



FIRENZE
CAPITALE
1865-2015



Covenant of Mayors and CEDEC Webinar
25th May 12.30 – 13.45

FIRENZE FLORENCE

towards a smart, sustainable and e-city



FLORENCE IN NUMBERS



Co-funded by the Horizon 2020 Framework Programme of the European Union



Popolazione residente

368.901

totale residenti, di cui il:



26%

in età di 65 anni ed oltre

13%

Università
(a.a. 2008/2009)



58.828

totale studenti iscritti

3.855

totale personale universitario



un'autovettura ogni 2 abitanti



un motociclo ogni 5 abitanti

Population pressure



3.691

residenti per Km²
Comune di Firenze



280

residenti per Km²
Provincia di Firenze

Non resident population

More than

184.000



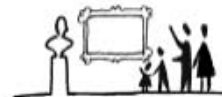
74

Museums and similar institutions



more than

7.500.000
visitors



Flussi turistici giornalieri

18.254



H 24 presenze giornaliere medie

102,41 km²



Active local units in Florence

almost

48.000

almost

170.000 Staff



12%

industry;

13%

building;

40%

business



UNESCO
Florence Historical centre
Admitted onto the World
Heritage List in 1982



020
-20
CO2

- Sustainable Energy Action Plan (2011)



- Mayor's Adapt (2015)



SUSTAINABILITY in
Florence:
a never ending story

- 1998 Carta di Aalborg
- 2005 Impegni di Aalborg
- 2010 Covenant of Mayors



- Compact of Mayors (2015)



- RESOLUTE: RESilience management guidelines and Operationalization appLied to Urban Transport Environment (2015)



- REPLICATE: RENaissance Places with Innovative Citizenship And Tecnology 2016



PIONEERED BY THE
ROCKEFELLER FOUNDATION
100



- 100 Resilient Cities (submitted proposal – under evaluation)

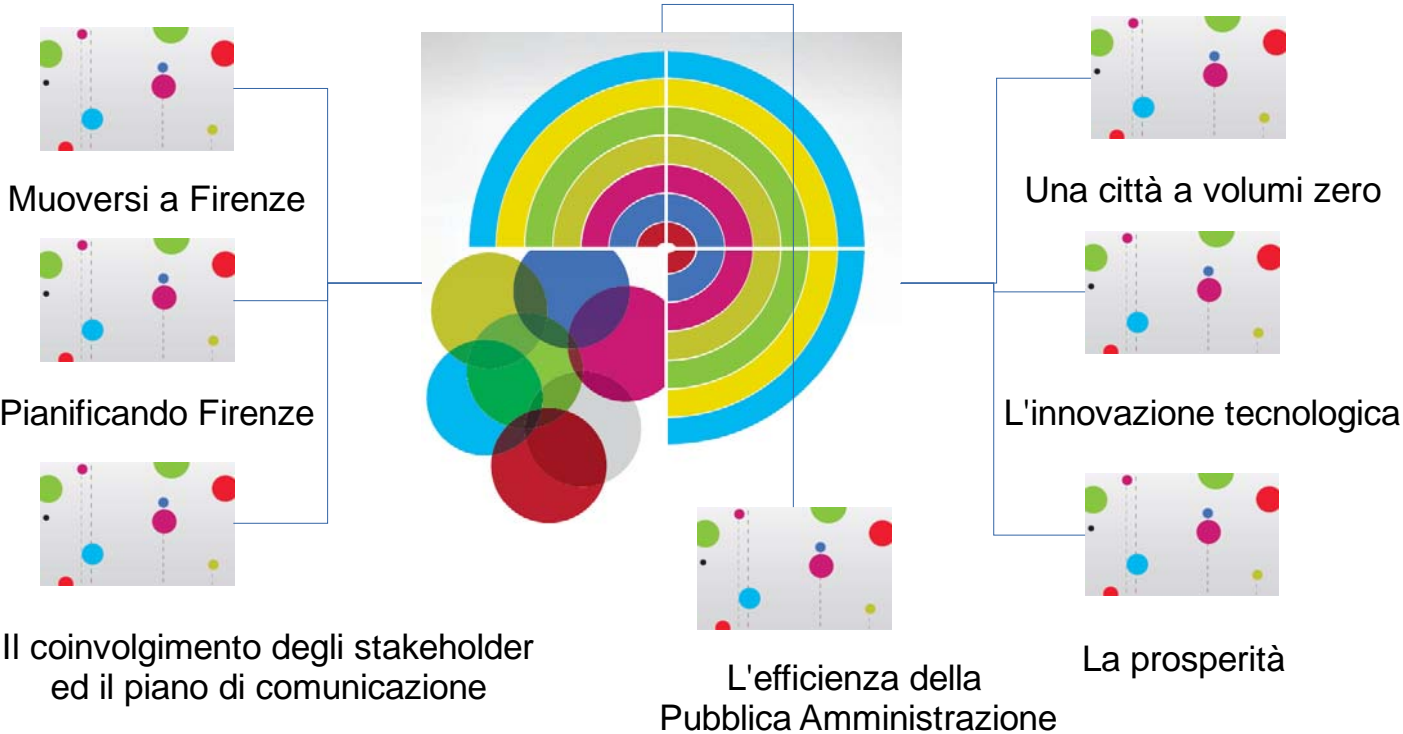
The SMART CITY PLAN: integrated and synergic actions



