

ONE OF EUROPE'S LARGEST COOLING SYSTEMS

Path to Saving Electricity and Carbon Emissions



Laurent Fournet
Chief Operating Officer,
Eurotunnel



Jose La Loggia
General Manager Commercial HVAC,
Trane Europe



Julien Soulet
Vice President and General Manager,
Honeywell Fluorine Products Europe,
Middle East and Africa

Agenda



Event flow

10.30 – 11.25: Presentations
11.25 – 12.00: Q&A session
12.00 – 13.45: Individual interviews, refreshments
14.00 – 15.45: Eurotunnel Behind the Scenes Tour
16.00: Departures



Laurent Fourtune, Chief Operating Officer, Eurotunnel
Eurotunnel's viewpoint



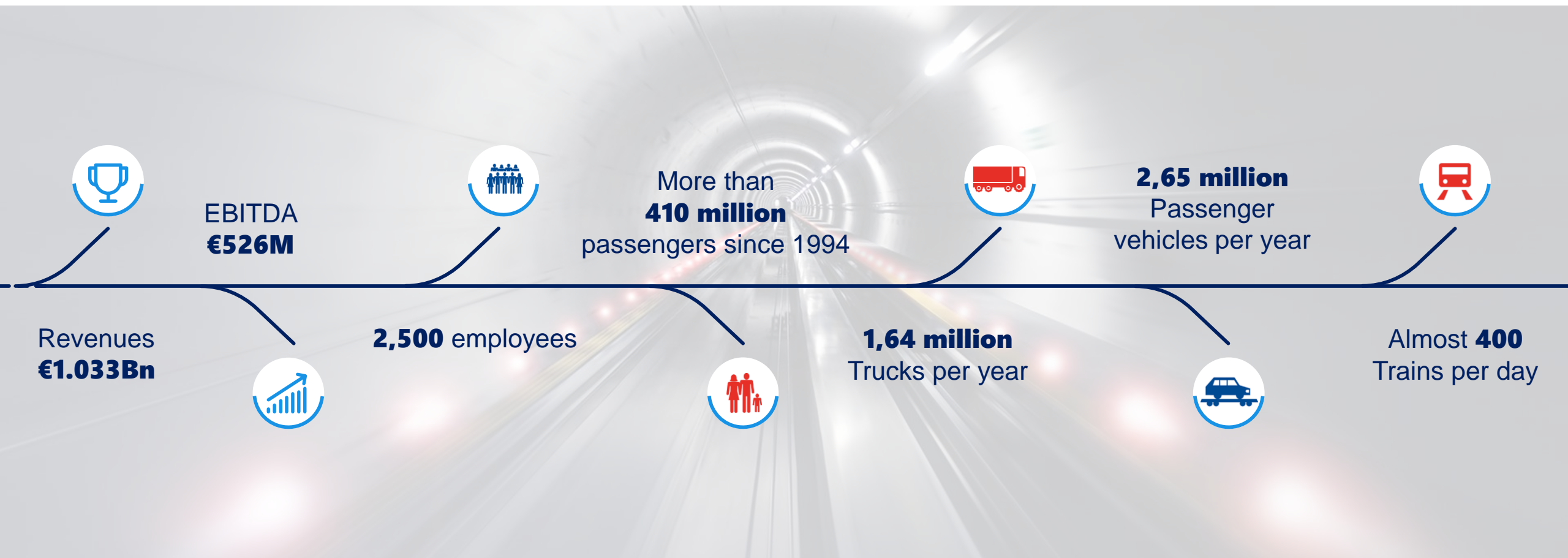
Jose La Loggia, General Manager Commercial HVAC Europe, Trane:
Increasing energy and operational efficiency while reducing greenhouse gas
emissions with Trane Series E CenTraVac



Julien Soulet, Vice President and General Manager, Honeywell Fluorine
Products EMEA: Reducing carbon footprint without sacrificing performance:
Honeywell Solstice[®] zd

