

# VoimaX

A 100B€ opportunity

Driving the Electrification Revolution  
Without Rare Earth Challenges



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Annually, over  
**160 million** motors  
required for electric  
vehicles by 2035.

(IDTechEX, 2024)

**€ 300B market by 2030!**

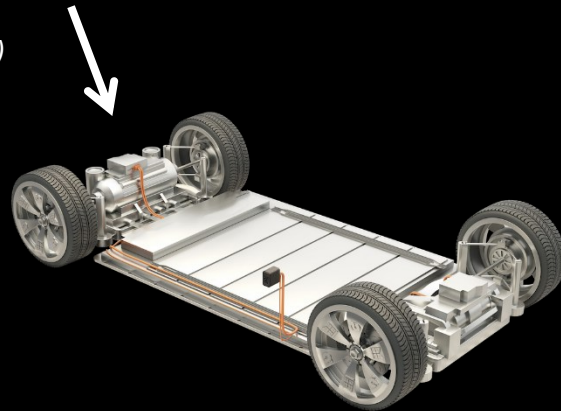
(Grand View Research, 2025)



# The brutal facts of motor industry

**85%**  
of EVs use  
magnet motors

*(IDTechEX, 2024)*



**92% by China**  
Magnet supply  
control

*(Politico, 2024)*



China, **monopolizing rare earth minerals**, will use this power strategically. We are naive if we think the Communist Party will never use that power.

- Rob Bauer, the chair of NATO's military committee (2024)

