

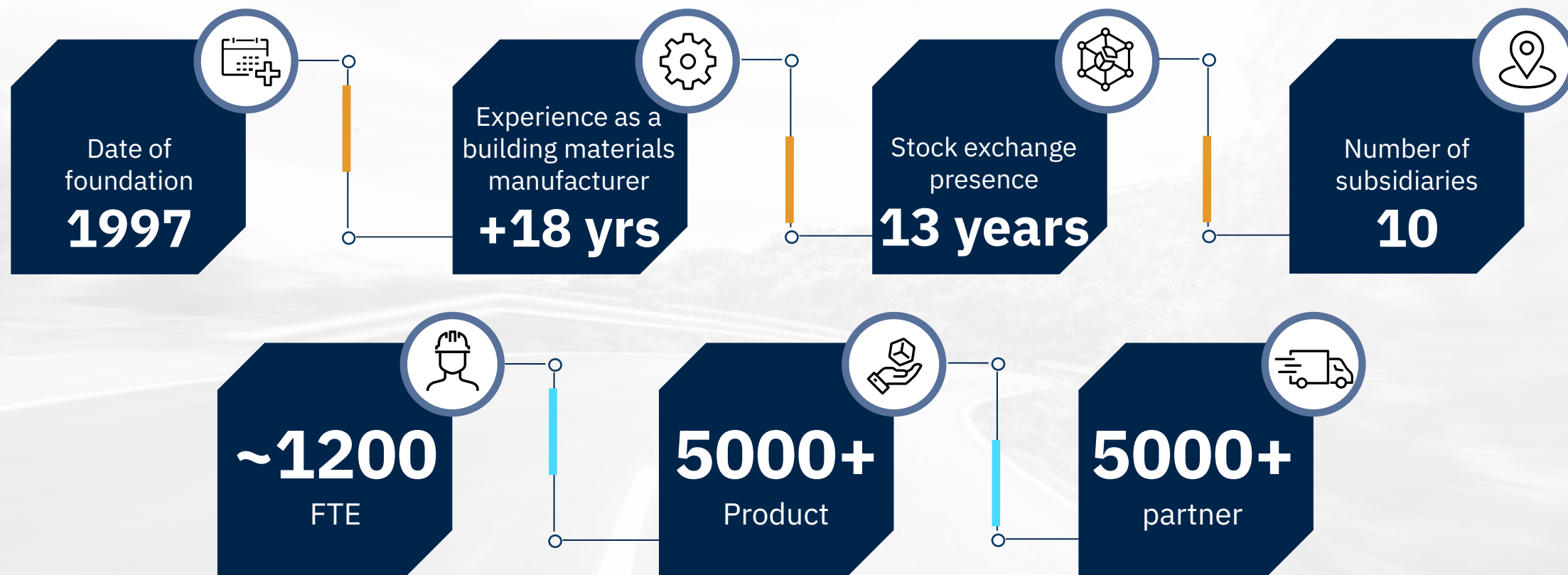


MASTERPLAST INVESTOR FORUM

14.05.2024

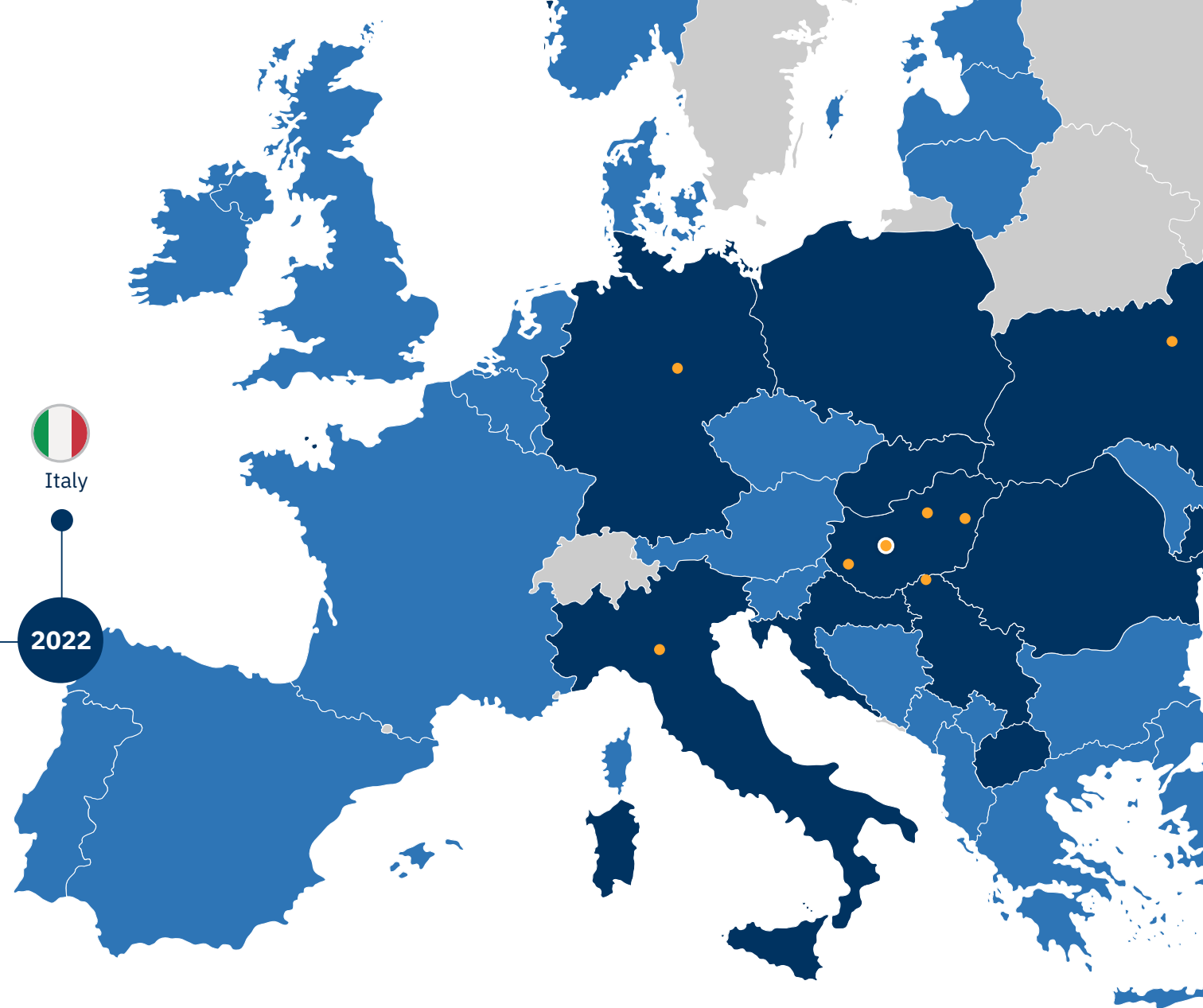
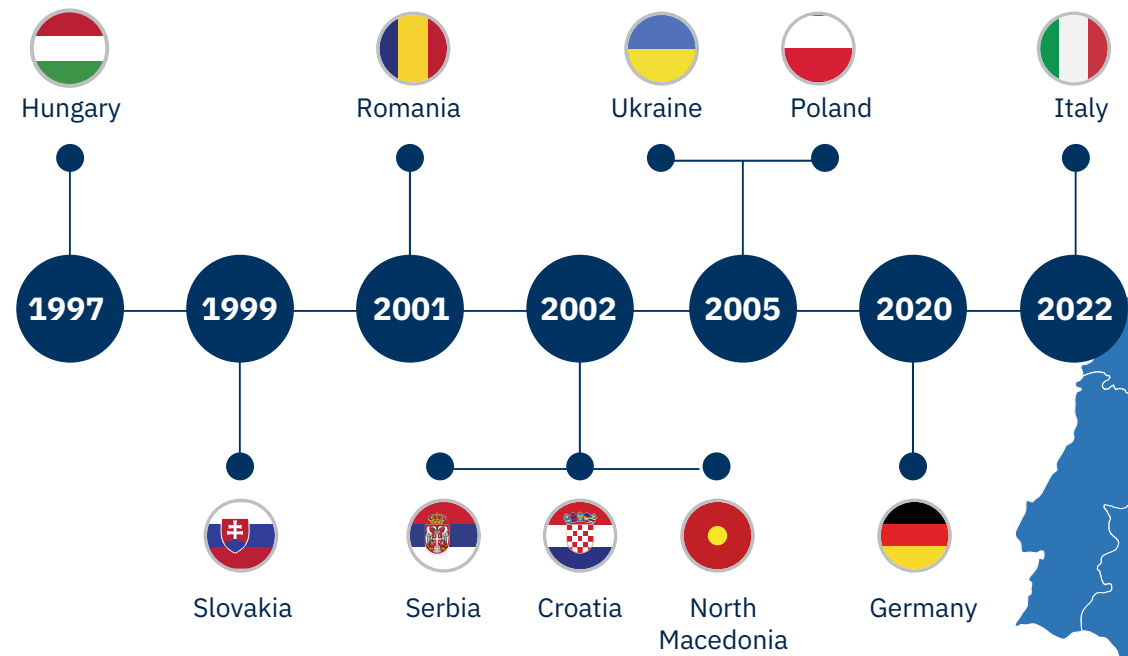
MASTERPLAST GROUP

COMPANY INTRODUCTION



A LEADING REGIONAL MANUFACTURER OF THERMAL INSULATION SYSTEMS COMPONENTS
ONE OF THE GLOBAL MARKET LEADERS IN FIBERGLASS MESH AND ROOFING FOIL

MARKET PRESENCE





ANALYSIS AND EVALUATION

REVIEW

TRENDS, RESULT

AFTER FULL THROTTLE TO SLAMMING ON THE BRAKES

- SPO October 2022 – HUF 4100 per share
- What happened in 2023?
- How did Masterplast react to this?
- What are the long-term valid changes?
- What are the main lessons from last year?