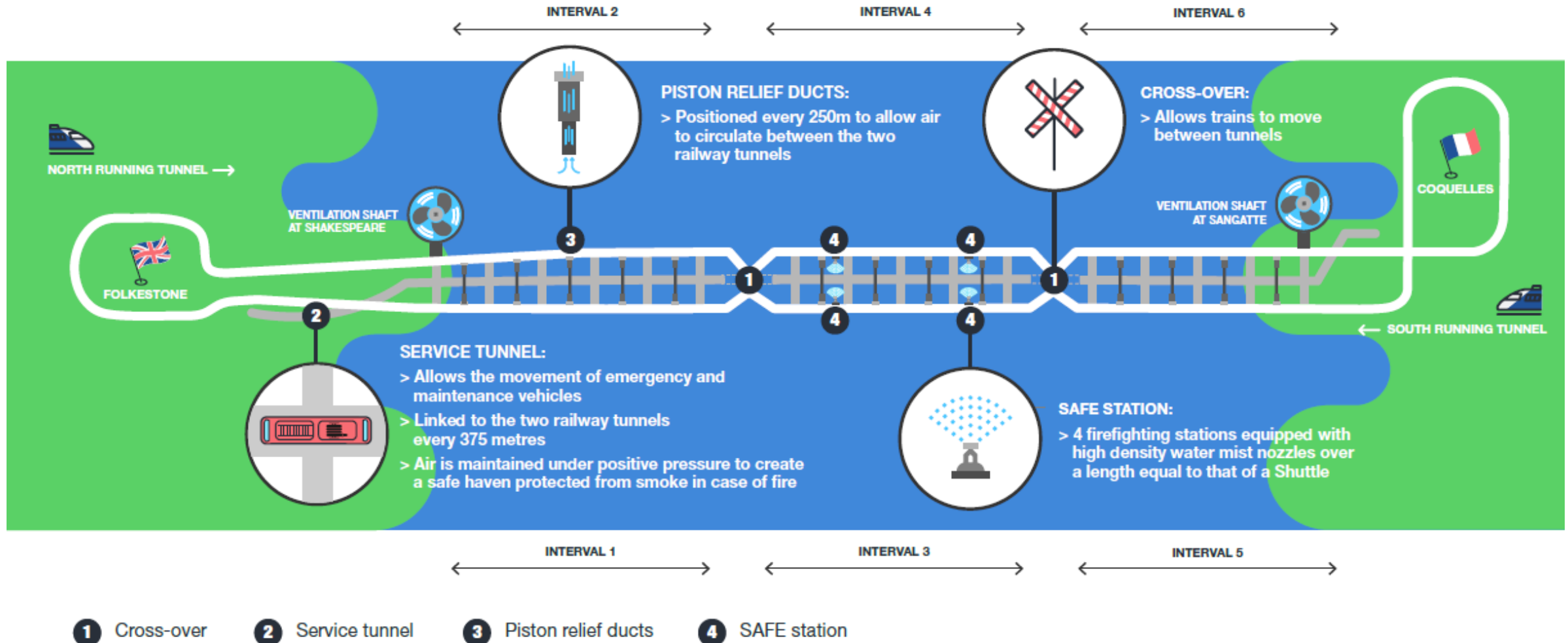


Eurotunnel overview



Presenter: Laurent Fournet, Eurotunnel

The Channel Tunnel: How it works?



Presenter: Laurent Fournet, Eurotunnel



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Eurotunnel: 30 years of Environmental Excellence

Carbon footprint
-47% vs 2006



2M tonnes CO2
saving/year vs. ferries/airlines



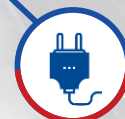
5th consecutive
Carbon Trust Standard
certification



Low carbon mobility
€8M commercial incentive
from EDF in 2017/2018



ElecLink favours **energy transition** and preserves
sealife



4.8 GWh saved with the
new chillers i.e the
consumption of **1,000**
households



Presenter: Laurent Fournet, Eurotunnel

Why a new Cooling system?



Presenter: Laurent Fournet, Eurotunnel



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Ingersoll Rand: our company

A rich legacy serves as the foundation for the next 100 years.



Innovating for 147 years

- Founded when Simon Ingersoll patented the steam-powered rock drill in **1871**.
- The Ingersoll-Rand Company was first incorporated on June 1, 1905.
- Acquired Trane (established 1885) in June 2008.



Company headquarters

- Incorporated in **Swords**, Ireland.
- North American Headquarters and Corporate Center in Davidson, North Carolina.



A global company

- More than **44,000** employees globally.
- A total of **894 facilities** around the world, including 53 manufacturing facilities worldwide.