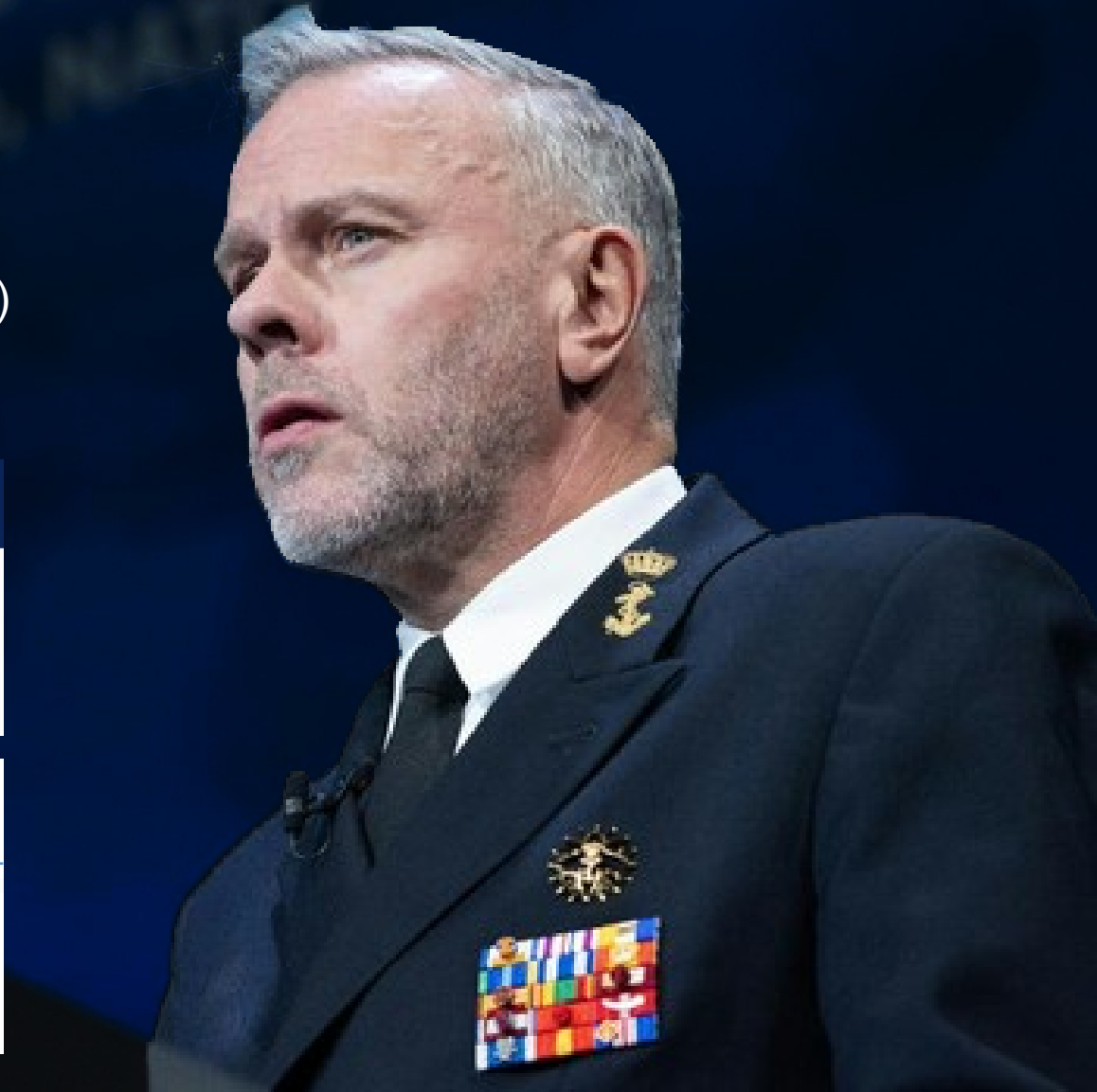
2025  
News

CSIS | CENTER FOR STRATEGIC & INTERNATIONAL STUDIES

**The Consequences of China's New Rare Earths Export Restrictions**

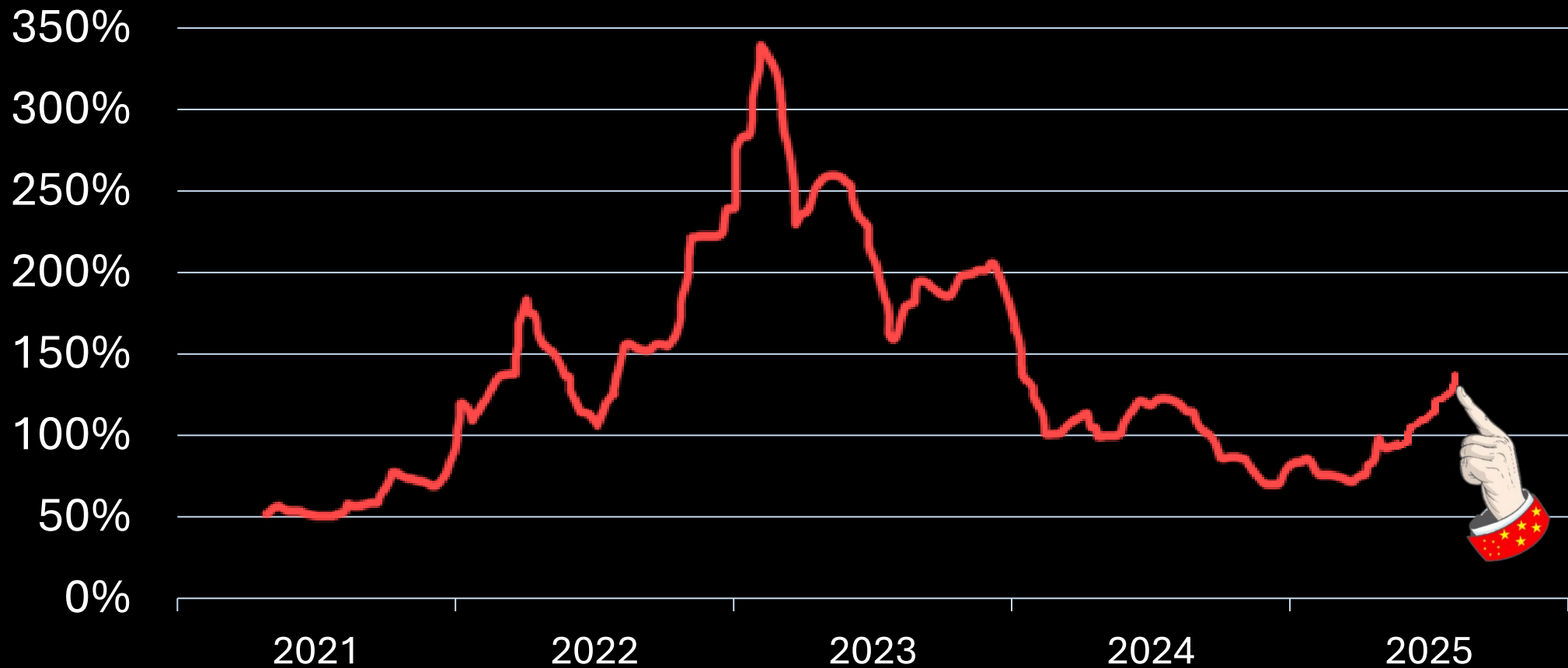
