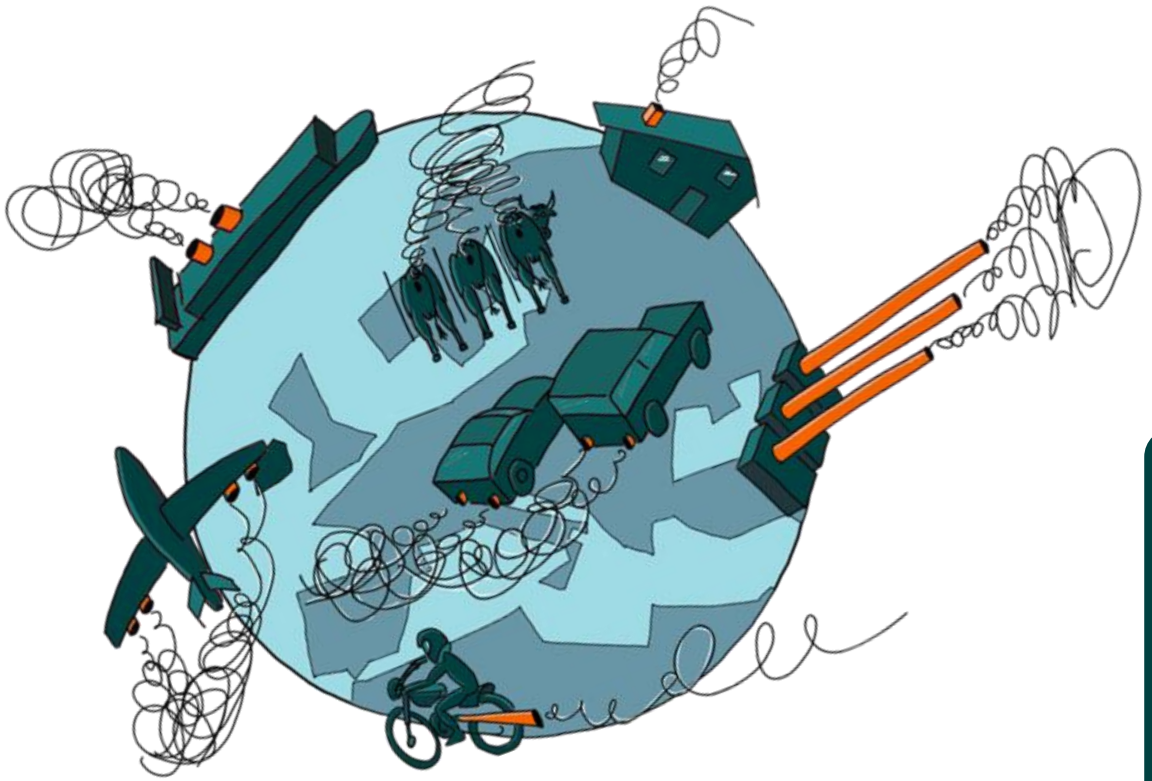
Energy that moves
just like logistics

ALLIGATOR

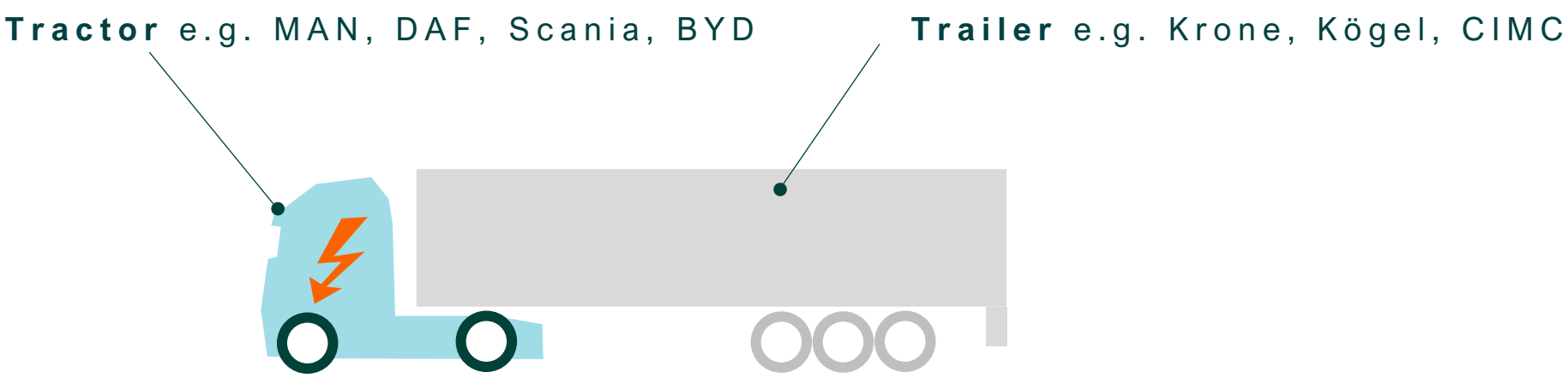


Pitch Deck

Energy Startup Day

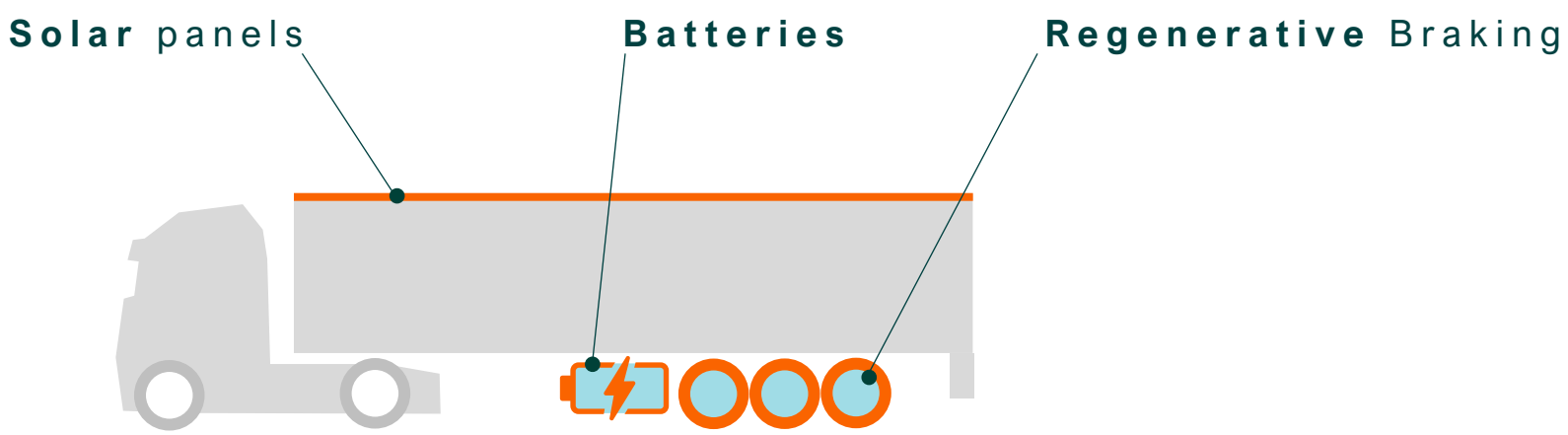
Autor: Michael Schacher

The Limitations
of Electric Tractor-Trailer Units



Currently, in all **electric semis**
the **high-voltage energy network**
is limited to the **tractor unit**.