2023 RESULT

Turnover **145,2**

EBIT **-12,5**

EBITDA **-6,1**

PAT **-15,6**

EMPLOYEE LAYOFF
-361 FTE

(data in millions of euros)

REVIEW Q1 2024

TRENDS, RESULT

- Depressed markets
- Delays in EU building energy programs
- A wait-and-see approach is observed in the markets
- Expensively acquired raw materials have run out
- Increasing production
- More efficient organizational operation
- Operating profit (EBITDA) further improved

| RESULTS

2023 Q1

Turnover	37 602
EBITDA	-2 032
<i>EBITDA%</i>	5,4%
Headcount	1 428 FTE

2024 Q1

Turnover	32 665
EBITDA	856
<i>EBITDA%</i>	2,6%
Headcount	1 231 FTE

(data in thousands of euros)

European and Hungarian Policy and Regulatory Framework of Buildings

Anikó Pálffy

Hungarian Energy Efficiency Institute

05.14.2024.



The focus must be to reduce emissions from heating

2030

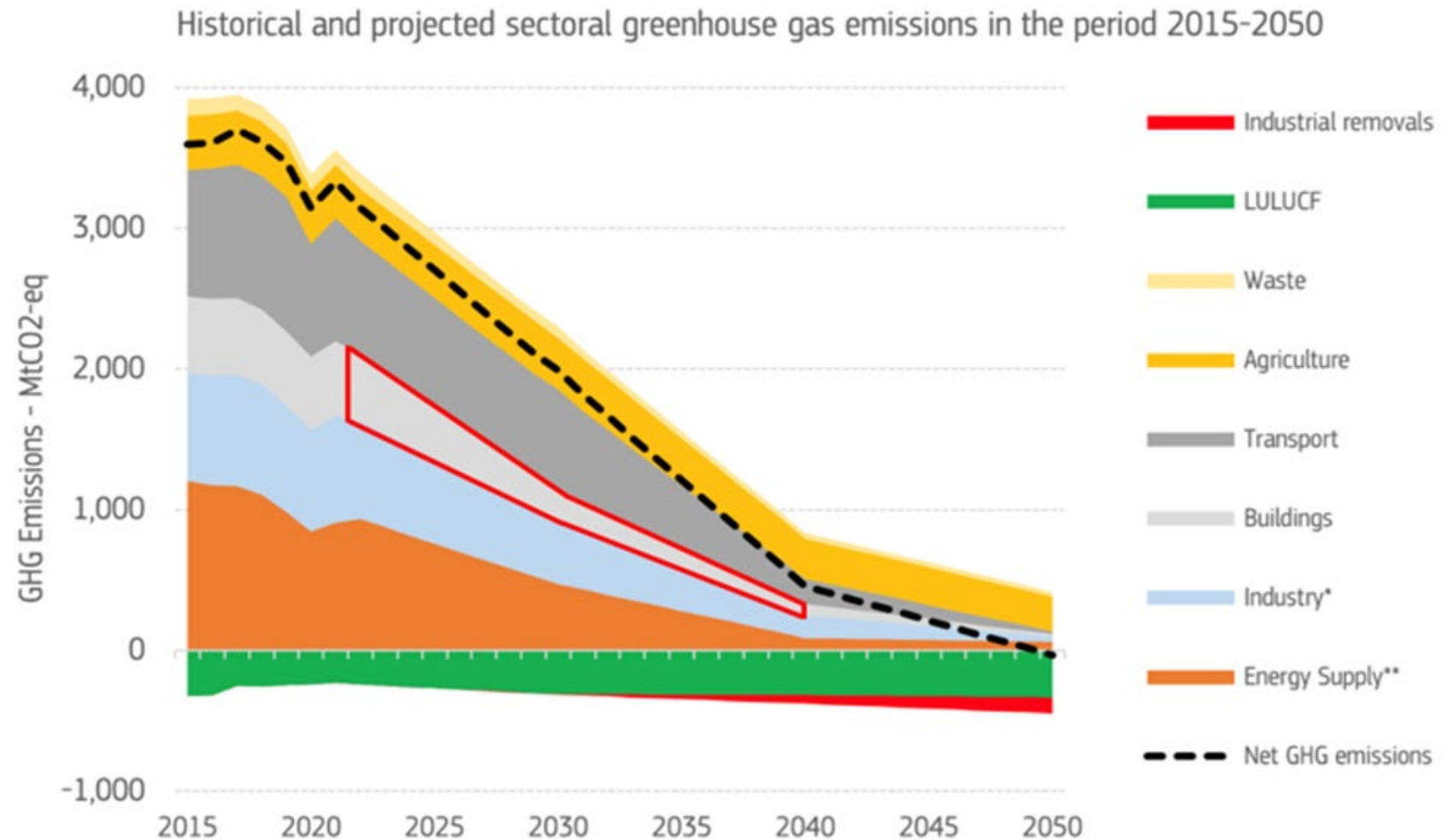
Buildings sector
expected to fall
dramatically by 2030

2040

...and reach close to
zero by 2040

2050

Climate-neutral
Europe



*Excluding non-BECCS industrial removals

**Including bioenergy with carbon capture and storage (BECCS)

RENOVATION WAVE STRATEGY (2020)

- 35 million buildings need renovation until 2030 in the EU
- Currently low renovation rate to at least be doubled
- Deep renovation (min 60% energy savings)



ENERGY EFFICIENCY
DIRECTIVE
(EED 2023)



ENERGY PERFORMANCE OF
BUILDINGS DIRECTIVE
(EPBD 2024)



RENEWABLE ENERGY
DIRECTIVE
(RED 2023)

Buildings-related pieces of the Fit for 55 package

EED



- Binding final energy consumption target, indicative national contributions + 'gap-filling mechanism'
- Higher yearly energy savings obligations by members
- Energy savings from fossil boilers can not be counted after 2025
- stronger focus on alleviating energy poverty.

