



# Temperature Control and Sustainable Cold Chain Innovation

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A close-up photograph of a hand wearing a blue nitrile glove. The hand is holding a small, clear glass vial with a white cap. The vial has text on it, including "COVID-19 mRNA", "Discard", "5 doses after", and "date/time:". The hand is using a syringe to draw liquid from the vial. The syringe is clear with a white plunger. The background is blurred, showing a person's face and another hand in a blue glove.

Our Purpose

We enable global access of  
pharmaceuticals

## Our Vision

To be the trusted partner for every stage of pharma life cycle and for all pharma segments

R&D and Pre-clinical Trials

Clinical Trials

Unfinished Products

Commercial Distribution





**Envirotainer<sup>®</sup>**  
Leave a Legacy





# 40 years transporting lifesaving pharmaceuticals around the world

**1985**

Envirotainer is founded in Stockholm, SE

**1995**

Envirotainer develop the first active temperature-controlled container

**2004**

Envirotainer launch cold-chain management services, including product validations  
va-Q-tec launches the first advanced passive container

**2014**

Envirotainer open an R&D production center in Rosersberg, SE

**2021**

Envirotainer launch the RelEye RLP – the first of the innovative RelEye family – offering an even more reliable shipping solution for pharma  
Joined the UN Global Compact

**2023-2024**

Committed to and approval of our Science-Based Targets and Net Zero roadmap

**2000**

Envirotainer partner with leading airlines and freight forwarders to launch the T-Tech

**2005**

Envirotainer globally launched RKN e1 – the first container with electric heating and cooling and with EASA certification

**2010**

Envirotainer globally launched RAP e2 – the first container with electric heating and cooling and with EASA certification

**2020**

Envirotainer products play a critical role in the global distribution of Covid-19 vaccines

**2022**

RelEye RAP launched – the second size in the innovative RelEye family  
Launch of Control Tower services, giving more insight and control over the product journey

**2003**

va-Q-tec develops the first Parcel

**2024**

va-Q-tec integrates with Envirotainer allowing us to offer the widest range of temperature-controlled solutions on the market