*from idea to
action:
Florence as
testing*

REPLICATE

REnaissance
PLaces with
Innovative
Citizenship
And
Technology



create a smart district model to scale up

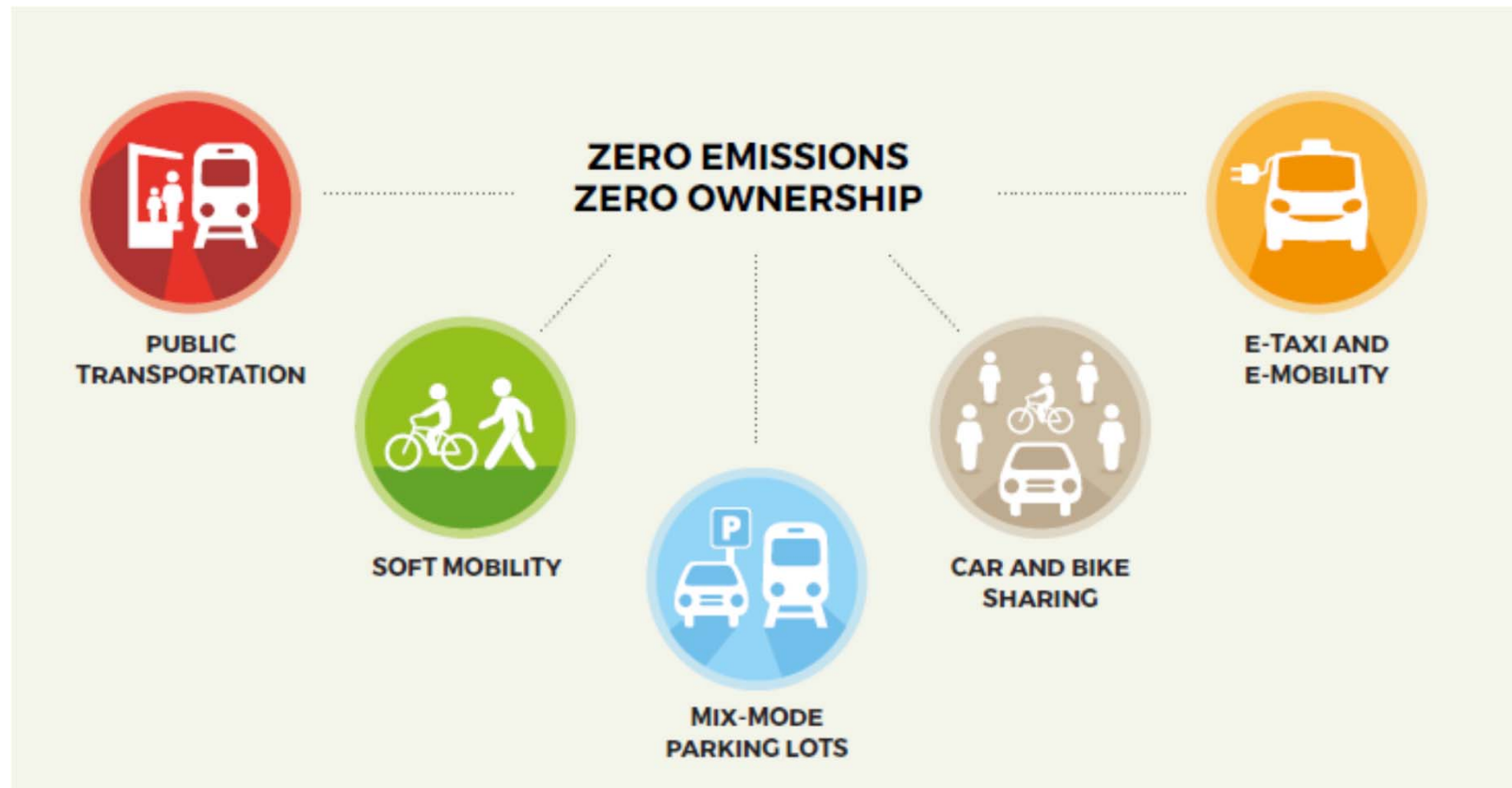
Mobility in Florence is the main sector affecting CO2 emissions (34%)