EPBD



- Updated standard for new buildings (Zero Emission Building)
- Residential buildings: 16% reduction in primary energy consumption by 2030 and 20-22% by 2035
- Non-residential: minimum energy performance standards, 16% of worst-performing buildings by 2030, and 26% by 2033 to be renovated
- Fossil fuel boilers will need to be completely phased out by 2040 and subsidies cut from 2025
- Enhanced energy performance certificates
- Building renovation passports, one-stop-shops, Smart Readiness Indicator, voluntary mortgage portfolio standards
- Solar rooftops will need to be deployed in all new residential buildings as of 2030

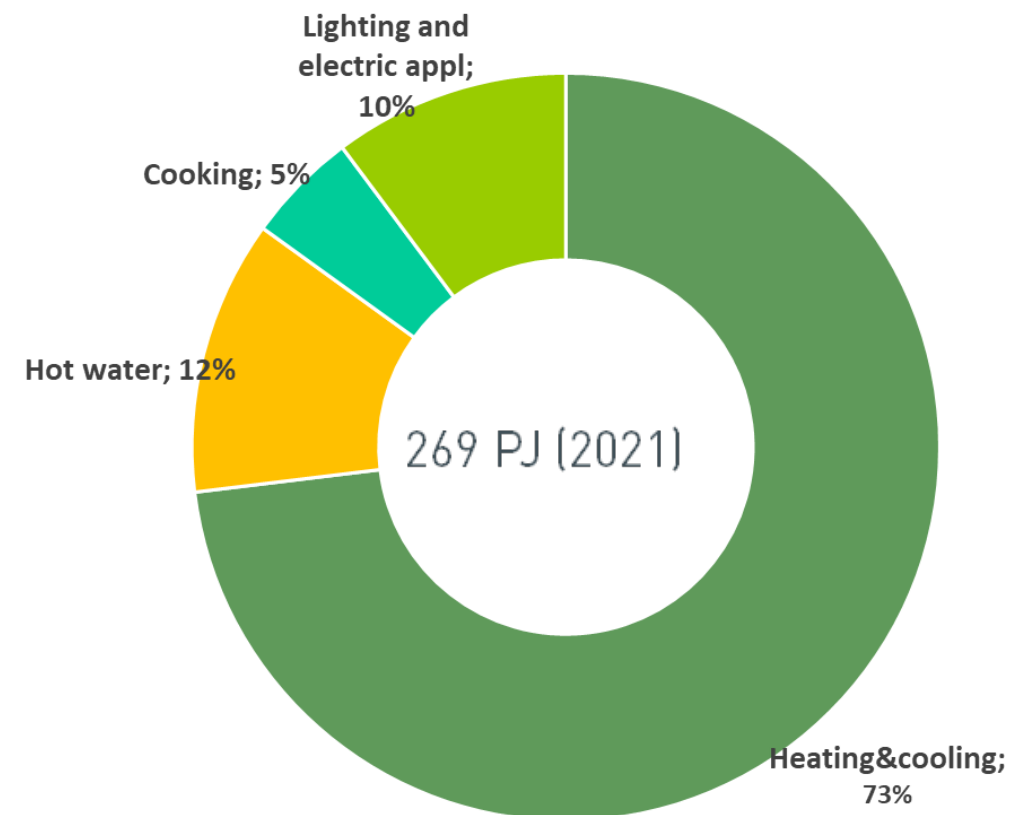
RED



- Non-binding target of 49% share of energy from renewable sources in the buildings sector in 2030
- Average minimum annual increase of 1.1% in the share of renewable sources by 2030