# Covering the needs of the pharmaceutical industry. In all stages of the pharma life-cycle

R&amp;D and Pre-clinical Trials

Clinical Trials

Unfinished Products

Commercial Distribution

Large

Medium

Small

Parcel

RelEye  
RAP  
4°C-30°C



E-Tech  
RAP e2  
0°C-25°C



RelEye  
RLP  
4°C-30°C



ProofTainer  
2 US, 2 Euro  
-70°C - +25°C



ProofTainer US, Euro, Max, Case  
-70°C - +25°C



RelEye RKN  
4°C-30°C



OnePal  
-20°C - +25°C



E-Tech RKN e1  
0°C-25°C



ThermalCoat  
2°C-8°C, 15°C-25°C



ProofPak  
-70°C - +37°C



OnePak  
-70°C - +25°C



CryoSure LN2  
< -150°C



OnePak Lite  
2°C-8°C



Size ↑

Temp →

-150°C

-70°C

-20°C

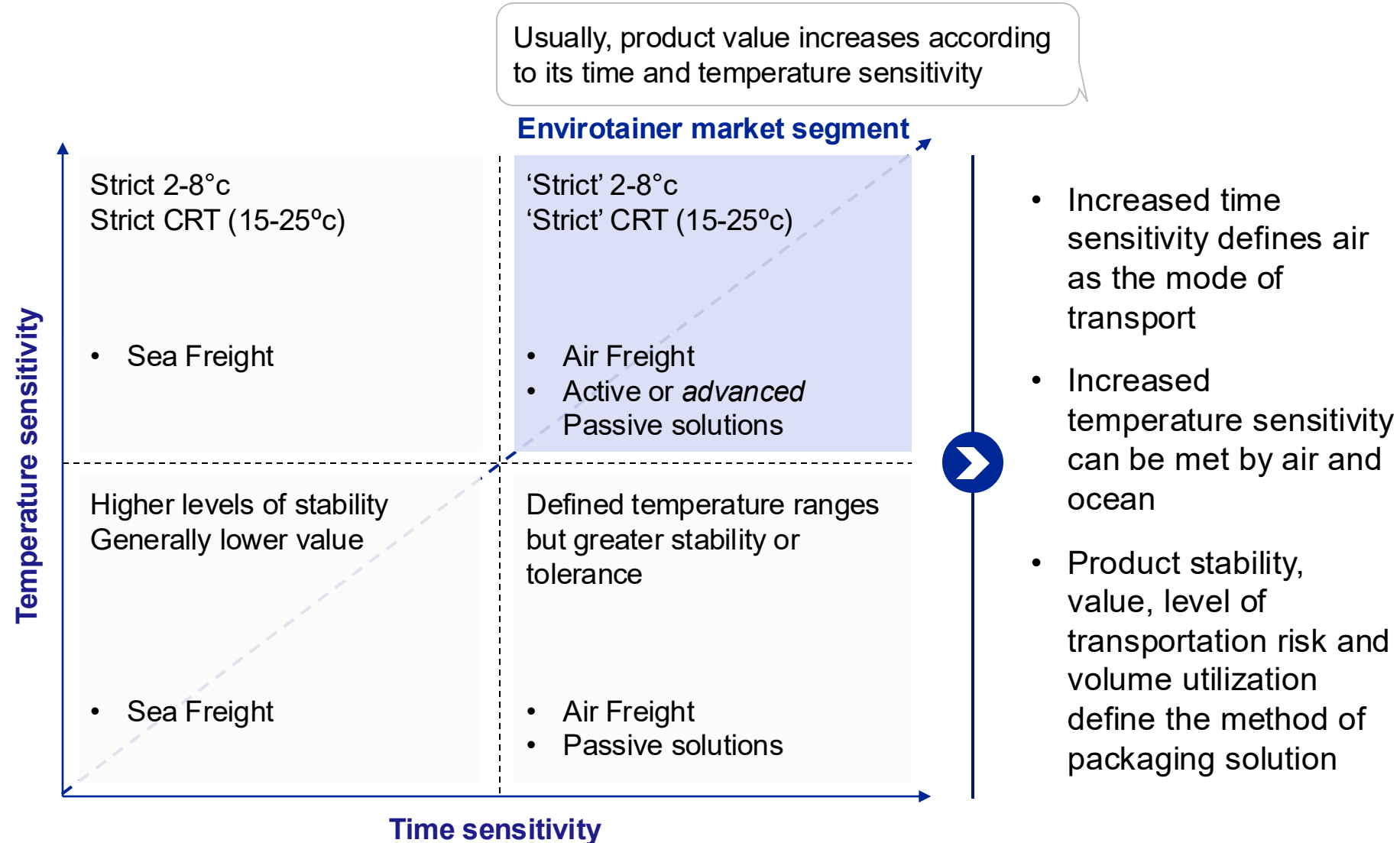
+2 - +8°C

+15 - +25°C

+37°C

# Packaging type and mode of transport selection

Time sensitivity, temperature sensitivity and product value are the primary drivers





# Six trends shaping patient-centric pharmaceutical logistics in 2025



## Optimizing cold chain with technology

AI will extend beyond R&D to supply chain management. Organizations will begin using technology, real time tracking and digital services, to minimize risk, reduce costs and boost efficiency.



## Strengthening supply chain resilience

Ongoing logistical disruptions force companies to diversify logistics strategies and focus on working with partners who are able to quickly adapt in response to changing circumstances or risks in the supply chain.



## Rising mergers, acquisitions, and strategic partnerships

Increased merger activity across Pharmaceutical companies CMOs, CROs, and CDMOs and now Cold chain logistics to accelerate innovation and reduce time-to-market



## Elevating sustainability standards

The call for sustainable practices and regulations in pharmaceutical delivery is louder than ever, which will significantly impact the pharmaceutical industry and place demands on all logistics suppliers.