Traded on NYSE

- Listed (NYSE: IR) since **1906**.
- 16th oldest company and the 12th oldest continuously listed company on the NYSE.

Presenter: Jose La Loggia, Trane



Buildings and Energy Use

BUILDINGS

ARE RESPONSIBLE FOR

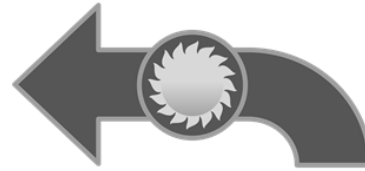


49% OF THE
WORLD'S ENERGY CONSUMPTION¹



40%

OF COMMERCIAL BUILDING
ENERGY CONSUMPTION



IS FROM HEATING,
VENTILATION &
AIR CONDITIONING

POWER CONSUMPTION

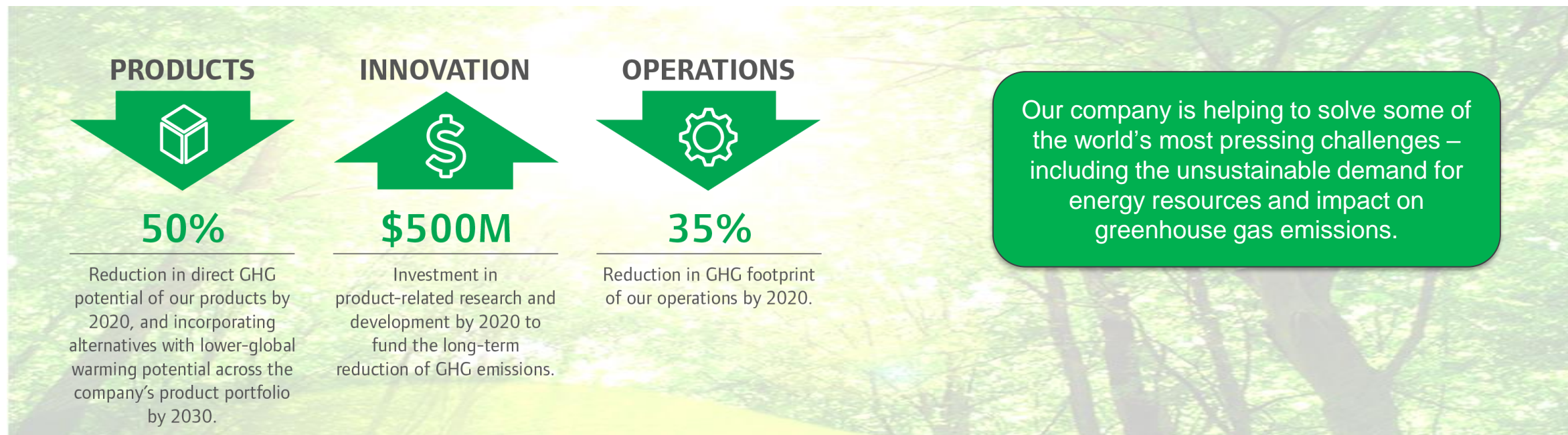
forecasted
to grow by **12.9%**

by **2040**¹

1. Navigant® Research, 2016
2. EIA and based off of 2015 consumption
3. <http://instituteeforenergyresearch.org/topics/policy/power-plant-closures/>