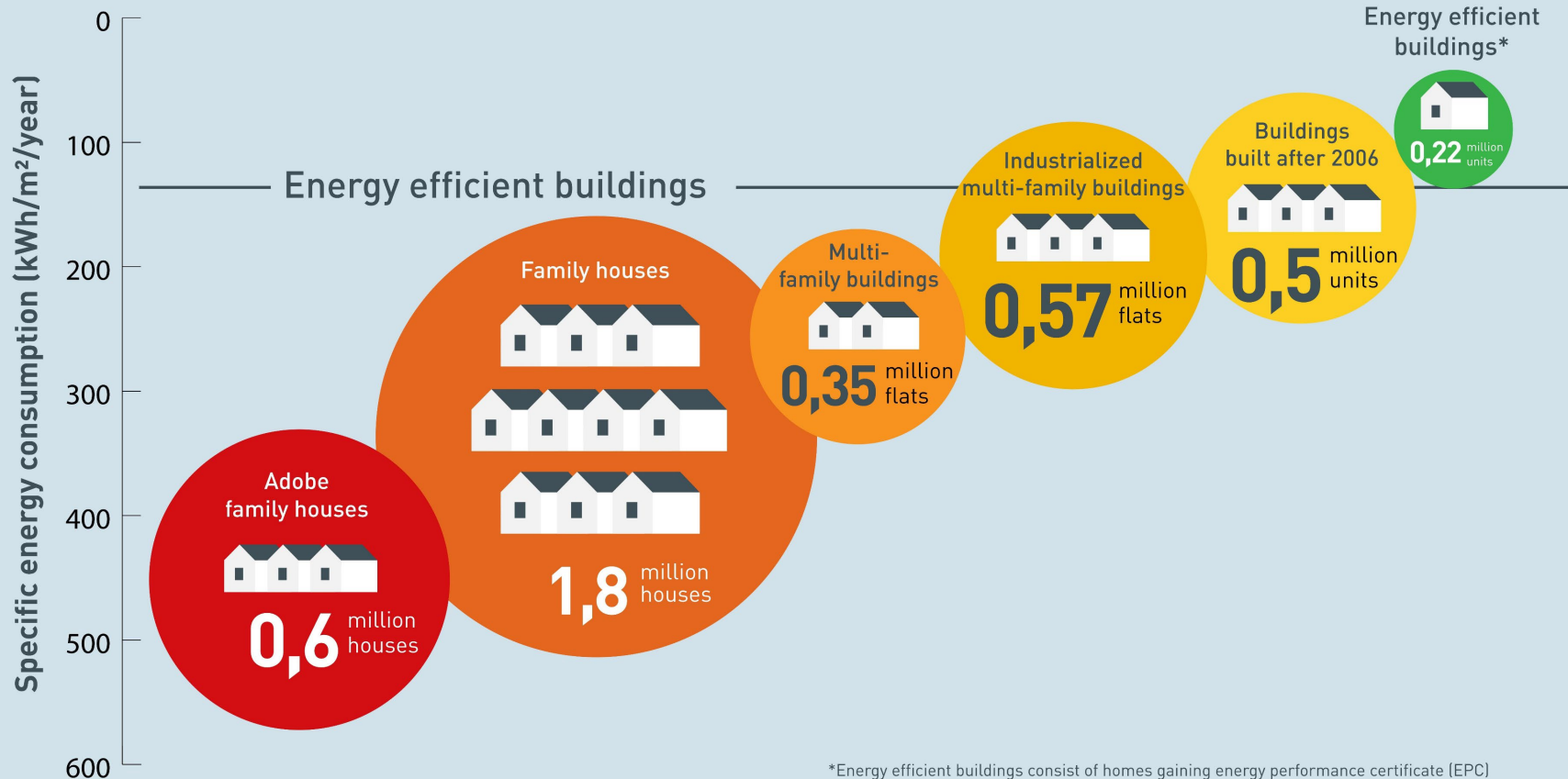
The residential sector is the biggest energy consumer in Hungary

Final energy consumption in TJ (2021)



The domestic building stock is outdated

HUNGARIAN RESIDENTIAL BUILDING TYPES BY ENERGY EFFICIENCY



*Energy efficient buildings consist of homes gaining energy performance certificate (EPC) "CC" or better according to the EPCs issued between 2016-2021.

Sources: Calculations and assumptions by MEHI based on the Hungarian SILC data survey (KSH 2018), the LTRS (ITM 2020) and national EPC database at entan.e-epites.hu.