## Expanding into emerging markets

Despite global tensions and geopolitical conflicts, the industry is increasingly expanding its reach into underserved markets – and this reach will continue to grow



## Adapting to small-batch shipments

As the demand for smaller, high-value pharmaceutical shipments grows, cold chain logistics needs to become more agile and adaptable to meet these evolving needs.

# What to consider when choosing a sustainable air freight solution

CO<sub>2</sub> footprint of cold chain air freight solutions



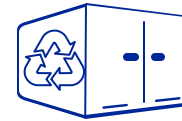
## What to consider when choosing a sustainable air freight solution



Volume efficiency



Weight



Reusability



Reliability

- Transportation stands for the majority of the CO<sub>2</sub> emissions
- Choose the solution that have the most **efficient utilization of the aircraft cargo space**. Flying empty and unused space also emits CO<sub>2</sub>
- **Lower weight** of the solution per pallet shipped means lower emissions
- Re-usable solutions are part of a **circular economy** and therefore give a smaller footprint and reduces landfill
- Damaged or lost cargo may lead to more CO<sub>2</sub> emissions from replacement production and shipping

# The Complete RelEye® Family – Our Flagship Family of Products

Recognised by the World Health Organization as the only Advanced Active Container



RelEye® RAP  
5 Euro or 4 US pallets

Available in 3 sizes – designed for any destination, trade lane or conditions with market-leading autonomy

RelEye® RLP  
3 Euro or 2 US pallets

RelEye® RKN – 1 Euro or 1 US pallet

- Full visibility with Live Monitoring and Control Tower – real-time control over your supply chain
- Unparalleled cargo load efficiency, lightweight design – delivering exceptional Total Landed Cost value
- Optimized for sustainability – airfreight loading efficiency, lightweight design and exceptional reliability to prevent pharmaceutical loss

# RelEye® named as Advanced Active in the 2025 World Health Organization Guidelines

The newly released 2025 WHO *Guidelines for the International Packaging and Shipping of Vaccines* have introduced a new “Advanced Active” category for temperature-controlled packaging solutions.



## Why It Matters:

- The World Health Organization, a globally recognized and unbiased authority, has conducted a thorough evaluation of temperature-controlled solutions for the most sensitive pharmaceuticals and vulnerable patients
- RelEye® has been classified as an Advanced Active container, a new category introduced by WHO to recognize superior performance and capabilities
- WHO recommends that advanced active containers can be used for international shipment of vaccines
- Adopting RelEye® supports regulatory alignment and simplifies procurement for international vaccine shipments



# RelEye® named as Advanced Active in the 2025 World Health Organization Guidelines

WHO's endorsement is a rare, unbiased benchmark in the industry. With RelEye®, you can confidently align with the highest global standards for vaccine quality, safety, and compliance.