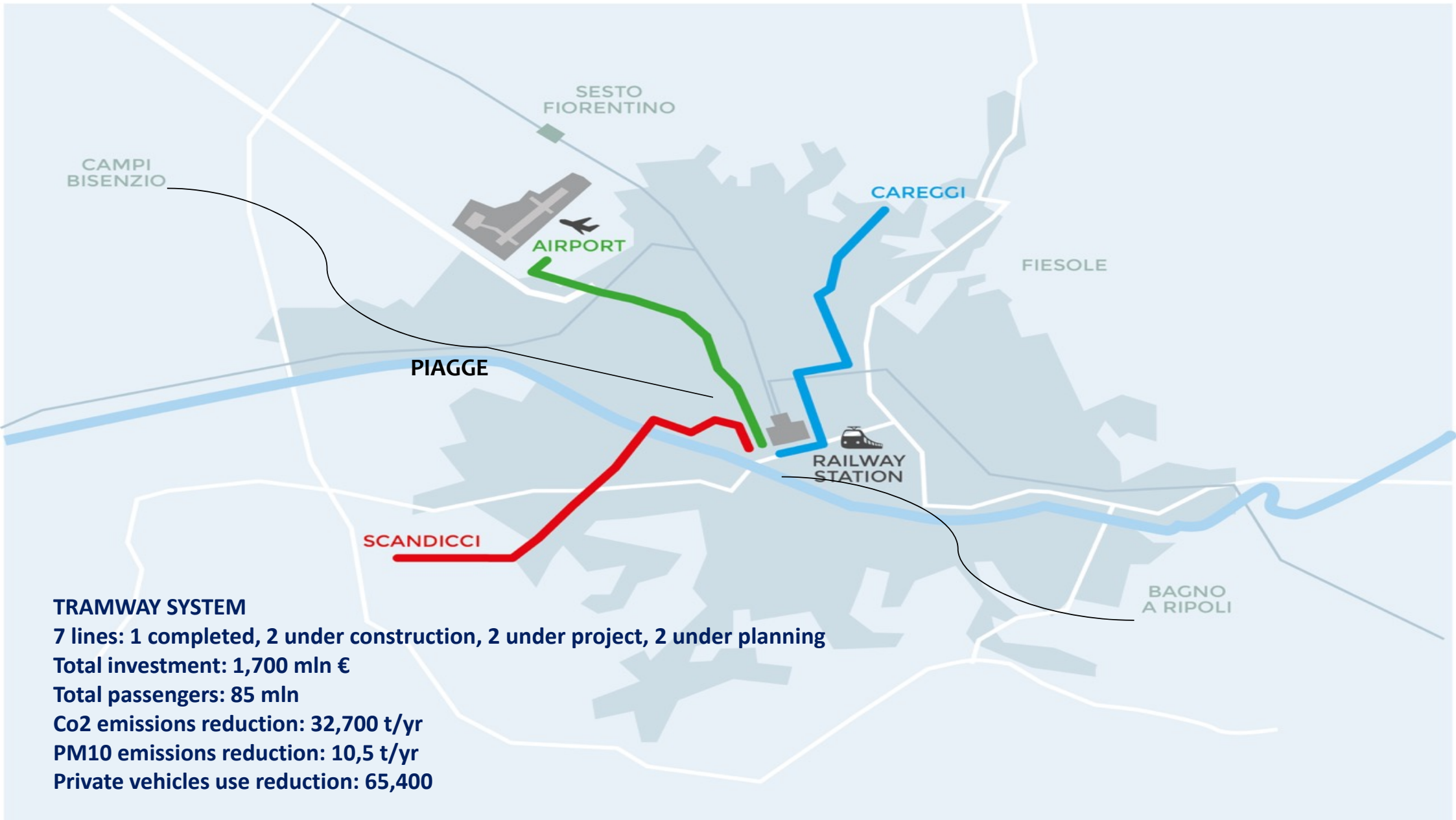
TRANSPORT NETWORK MODERNIZATION AND MOBILITY EFFICIENCY

local rails trams, bus, highways, parking spaces, intermodality, park and ride, pedestrian areas

low-emission vehicle, soft mobility, e-mobility

Information technology, infomobility platform, traffic supervisor





FLORENCE THE WALKING CITY

The largest European pedestrian area within a city centre

Pedestrian areas are growing all the time:

- 2009 > **260,000 m²**
- 2012 > **380,000 m²**
In particular: Piazza Duomo, via Tornabuoni & Piazza Pitti
- 2014 > **395,000 m²**
- 2016 > **400,000 m²**
Piazzale Michelangelo

- 
- Area DUOMO
 - Area POR SANTA MARIA
 - Area RICASOLI
 - Area PITTI
 - Area CARMINE
 - Area MICHELANGELO

**THE HIGHEST NUMBER
AMONG OUR NATIONAL TOWNS:
OVERALL AMOUNT ELECTRIC VEHICLES
(PUBLIC AND PRIVATE SECTOR)**

10 mini electric bus (for the Unesco area)



Electric municipal fleet: 130 vehicles (bikes, car, vans...)

1/1000 inhabitants electric recharge points
(either public and reserved for municipality)



4 very fast recharge points for the city's e-taxi fleet
(first Municipality in Italy to provide the service)



100 e-taxi, 226 hybrid taxi, 464 thermic engine taxi
(taxi fleet : 790)



2015 and 2016:
no cost recharge points to improve e-vehicles use



NOT OWNERSHIP CAR AND BIKE SHARING

The today city's **car sharing fleet** (2016)

650 vehicles (200 electric vehicles) : free flow 600 (200 electric vehicles) and 50 traditional

The tomorrow city's car sharing fleet (2021)

1200 vehicles (400 electric vehicles) : free flow 1200 (400 electric vehicles)



car2go



enjoy



girAci



Il Sindaco di Firenze Dario Nardella e Emiliano Niccolai, AD di C.S. GROUP
share'go

Bike sharing today (2016):

50 stations;

750 bikes/e-bikes;

Bike sharing tomorrow (2021):

120 stations;

