

Energy efficiency for Energy transition

- Dan Bandrabulă – Energy & Technical Facilities Manager

Dan Bandrabula – About me

*Master's degree:
Management of the Electric Systems*

*Authorized Energy Manager
by the Ministry of Energy*

Job History:

2010

- Hydro Power Plants Chief – Romenergo

2013

- SLP/Energy Manager – Coca Cola HBC Romania

2016

- Energy Specialist – S.C Zentiva S.A

2018

- Energy & Technical Facilities Manager – S.C Zentiva S.A

2023

- Energy & Technical Facilities Manager – S.C Zentiva S.A & Labormed

Zentiva in Romania - History

1962

la naștere
**Uzina de Medicamente
București.**

2000 - 2005

Începe **procesul de reconstrucție** aproape
de la zero a fabricii: clădiri, echipamente
și tehnologii noi.



2009

Zentiva este **achiziționată**
de **Sanofi.**

ZENTIVA
O COMPANIE SANOFI

2018

Zentiva devine
companie
independentă,
susținută de Advent
International.

Advent International
GLOBAL PRIVATE EQUITY

2020

Achiziția în
România a **Alvogen**
România și a
fabricii **Labormed**

Alvogen
Labormed Alvogen



Fabrica de Medicamente București își
modifică numele în **SICOMED**, acronimul
pentru Sinteze-Condiționări Medicamente.

1990



Sicomed este **achiziționată** de
grupul Zentiva.

2005

Este construită
secția de **Peleți** și
se finalizează
Laboratorul
European. Se
reia activitatea de
export.



2011



Achiziția companiei
Solacium Pharma –
extindere portofoliu
OTC și suplimente
alimentare

2019

de peste
60 ANI
împreună
pentru sănătate
ZENTIVA



Zentiva in Romania – biggest local medicine production capacity

General facts

- 850 employees in 2 sites
- 230 locally manufactured products
- 695 forms of packaging
- Over 5 billion galenic units
- 163 million boxes manufactured
- European testing and release laboratory in Zentiva: 650 forms of packaging, 30 markets

Portfolio

- Export in 34 markets
- 60% from production is going to export
- TOP 3 Zentiva Romania markets: RO, DE, FR

Technology

- **Solid shapes**
 - Dry / wet granulation
 - Tableting / encapsulation
 - Coating (tablets/pellets)
- **Injectable forms (only in Zentiva site)**
 - Ampoules of 1, 2, 5, 10 ml
 - Aseptic filling
 - Sterilization in final container

Certification

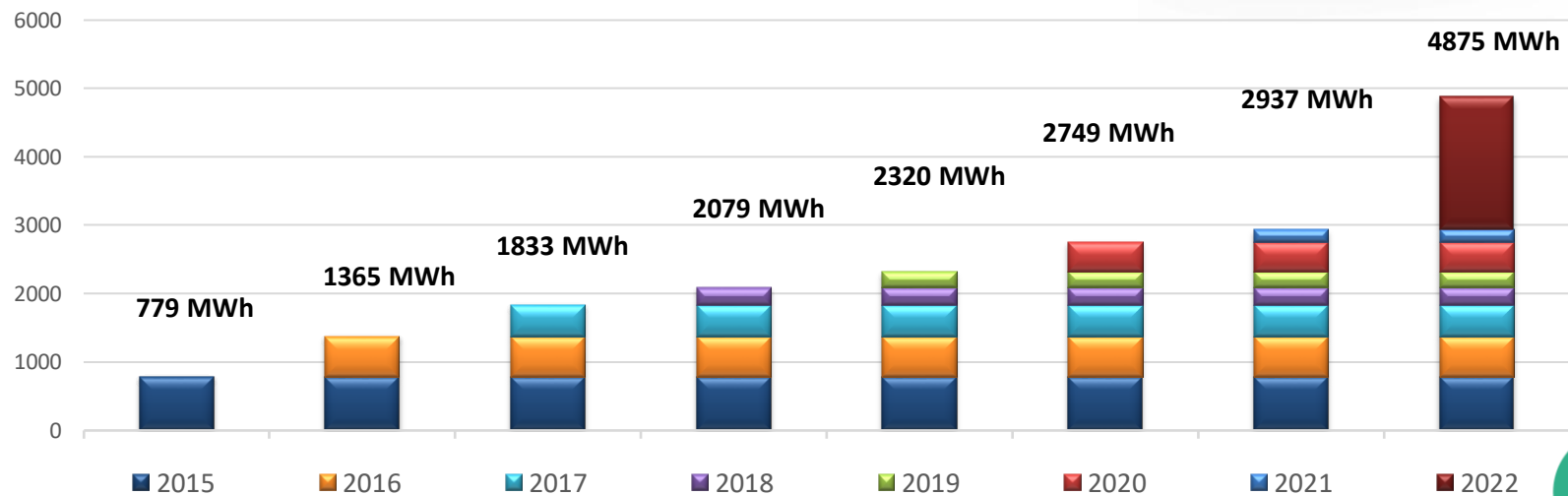
- **RBPF (GMP):**
 - Zentiva: EU, AU, BY, RU
 - Labormed: ME
- **ISO 9001** and **ISO 45001** in Zentiva
- **ISO 14001** in Zentiva and Labormed
- **ISO 50001** in Zentiva