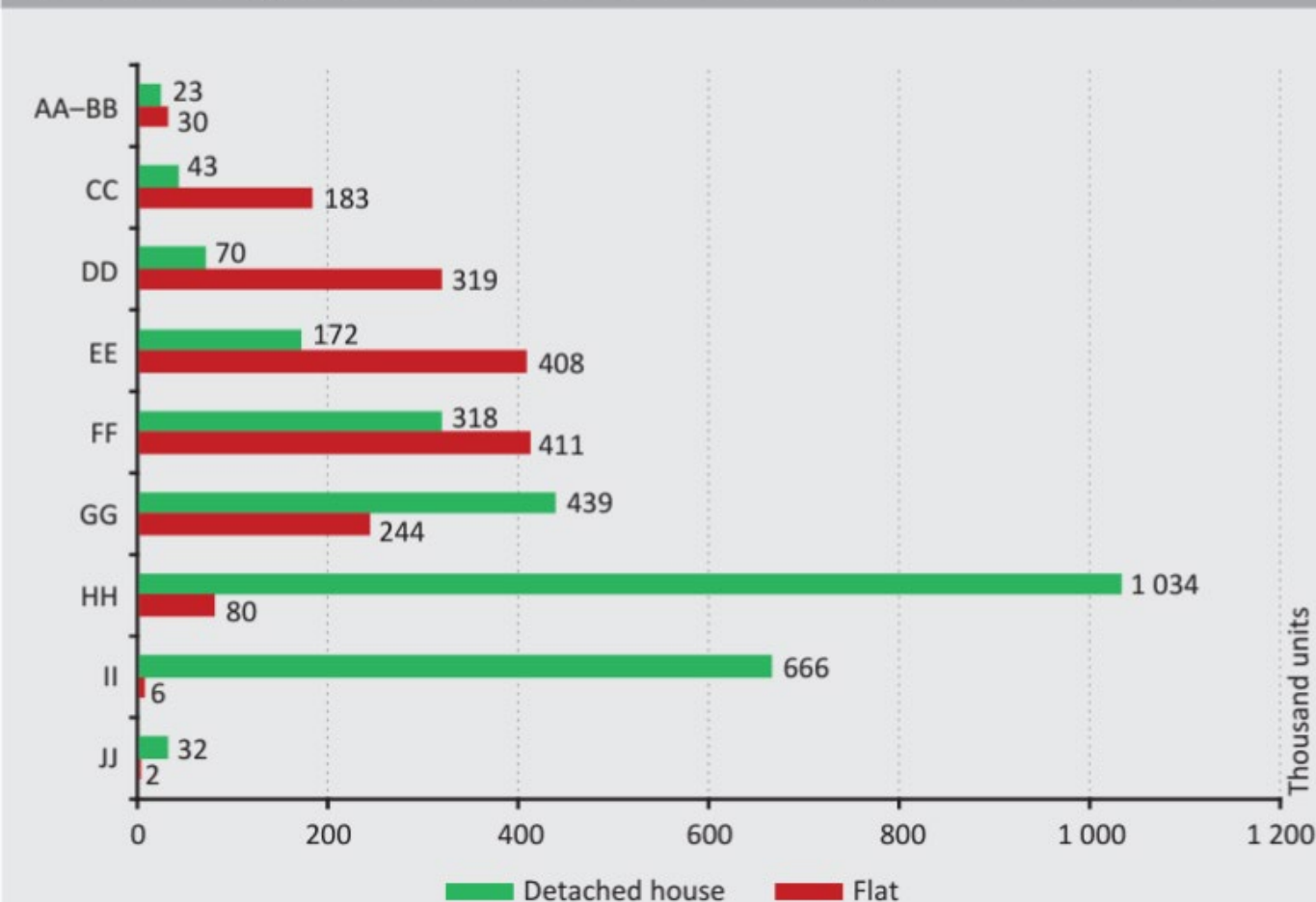
Classification based on energy certificates

Proportion of insulated dwellings (ex-post)

- 10 % exterior wall
- 7 % attic roof
- 4 % basement ceiling
- 8% flat roof
- 20 % windows replaced

The picture is even worse for the total stock

Figure 6
Estimated energy classification distribution of the Hungarian houses and flats



Source: Calculated based on the merged database

- More than 80 % of the 4.5 million flats in Hungary were built before 1990, with less than 10 percent of the housing units at least approaching modern standards
- Approx. 2 million of the 2.8 million single-family houses (71%) fall into the GG (near average) or worse category
- 3% of family houses are considered energy efficient

Energy renovation of buildings is the key to climate neutrality

The domestic building stock

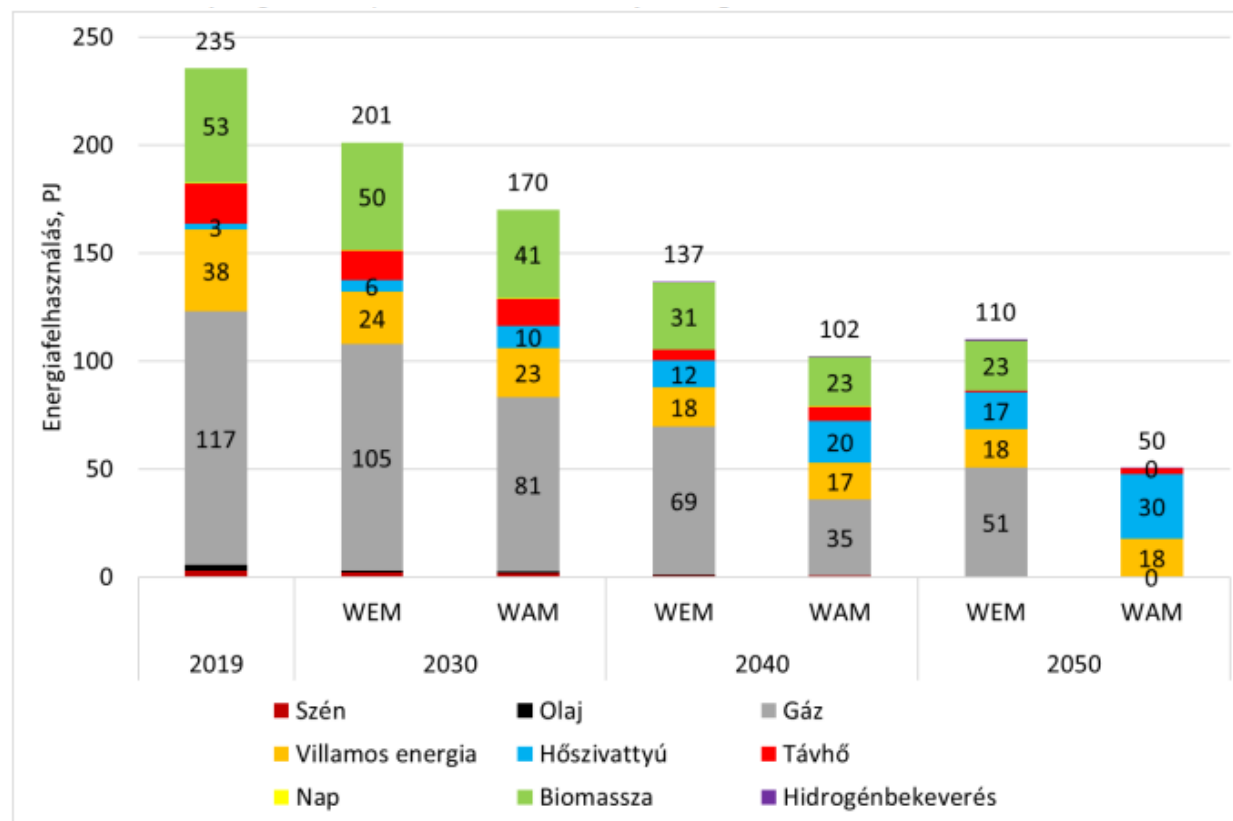
- ~ 90% will still be in use in 2050
- renovation rate of 1-3% per year, but deep renovations that result in significant energy savings are only around 0.2%
- an energy poor building uses up to 4-5 times as much energy as a modern home
- 2020 MEHI household survey: shallow, partial energy renovations, without planning, typically self-financed