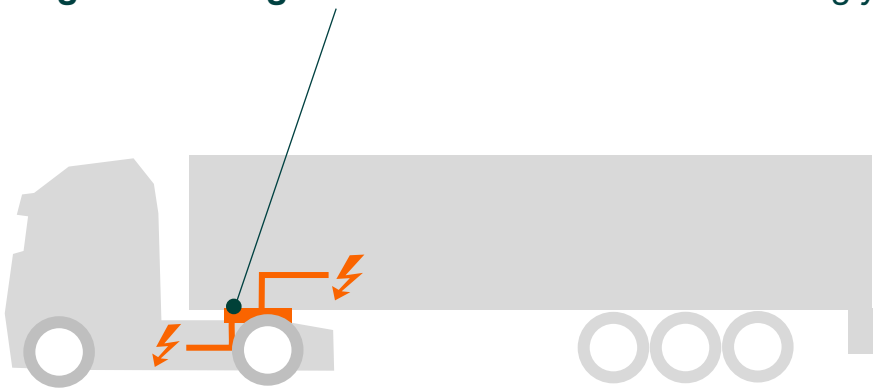
The Unused
Energy Source

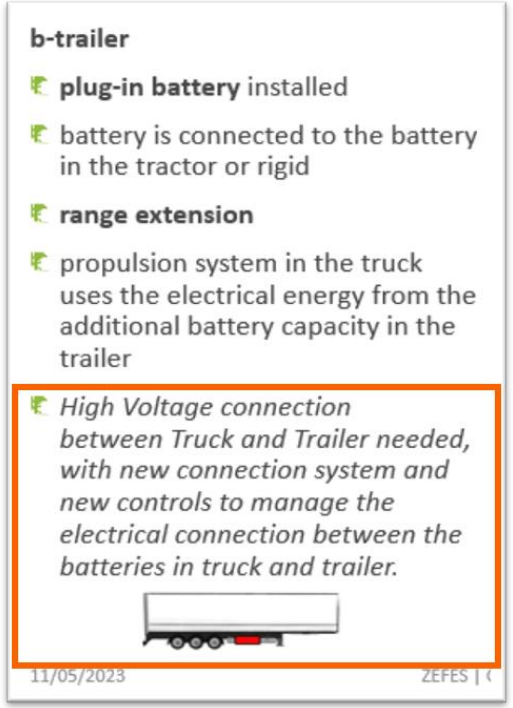


Trailers are a huge, unused **energy source**.
Connecting this source solves major pains in
weight distribution, **grid stress**, **charging costs**, and **fleet utilization**.

The missing technology
for trailer energy integration

High-voltage connection technology

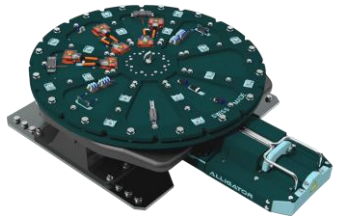




An open technological gap, officially confirmed by the research EU project **ZEFES** New Milestone Achieved! - ZEFES

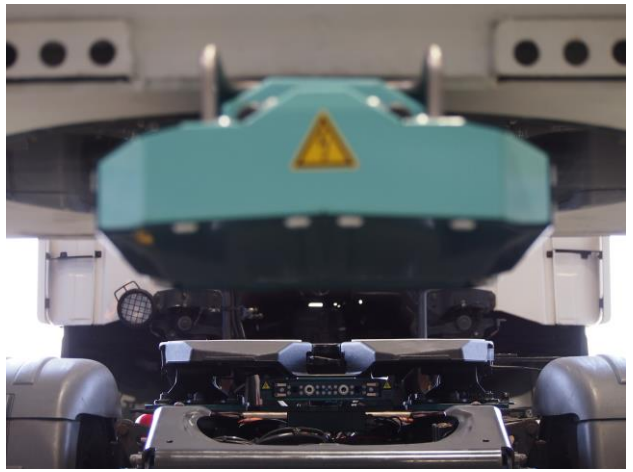
To activate this energy source,
a **connection technology** for **high-voltage power lines**
between the **tractor** and **trailer** is necessary.

High-voltage connection
on the move

	High Voltage >60VDC	**Low Voltage** <60VDC
On-Move *connection*		
Stillstand connection		

State-of-the-art **coiled cable connections**
are designed for **low voltage**.
Today, **high-voltage solutions** are only designed for connection at a **standstill**.