Energy Efficiency (what we have done until now in Zentiva site)

Zentiva is accredited since 2015 with the ISO 50001 standard - Energy Management and in 2020 we are accredited on the latest version of this standard.



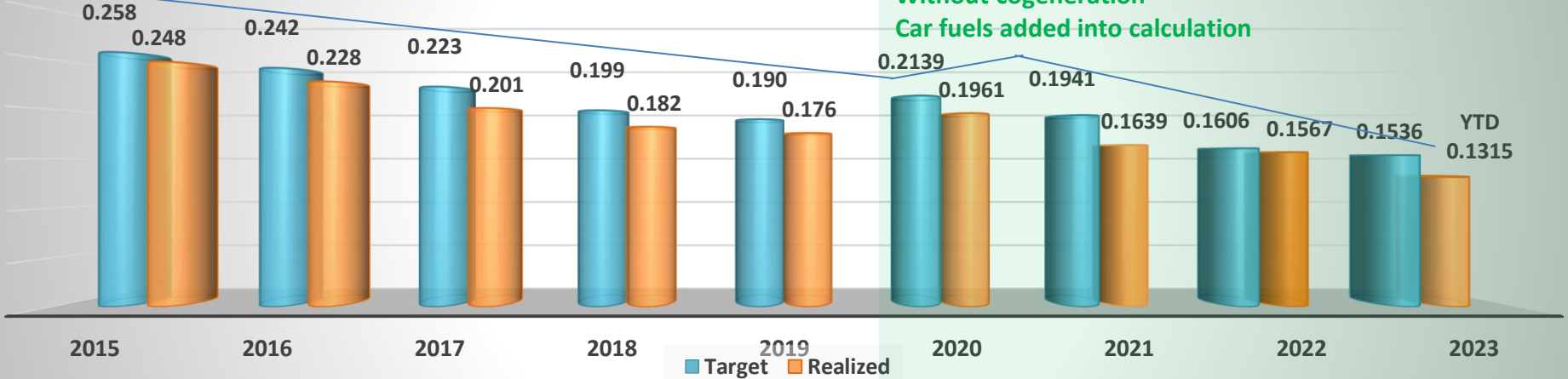
Hystorical energy saved (MWh)