Deep renovation of 100-130 thousand buildings per year would be needed to decarbonize the building stock

Revised National Energy and Climate Plan (2023/2024)

Residential final energy consumption and changes in energy mix under the WEM and WAM scenarios - impact of new policy ion measures (PJ)



Tényadat forrása: Eurostat

Act XLIV of 2020 on Climate Protection,
Revised NECP, Recovery Plan and RePower chapter: low ambition on energy efficiency

- In 2021, 61% of households (also) heat with gas
- Major shift in the energy mix by 2030/2050
- Few supporting measures are foreseen to deliver targets

Ambitious building renovation targets on paper, growing ambition in the EU

- "to transform the national stock of residential and non-residential buildings into a highly energy-efficient and **decarbonised building stock by 2050, through renovation.**"
- "By 2030, **3% of buildings will undergo deep renovation each year**, in line with the EU's Renewal Wave strategy. This means between **100 and 130 thousand buildings per year**, compared to the current level of approximately 1% of buildings per year where substantial energy investments are made."
- The target is to **reach 90% of nearly zero energy (BB) buildings by 2050.**
- Total energy requirement for residential buildings according to TNM Regulation max. 100 kWh/m²/year, (max. 76 kWh/m²/year (class A) based on new building energy performance regulation)

In the light of the new EPBD, the to-be-prepared Building Renovation Roadmap should set more ambitious targets and ensure that the renovations are actually carried out

Domestic building renovation incentives and support schemes

- For years, few resources for residential building modernization programs (village CSOK, formerly Home Renovation Program – no energy requirements, social policy objectives)
- Impact of the **partial lifting of the residential price cap**: heating costs of detached houses built before 1990 have soared (cutting back on heating, renovation?)
- **New energy performance requirements and certification** regulation
- **Energy Efficiency Obligation Scheme** - effective in industrial and transport sectors, residential actions tend to be less cost-effective for obligated parties
- **Home Renovation Program (2024)**: RRF funded retrofit of 20,000 family houses, 30% energy savings requirement. The program should be extended and continued.

What next?

- The Hungarian renovation wave: 20 000 billion Ft needed to finance the renovation of the stock to cost-optimal level
- Fitfor55: the new EED, EPBD, RED raise the stakes
- Financing sources:
 - Main EU funds: cohesion funds (operational programs) and RRF
 - State budget: CSOK plus, new Home Renovation Grant (no Home Warmth program, no condominium renovation grant)
 - Private financing: favorable green credit, Energy efficiency obligation scheme, ESCO – big room for expansion, low residential credit penetration
 - The market is already pricing in the [increase in the value](#) of an energy-efficient modern property (10-30% bonus compared to the average)

Residential renovation should be encouraged on a large scale by * predictable policy+regulation, * public subsidies + market financing, * technical assistance (e.g. OSS [RenoPont](#))

Thank you!

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MARKET PROJECTION

GENERAL CONSTRUCTION TRENDS

- Energy efficiency focus
- Changing housing market needs
- Commercial and office buildings
- Situation of new housing constructions
- Public investments
- Industrial buildings



MASTERPLAST STRATEGY MISSION



*AS A LEADING EUROPEAN BUILDING MATERIALS MANUFACTURER, WE
ARE MAKING AN ENVIRONMENTALLY RESPONSIBLE CONTRIBUTION TO
ENERGY-EFFICIENT BUILDINGS WORLDWIDE.*

MASTERPLAST STRATEGY FOCUS AREAS



**THERMAL INSULATION
SYSTEM ELEMENTS**



**MODULAR BUILDING
ELEMENTS**



**INDUSTRIAL
PRODUCTS**

INSULATION MATERIAL PRODUCTION POSITIONS

EPS (expanded polystyrene)

- 5 production base
- Total production capacity: 1.5 million m³ /year

XPS (extruded polystyrene)

- Production base in Subotica, Serbia
- Production capacity : 200 000 m³ /year

CIRCULAR ECONOMY SYSTEM

HUNGAROCCELL GREEN PROGRAMME - Masterplast collects and recycles the unused cut materials generated during the use of Hungarocell polystyrene and XPS products it sells, and produces new thermal insulation material from them.