The Key that Connects
the Energy Network



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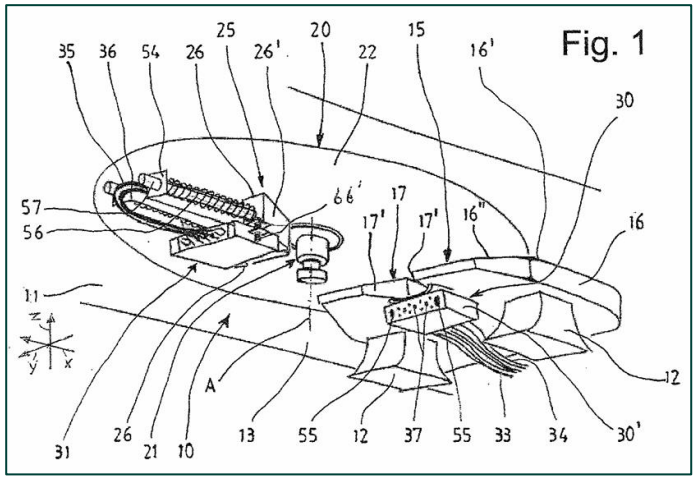
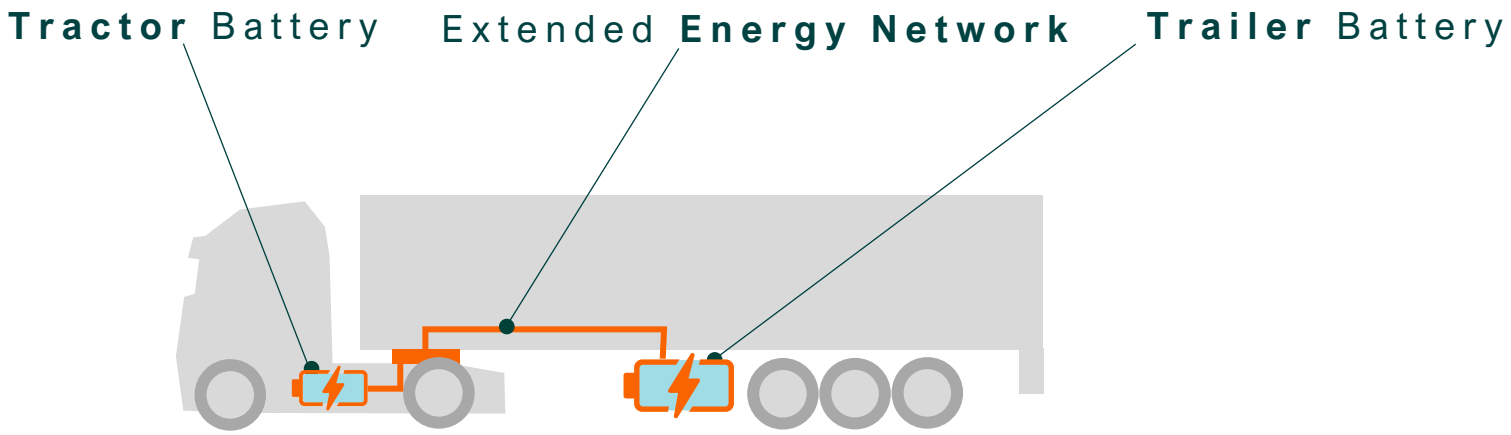