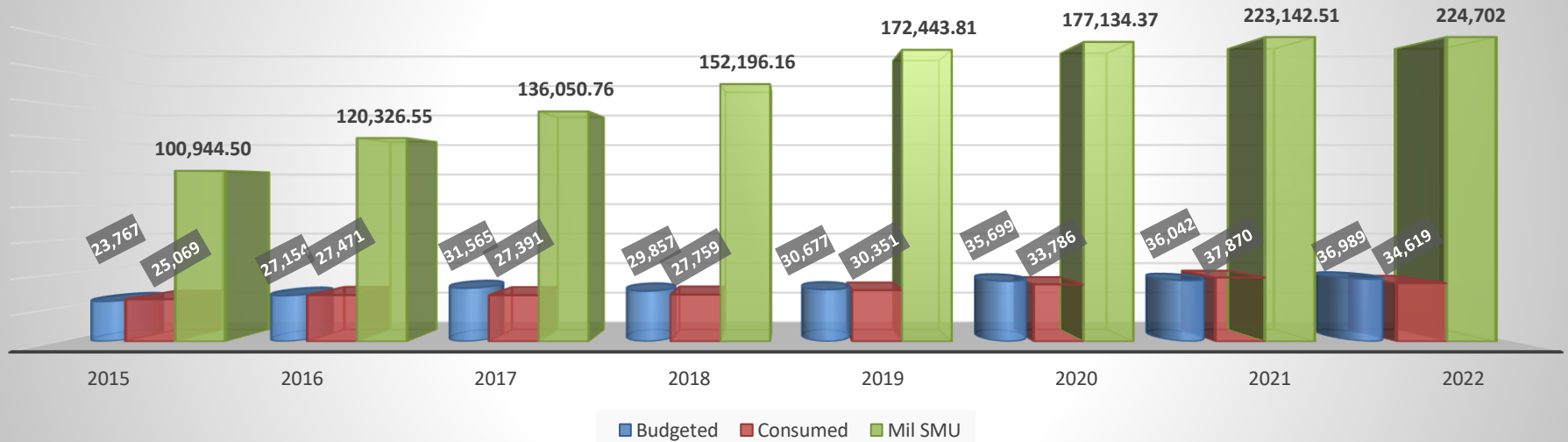
Energy Performance recorded

kWh/SMU evolution

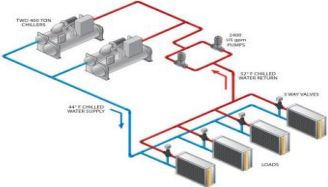
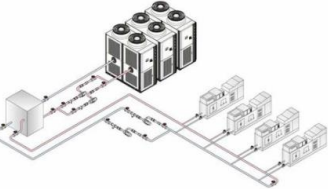

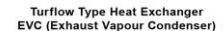

New ISO 50001 Standard
Without cogeneration
Car fuels added into calculation



Energy consumption evolution MWh/year



Bucharest (both factories) Energy Efficiency Projects 2022

	Project name	Implementation	Saving estimated
	Cooling capacity optimization by implementing a 2 nd chilled water station	September 2022	Electrical Energy 1163 MWh/year 9.3% less consumption
	Centralized chilled water circuit for Packaging machines	October 2022	Electrical Energy 73 MWh/year 0.5% less consumption
	Photovoltaic system in B2 (warehouse)	November 2022	Electrical Energy 233 MWh/year 10% less consumption
 Turflow Type Heat Exchanger EVC (Exhaust Vapour Condenser)	Heat recovery from steam condensate	October 2022	Natural gas 1855 MWh/year 7.5% less consumption
	New Steam Boiler	September 2022	Natural gas 1433 MWh/year 6% less consumption

Total investments in 2022:

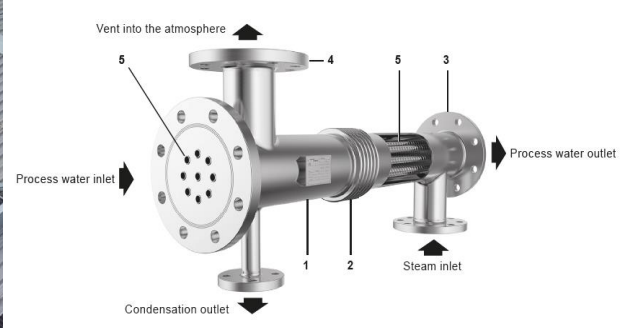
1.293 mil euro

Total energy savings expected in 2023:

- **1469 MWh/year** electrical en (10% of total energy consumption)
- **3288 MWh/year** natural gas (12% of total natural gas consumption)

Total CO2 emission reduction expected

657 tCO2 emissions reduction



Our sustainability strategy – framed around 3 pillars



People

- We are building Zentiva as a great place to work where everyone can be their true selves. We take care of our people, their loved ones, and the people we serve; as well as communicate transparently and create value as one team.