PRODUCTION CAPACITY

EPS **500.000** M³

FIBERGLASS MESH **150** MILLION M²

EPS, FIBERGLASS MESH

SUBOTICA

KÁL

CALERNO

ASCHERSLEBEN

SÁRSZENTMIHÁLY

SZÉKESFEHÉRVÁR

PRODUCTION CAPACITY
XPS **200.000** M³

XPS

SUBOTICA

KÁL

CALERNO

ASCHERSLEBEN

SÁRSZENTMIHÁLY

SZÉKESFEHÉRVÁR

PRODUCTION CAPACITY

EPS **300.000** M³

PROFILES **1,7** MILLION M

EPS, PROFILES

SUBOTICA

KÁL

CALERNO

ASCHERSLEBEN

SÁRSZENTMIHÁLY

SZÉKESFEHÉRVÁR

PRODUCTION CAPACITY

EPS **300.000** M³

EPS

MASTERPLAST

MASTERPLAST

MASTERPLAST

MASTERPLAST

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MASTERPLAST

ALTA QUALITÀ

SUBOTICA

KÁL

CALERNO

ASCHERSLEBEN

SÁRSZENTMIHÁLY

SZÉKESFEHÉRVÁR



PRODUCTION CAPACITY
VLIES, LINOPORE **150** MILLION M²

NONWOVEN

- SUBOTICA
- KÁL
- CALERNO
- ASCHERSLEBEN**
- SÁRSZENTMIHÁLY
- SZÉKESFEHÉRVÁR

PRODUCTION CAPACITY

VLIES, LINOPORE **150** MILLION M²

NONWOVEN, ROOF FOILS

SUBOTICA

KÁL

CALERNO

ASCHERSLEBEN

SÁRSZENTMIHÁLY

SZÉKESFEHÉRVÁR

INSULATION SOLUTIONS

NEW INVESTMENTS

GLASS-WOOL

- Szerencs, Hungary
- Planned capacity: 19 000 t/year
- Bio-binder technology, electric melter
- Planned start of production: first half of 2025
- Partner: Selena Group

STONE-WOOL

- Halmajugra, Hungary
- Planned capacity: 35 000 t/year
- Planned start of production: second half of 2025
- Partner: Market Építő Zrt.





SZERENC'S GLASS-WOOL

**TOPPING OUT CEREMONY 24.05.2024
WITH MINISTER PÉTER SZIJJÁRTÓ**

**SZERENCs
GLASS-WOOL**





HALMAJUGRA STONE-WOOL



PRODUCTION CAPACITY
1000 M² / month

MODULAR BUILDINGS

SUBOTICA

KÁL

CALERNO

ASCHERSLEBEN

SÁRSZENTMIHÁLY

SZÉKESFEHÉRVÁR



SZERENC'S OFFICE BUILDING



SZERENC'S OFFICE BUILDING



OPPORTUNITIES HOTEL, WORKER'S HOSTEL



ÉMI model house
Székesfehérvár semi-detached house

RESULT

FORECAST 2027

Turnover
(million euros)

405

EBITDA
(million euros)

43,9

EBITDA
%

10,8%

PAT
(million euros)

30,8

PAT
%

7,6%

- The ultimate goal remains unchanged, but is delayed by one year
- No annual forecast is issued
- New dividend policy after the completion of new investments

MANAGEMENT OBJECTIVES

- Strengthening position in thermal insulation systems
- Increasing the share of own manufactured products
- Enhancing manufacturing efficiency
- Digitalization and automation
- Coordinated operation of manufacturing and trade
- Increasing organizational efficiency and integration



ESG

RESULTS

~ 300 000 kWh

renewable energy capacity
increased 10-fold
Additional projects are ongoing

Hungarocell Green Programme

Increase in the number of Eco
Points (12.1%)
Number of collected bags has
increased (40.2%)

30 000+

Strong contribution to meeting
the 2050 climate goals with
homes insulated with
Masterplast products

20%

female quota on the board of
directors

~ 190 000 EUR

spent on community
investments, donations

0

fatal accident
and occupational disease

Green Committee

establishment

100%

adoption of a code of
ethics by all new colleagues

ISO certificates

9001; 14001; 45001; 50001;
13485



25 YEARS

SUMMARY

A QUARTER CENTURY OF INSULATION LIES AHEAD OF US

DYNAMIC GROWTH AT THE EUROPEAN LEVEL UNTIL 2050

MASTERPLAST IS ON THE VERGE OF A STEP CHANGE



— **THANK YOU FOR YOUR ATTENTION** —