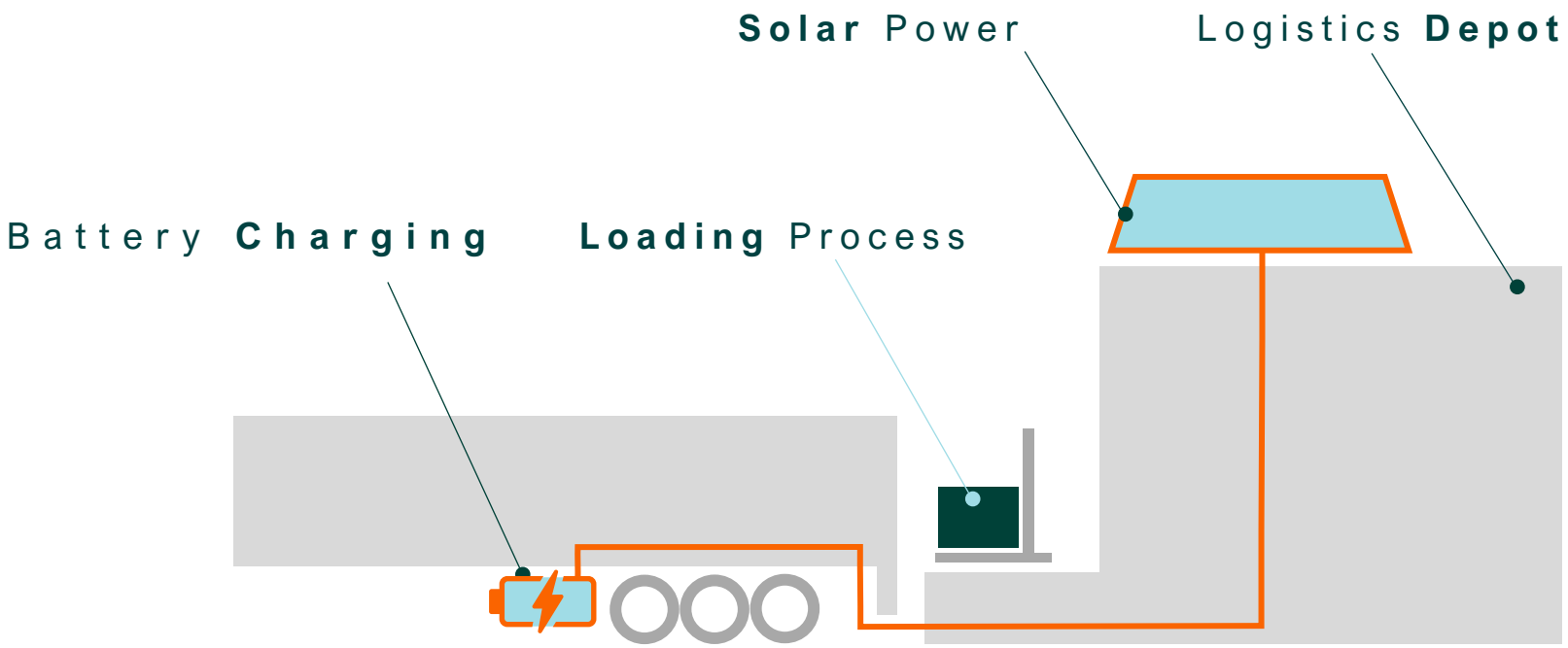
The key to unlocking this **energy source** is the **Planar Feedthrough technology**.
It makes the **high-voltage connection**
on the move between tractor and trailer possible.

B-Trailer is not a compromise
It is the perfect fit for EV fleets



The Planar Feedthrough technology makes the **B-Trailer concept** real.
Together with **leading EV system integrators** and **universities**,
we turn a **great idea** into an **industrial technology**.

How it works
Move goods and energy together



B-Trailers can not only be **loaded with goods** at the logistics depot,
as is done today, but in the future,
it can also be **charged with solar energy** at the same time.

90% Cost Drop
How We Make It Real

Public **Fast Charging**

CHF **1.00**/kWh

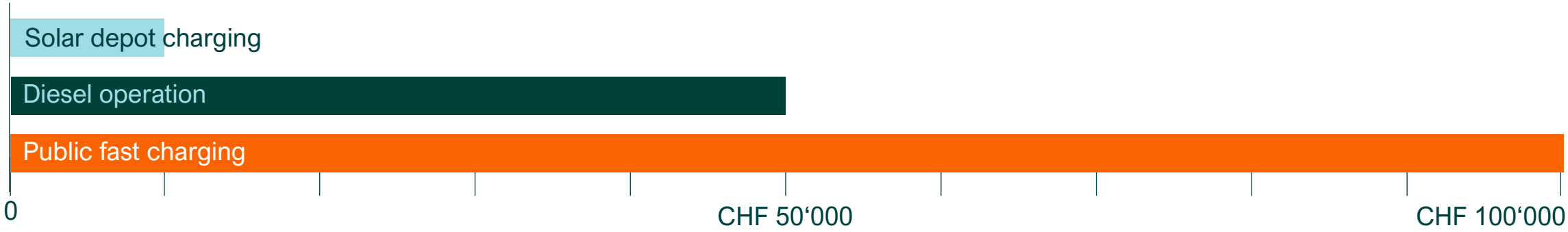
Energy **Consumption**

100’000 kWh/year

Solar Power

CHF **0.10**/kWh

Energy cost per Vehicle per year



Public charging can cost over **CHF 100’000/year per vehicle.**

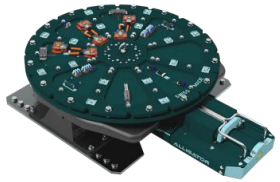
With **independent B-Trailer charging**,

costs drop to as low **as CHF 10’000/year per vehicle.**

Hardware Sales and Licensing

Product (Tier 1)