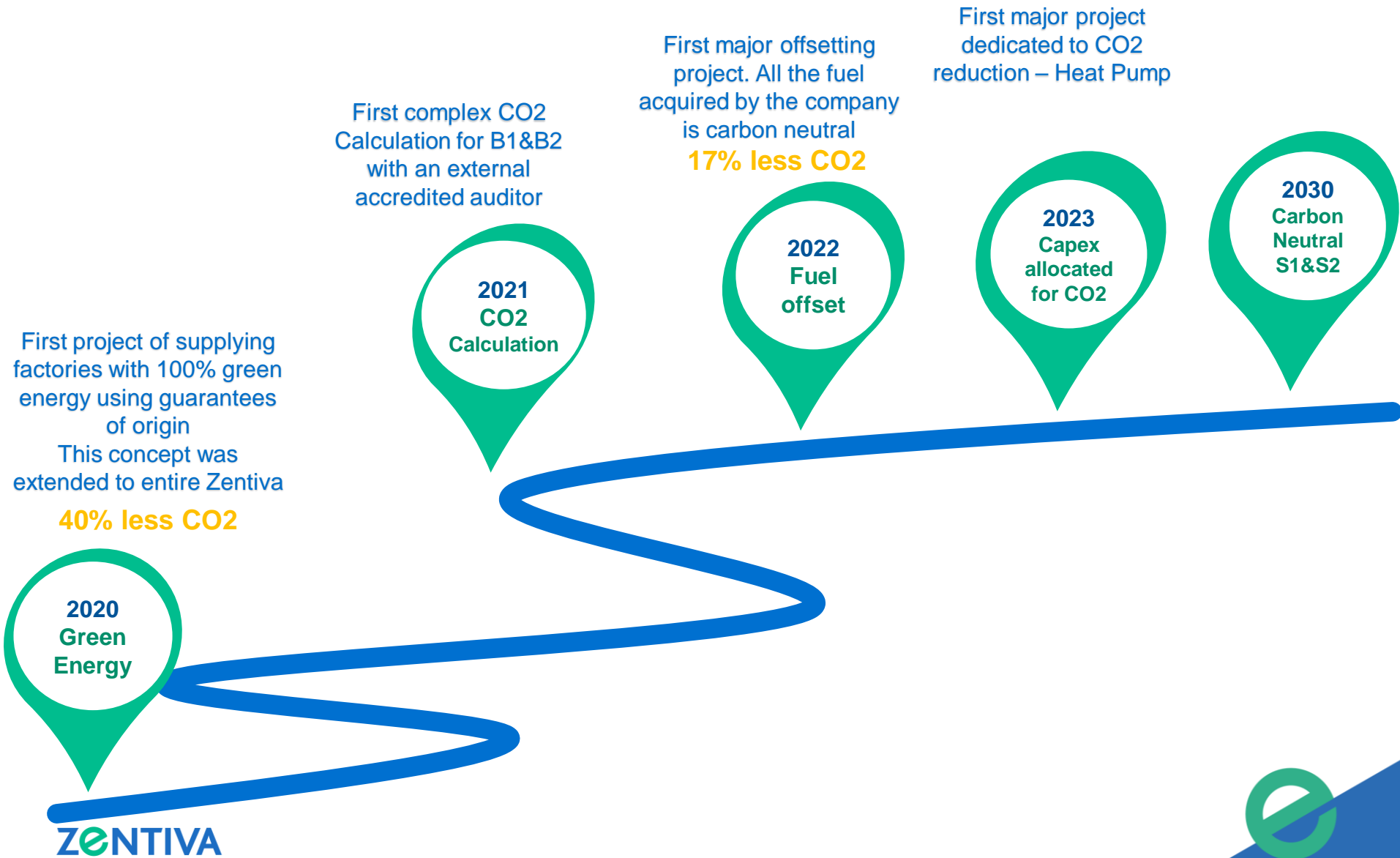
Partners

- We are establishing sustainable relations with our partners who share the same vision as us.