 News  
European Parliament

Commission must tackle China's export restrictions on rare earth elements



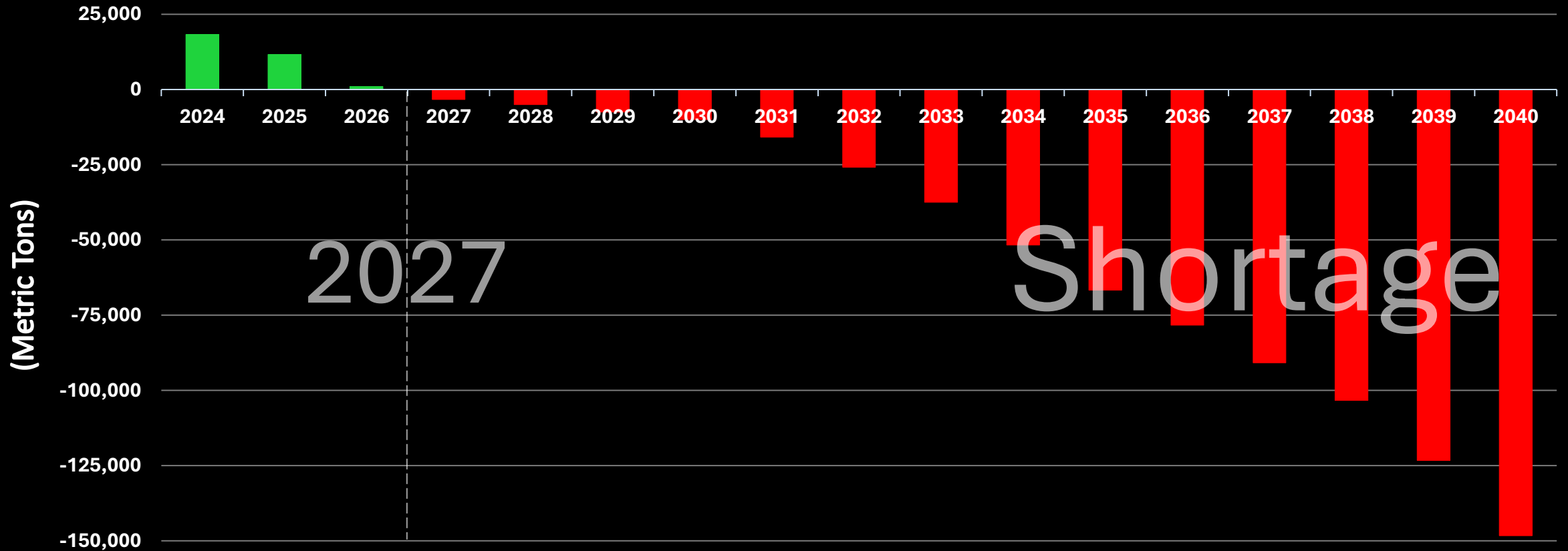
# Wake-up call!!