Manufacturer



Revenue Streams

- Hardware Sales (Planar Feedthrough)
- Spare Parts & Aftermarket
- Patent Licensing

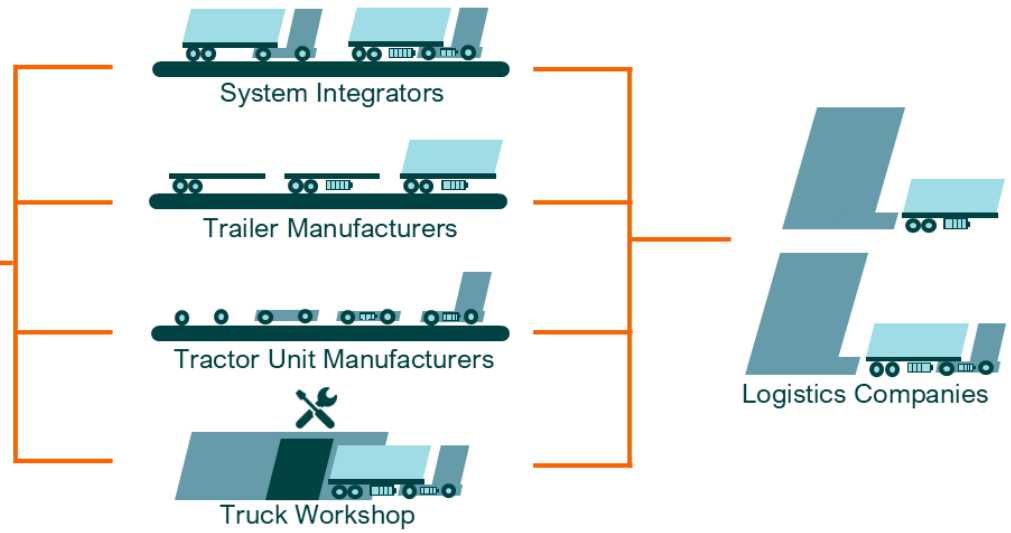
1 Unit or License per Tractor–Trailer Combination

Customers (OEM)

Installer

Economic buyer (LSP)

User



We build our technology based on **user needs**,
creating business through **hardware sales** to **system integrators**,
and later through **licensing** to **OEMs** and **Tier-1 suppliers**.

Traction
and milestones

2030

144
Systems per year
- ✓ Scale in line with the fast-growing EV-tractor market

2028

Production
TRL **9**
- ✓ Modular production process
- ✓ toward full automation production

2027

Pilot Project
TRL **8**
- ✓ System in real operation
- ✓ Long-term operation
- ✓ Sponsored hardware delivered
- ✓ CHF 250k from foundations

2025

Feasibility study
- ✓ Feasibility Study co-financed by Customer
- ✓ Basic Engineering Pilot Project
- ✓ Start Innosuisse Project to Reach TRL 6

2023

Prototype
- ✓ TRL **5**

2022

Patent
- ✓ **WO 2023/175000**

2021

Incorporation
- ✓ **Alligator** AG

Competitive Analysis

		Automatic Signal Connection	HV Network (Battery) on the Trailer	HV Connection at Standstill	HV Connection on the Move
	ALLIGATOR DE / CH	✓	✓	✓	✓
Cabel	STÄUBLI CH	✗	✗	✓	✗
Cabel	HARTING ISO23316-2 DE	✗	✗	✓	✗
E-Trailers	BPW ZF TrailTrax® DE	✗	✓	✗	✗
E-Trailers	range energy US	✗	✓	✗	✗
E-Trailers	solaredge IT	✗	✓	✗	✗
E-Trailers	TRAILER DYNAMICS DE	✗	✓	✗	✗
LV-Systems	JOST KKS DE	✓	✗	✗	✗
LV-Systems	SAF Holland DE/US	✓	✗	✗	✗

Let's move energy **together**

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