1800 bikes/e-bikes

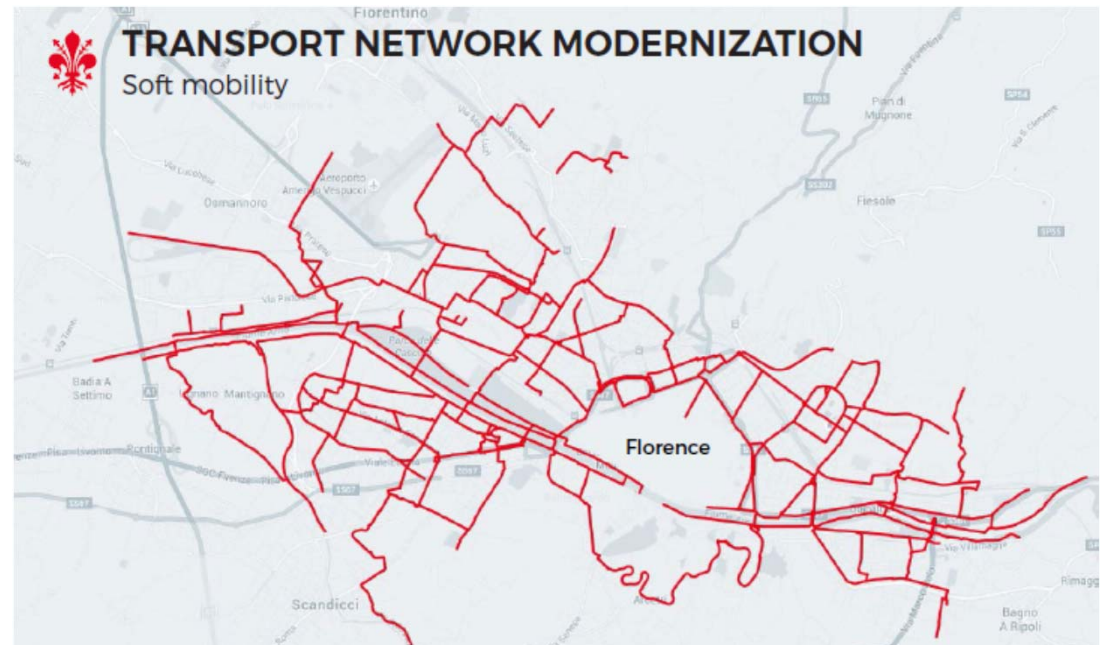


SOFT MOBILITY: BIKE PATH

City's bike-path network today: 137 km

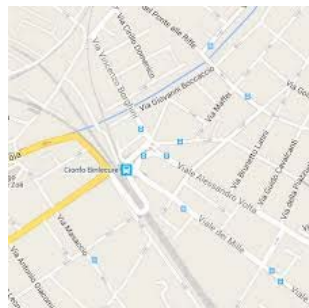
City's bike-path tomorrow (2022): 187 km

- completion of the bike-path city's network and its extension to the metropolitan area
- Completion of the bike-station system (main hub: Santa Maria Novella)



EFFICIENCY IN INFORMATION AND COMMUNICATION TECHNOLOGIES

- Smart city control room (dataset and big data managing)
- Traffic control room
- Info displays and real time mobile apps
- Automated entrance surveillance
- Eco-road pricing IOT reduce traffic and lower pollution



STAKEHOLDER INVOLVMENT: *the bottom up strategy*

*LISTENING AND SHOWING CITIZEN HOW TO BETTER LIVE FLORENCE
WITH INNOVATION, SHARING OPPORTUNITIES, ANALYSING SITUATION,
QUESTIONS&DOUBT*

System thinking : the process of understanding how those things which may be regarded as systems influence one another within a complete entity, or larger system

What we have to do?

Find your way to get in touch & keep in contact with the people

In Florence, the **marathon of audience**: open event on a specific theme where citizens can attend and take part to the discussion as the active party of the meeting.

Deciding without listening is high-handedness;
listening without deciding is powerlessness.



The “smart-city” plan is a tool
for a coordinated strategy and for citizens’ life simplification

*The City of TOMORROW will be: ELECTRIC, ZERO VOLUMES,
GREEN, SUSTAINABLE, RESILIENT
in a word SMART*



Thanks a lot for your attention
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