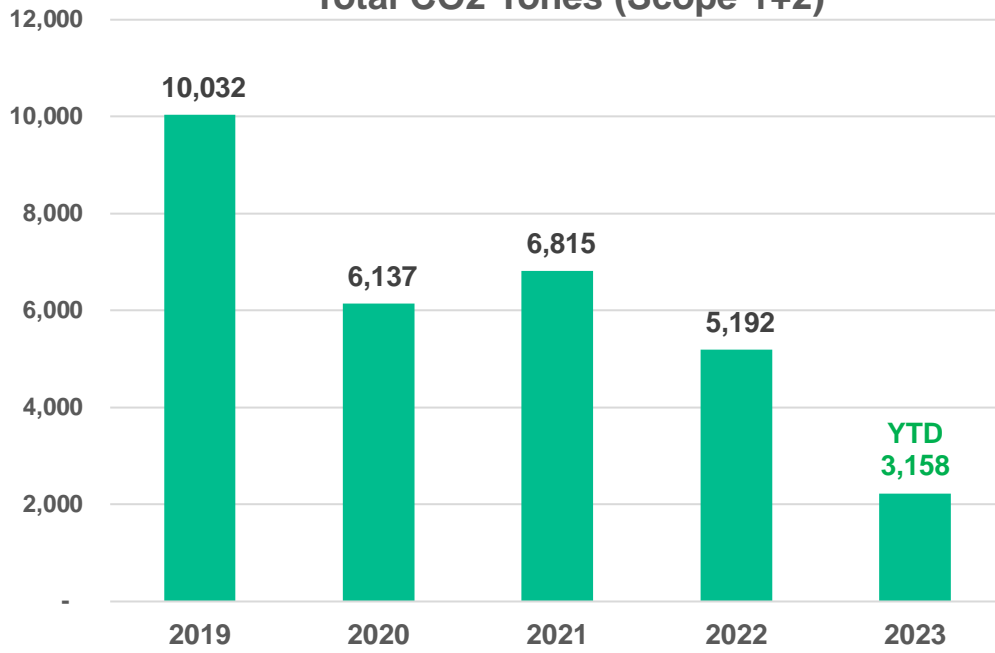
Planet

- Zentiva is contributing to a greener planet by committing to be carbon-neutral for scope 1 and scope 2 by 2030. We will achieve that goal by implementing a comprehensive climate strategy that focuses on reducing carbon emissions, sourcing from renewable energy, reducing water and energy consumption and waste. We help the planet to stay healthy by planting trees and investing into biodiversity projects.

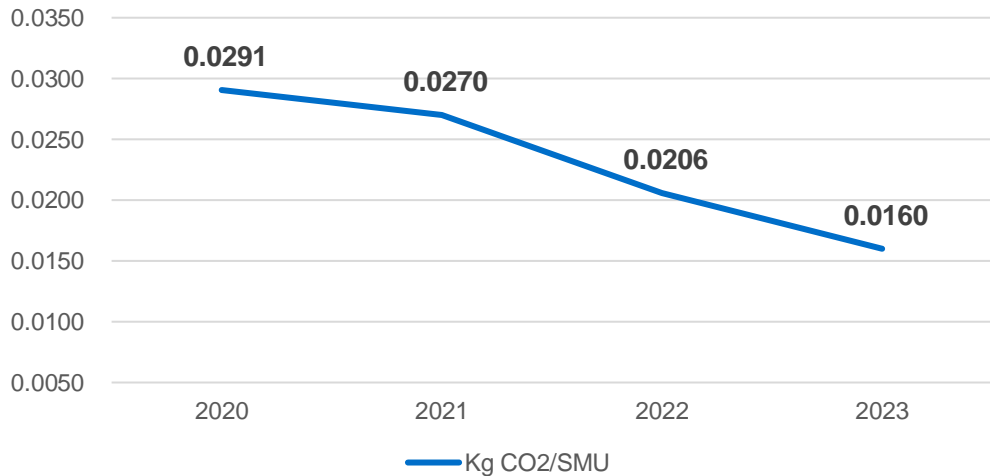
Sustainability in Zentiva (what we have done)



Total CO2 Tones (Scope 1+2)



Kg CO2/SMU



CO2 Emissions Evolution Zentiva

Next Steps – Carbon Neutrality Roadmap

Reduce and eliminate natural gas consumption

Install more inhouse energy production from alternative sources

Implement energy recovery projects

Increase level of buildings insulation

How – projects in analysis

- Installation of industrial heat pumps
- Increase production from photovoltaic panels
- Increase usage of heat recovery from boilers, AHU units, compressors
- Isolate the buildings
- Replace actual NG steam boilers with electrical steam boilers



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Thank you!



de peste
60
DE ANI
împreună
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