## Magnet (Neodymium) Price Index

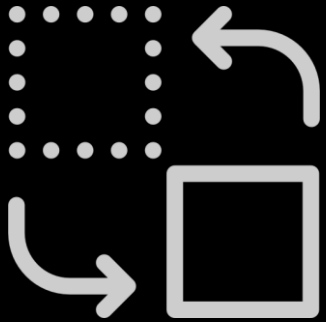


# Magnet shortage

Projected Global Magnet (NdPr) Cumulative Balance



# Strategies for magnet shortage



Replace



Recycle



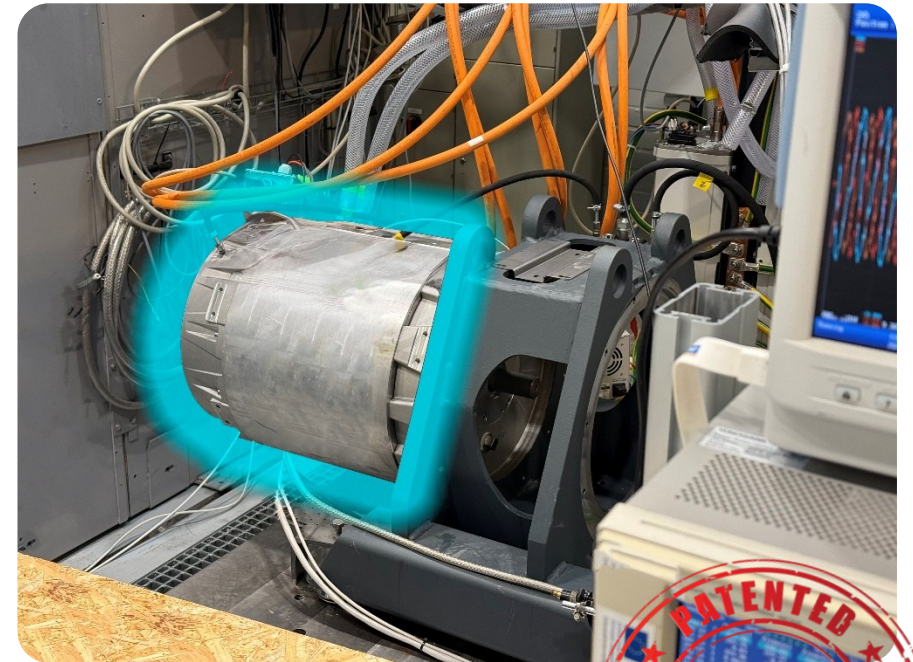
Remove

# VoimaX, a novel e-motor!

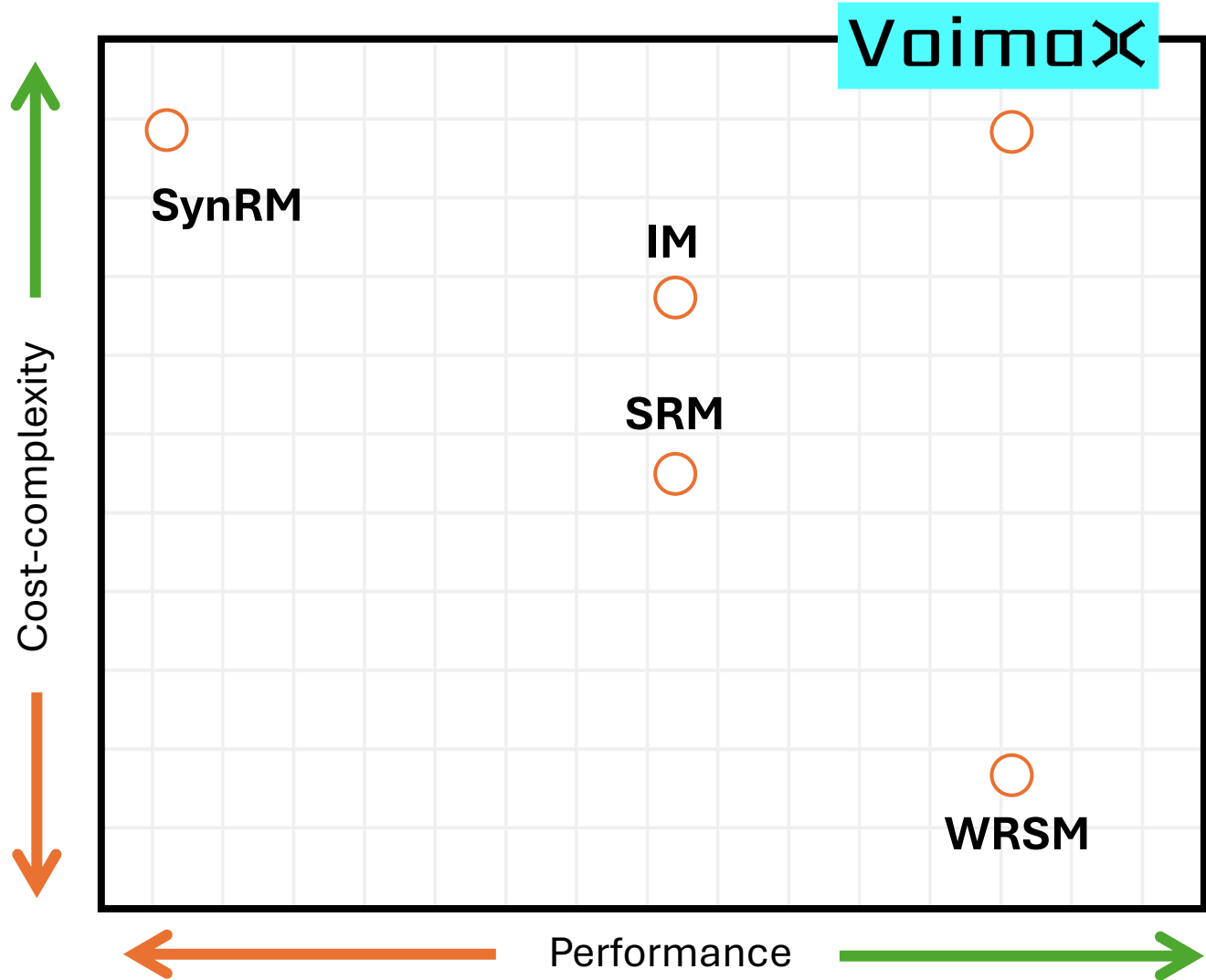
**100%** magnet-free!