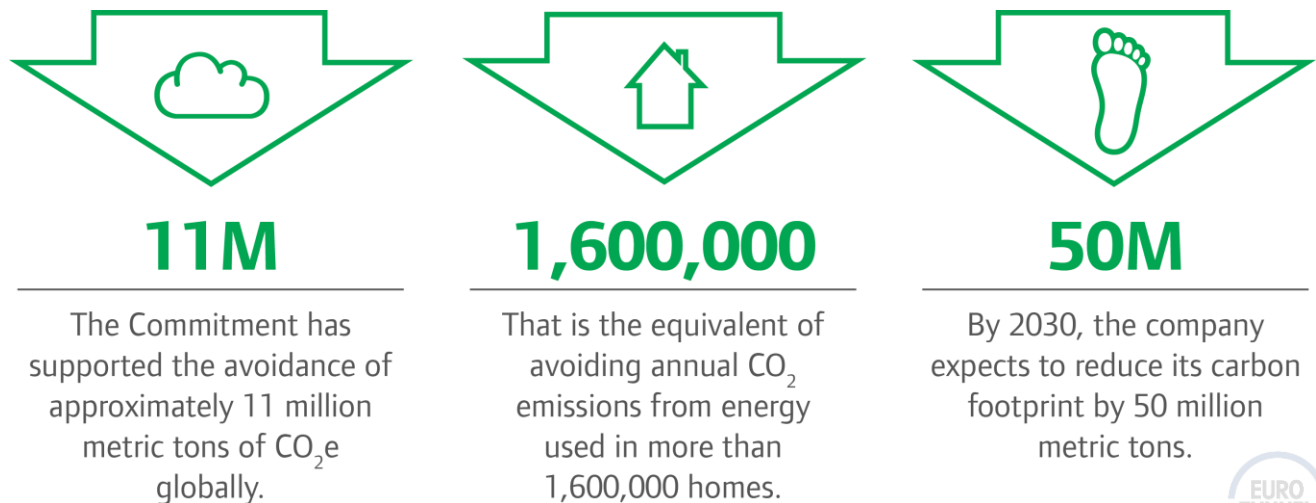


Ingersoll Rand: our climate commitment



Our company is helping to solve some of the world's most pressing challenges – including the unsustainable demand for energy resources and impact on greenhouse gas emissions.

Progress on the Commitment



Ingersoll Rand: product innovation

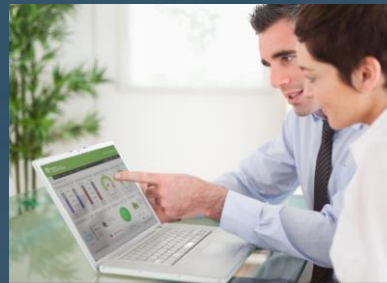
We innovate to solve customer problems

Trane offers **solutions** at every stage within the **life cycle of the building**. We know how to **maximize the potential of a building** when it's first built and every day afterwards.

EcoWise™



Energy Avoidance



Electrification



Balance™ CMAC



Ingersoll Rand: chillers for Tomorrow ...Today

What we do matters

We know that what we do makes an **impact on our world**. This is why we provide a breadth of offerings that include industry **leading efficiencies**, **low global warming** potential solutions, world class automation systems, and a complete **energy services** portfolio. Our **solutions matter** for everything that happens **inside and beyond the building**.



EcoWise™

As part of the Ingersoll Rand Climate Commitment, the EcoWise portfolio of products is designed to lower environmental impact with next generation, low GWP refrigerant options. They are designed to help our customers meet sustainability goals without compromising efficiency, reliability, or safety.

Chillers Features Next-Generation, Low GWP Refrigerants



Screw chillers
Sintesis family
XSTREAM
Full HFO



Magnetic bearing
XSTREAM
EXCELLENT



Centrifugal Chillers
eCTV



TRANE®

Honeywell
THE POWER OF CONNECTED

Honeywell Overview

NYSE: HON | ~1,300 sites | ~131,000 employees | Morris Plains, N.J. headquarters | Fortune 100

Aerospace



\$14.8B
Sales

Our products are used on virtually every commercial and defense aircraft platform and in more than 100 million vehicles worldwide and include aircraft propulsion, cockpit systems, and satellite communications.

Home and Building Technologies



\$9.8B
Sales

Our products, software, and technologies are in more than 150 million homes and 10 million buildings worldwide, helping customers control their comfort, security, and energy use.

Safety and Productivity Solutions



\$5.6B
Sales

We improve enterprise performance and worker safety and productivity with our scanning and mobile computers, software, warehouse automation solutions, and personal protective equipment.