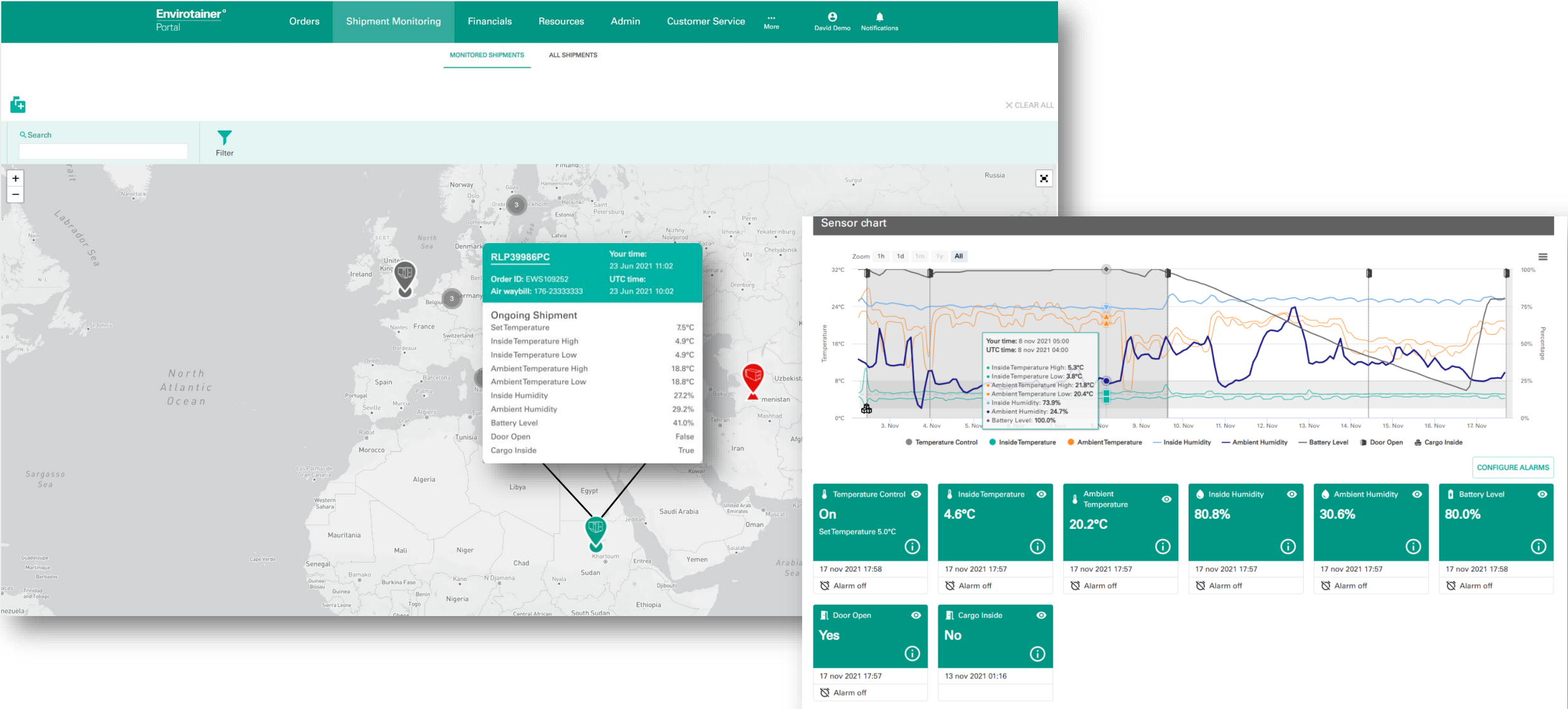
## What Sets RelEye® Apart:

- Up to 170 hours autonomy at 2-8°C
- Real-time monitoring (temperature, battery, humidity, location, door, cargo)
- Plug-in capability for extended protection
- Significant CO<sub>2</sub> reduction vs. passive solutions



# Live Monitoring and Control Tower Service













Track your Releye® shipment real time in the customer portal



# 24/7/365 Control Tower Service

## Notification is actively triggered for early intervention

- 24/7/365 response to alarms
- Response time (first contact with customer) – within 15 min from alarm received (20min with transmission 5 min container)
- Control Tower is activated for all RelEye shipments where contact details are provided

Alarm name		Alarm trigger
Low Battery	 	Battery drop below 20% charge with cargo loaded inside
Temperature too high	  	Inside temperature rises above 7°C - for set temp 5°C – (or above 24°C - for set temp 20°C) with cargo loaded inside, and more than 30 minutes passed since last door opening
Temperature too low	  	Inside temperature drops below 3°C - for set temp 5°C – (or below 16°C - for set temp 20°C) with cargo loaded inside
Door open for too long	 	Door has been left open for more than 30 min with temperature control on
Temperature control turned off	 	Cargo is loaded inside but temperature control is not on

More alarms to be assessed and added over time

# Thank you



**Clariss Kaya**

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