**+50%** lower material cost  
over magnet rotors.

High-performance, High-efficiency motor, suitable  
for EV industry



# What's the best magnet-free tech?



# VoimaX Advantage\*

only commodity  
steels & copper

drive simplicity,  
using simple driver

drop-in with current  
settings; standard

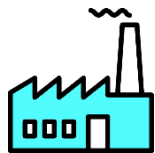
recyclable  
steel/copper stack

**Raw material**

**Drive**

**Integration**

**End-of-life**



**Manufacturing**

Less steps,  
commonly used  
machines

**Performance**

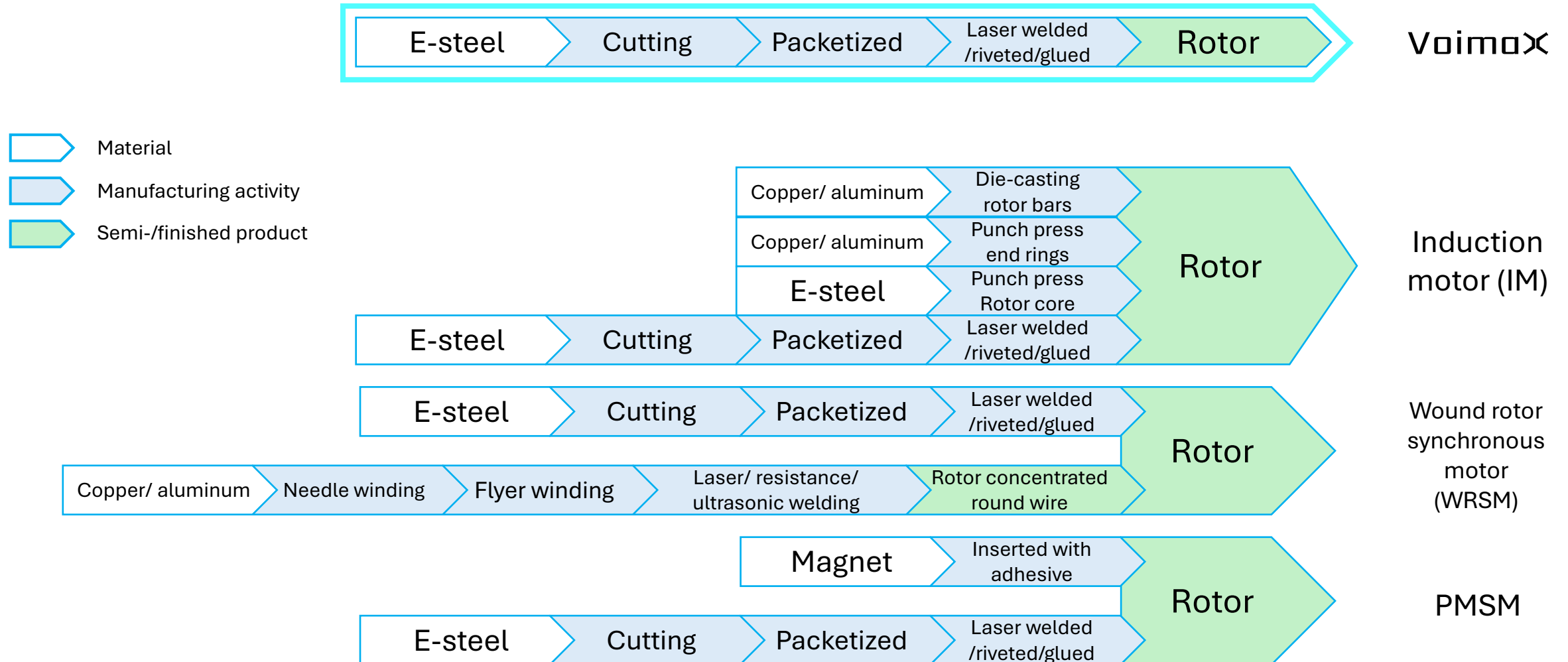
high-performance,  
meet industry need

**Maintenance**

no brushes/slip-  
rings, no service

\*For successful adoption in this industry, a technology must fit seamlessly across **the entire value chain** rather than excelling only in performance or individual aspects. In this sense, VoimaX demonstrates a clear advantage over other magnet-free technologies.

# Scalability (manufacturing perspective)



# Customers feedback



Once you provide **test data**, the company will be ready to present your technology to the board, as they need solid evidence to convince shareholders and potentially **secure investment** in your technology.

- Product Manager Of A Major Motor Supplier



# Team\*



**Mehran Rezaei**

Vision-driven builder  
turning new motor tech into  
business.



**Charles Nutakor**

Turns innovative motor  
ideas and improvements  
into real products.



**Antti Kojola**

Strategically leads the  
business toward growth  
with key partnerships.

\*VoimaX is a spin-off from LUT University (Finland), and our collaboration with the scientists behind this innovation will continue as planned.

# The vision

## From prototype to product

**2026, 2027** (pre-seed & seed)

Design-for-manufacturing  
System compatibility & Integration  
Customer partnership development

## Manufacturing setup

**2029**

Industrialization  
Supply chain development  
Customer purchase order

TRL4

TRL5

TRL6

TRL9

**continues R&D on  
magnet-free motors**

Two prototypes  
built, tested and  
**PoC is reached.**

## Field testing

**2028** (series A)

Field testing with partners  
Manufacturability finalized

## Industrial scale

**production** (series B)

**2030**

# Plan

From Prototype to Product  
2026, 2027



## Investment

Public grants & loans

Private; VCs

- **Build 5+15 motors**
- **Test, test, test !**
- **Finalize the design-for-manufacturing**
- **Secure customer commitment**

# Awards and grants

*idea***race** 



Winner

**Startup Summit  
Eastern Finland**



Winner

**RUNAR BÄCKSTRÖM**

SÄÄTIÖ • STIFTELSE • FOUNDATION

Grantee

**DREAM**  
2025



Winner



# VoimaX

Let's ignite the magnet-free electrification...

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