Performance Materials and Technologies



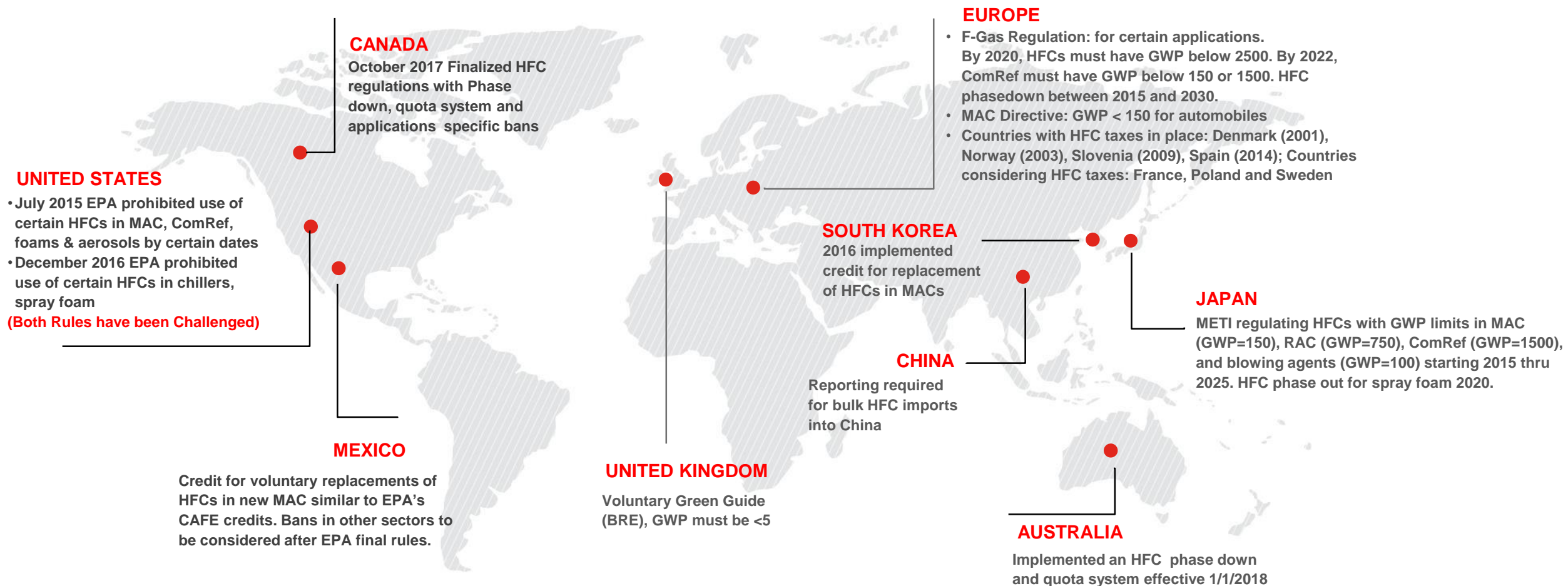
\$10.3B
Sales

We develop advanced materials, process technologies, automation solutions, and industrial software that are revolutionizing industries around the world.

Presenter: Julien Soulet, Honeywell



HFCs Under Pressure for Global Reduction



Presenter: Julien Soulet, Honeywell



Honeywell Fluorine Products

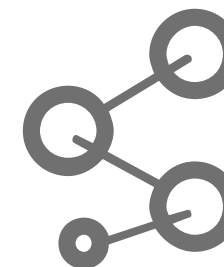
Pioneers in developing next generation solutions to meet global imperatives

Markets

- Air conditioning and refrigeration
- Building and construction
- Appliance and containers insulation
- Aerosols and solvents

Applications

- Refrigerants
- Blowing agents
- Aerosols
- Solvents



Investments: \$900 million in R&D and new capacity

Solstice[®] yf

- Environment: GWP of 1 vs. 1430
- Performance: Same Cooling Efficiency
- Safety: SAE International Approved
- Cost: Near Drop-in Replacement
- +45M cars on road > 103 models today

Solstice[®] zd & ze

- Environment: GWP of 1 vs. 1430
- Performance: Higher Cooling Efficiency
- Safety: Meet Safety Requirements
- Cost: Near Drop-in Replacement
- All major chiller OEMs launched Solstice ze and Solstice zd chillers

Solstice[®] Blends: N40, N13

- Environment: Up to 93% GWP reduction
- Performance: Higher Cooling Efficiency
- Safety: Meet Safety Requirement
- Cost: Near Drop-in Replacement

Presenter: Julien Soulet, Honeywell



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Impact of Solstice® to Date



- Solstice® products are making a significant impact
- The use of Solstice® products has helped avoid the release of 79 million tons of CO₂e
- That's equivalent to:

Removing 16 million cars
from the road



OR

Carbon sequestered by a
forest of the size of Germany



OR

The CO₂ emissions from the
energy used by 7.3 million homes



Presenter: Julien Soulet, Honeywell





Q&A



TRANE®

Honeywell
THE POWER OF **CONNECTED**