

SEISMIC IN THE CONTEXT OF SUSTAINABILITY

Seismic Academy Milano, July 1<sup>st</sup>, 2021

Dr. Stefan Nöken Member of the Executive Board Hilti Corporation



### WE UNDERSTAND THE NECESSITY TO ACT AND THE HIGH LEVERAGE IN THE CONSTRUCTION INDUSTRY

#### **Expectations from stakeholders are increasing**

#### **Society**

"Climate strike NYC: Young crowds demand action"
(The New York Times)

#### **Regulatory environment**

"CO2 taxes are being introduced in multiple legislations" (DW)

#### Climate change reality

Climate change will be sudden and cataclysmic.
We need to act fast

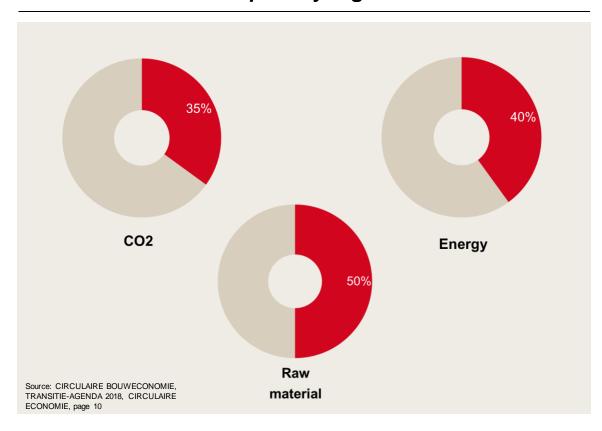
#### **Employees**

"We need to become an ecological role model. [...] What can Hilti do to play to its mission? [...] No window dressing."

#### **Customers & markets**

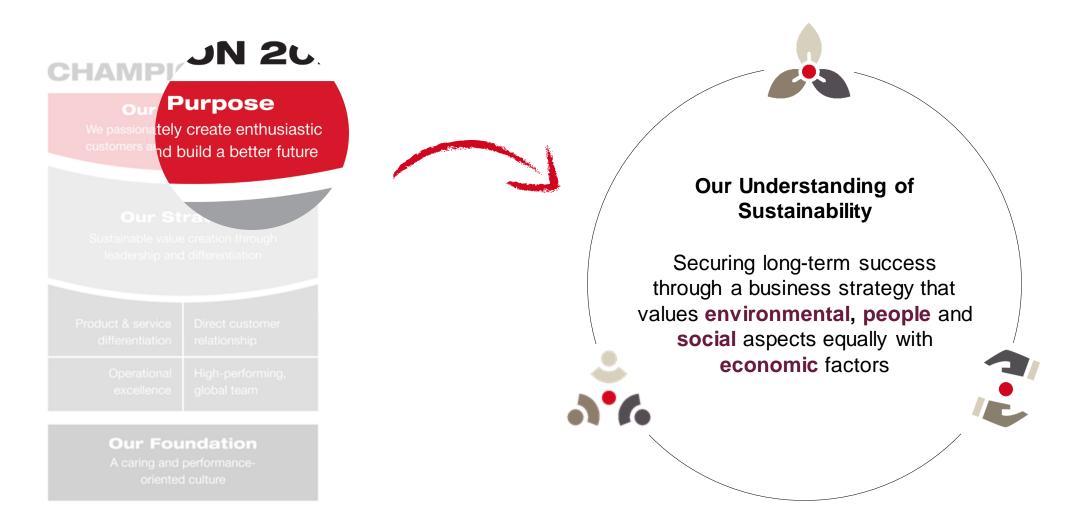
"Subjects of sustainability are of central importance and are firmly anchored in our procurement processes."

### Environmental footprint of construction industry is especially high





# SUSTAINABILITY IS PART OF OUR CORE PURPOSE – NOW WE WANT TO LIFT OUR EFFORTS TO THE NEXT LEVEL





### WE DEFINED AMBITIONS FOR OUR GLOBAL PRIORITIES AND NOW WORK ON INITIATIVES TO REACH THEM



We Care for our Environment



Become CO2 neutral by 2023



Lead the industry in circularity



We Care for People: Customers, Employees, and Partners





Differentiate through user health & safety and building safety



Lead in employee health and safety



We Contribute to a Better Society and High Ethical Standards



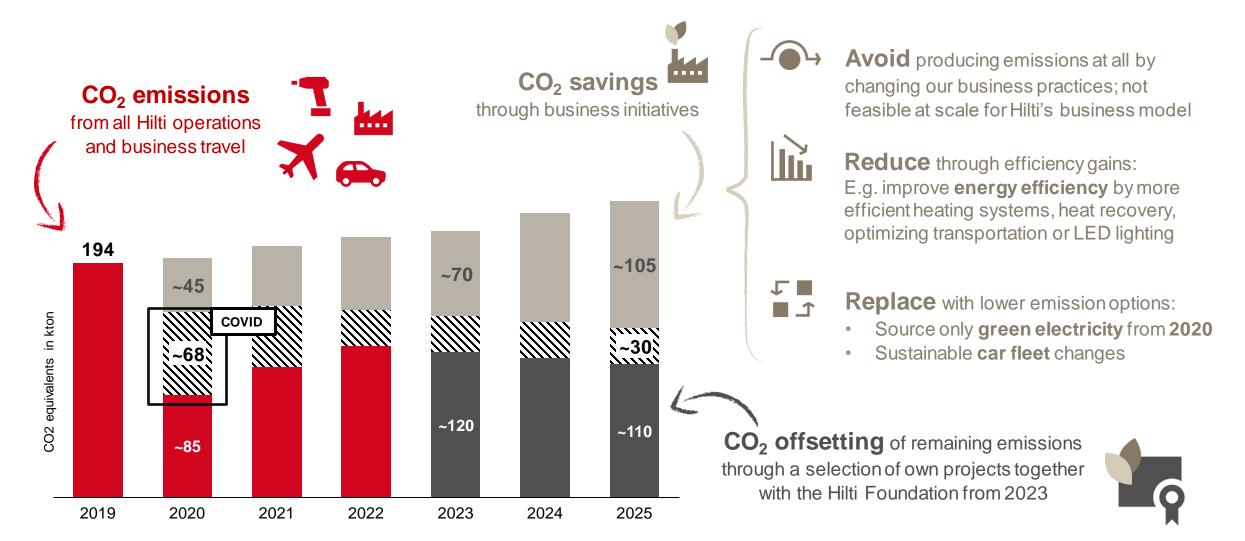
Create **social impact** at scale



Uphold ourselves and the industry to highest standards in **business ethics** 



### CO2 DEVELOPMENT **POST COVID** SCENARIO GREEN ELECTRICITY ALREADY IN 2020





## HILTI FOUNDATION'S WORK IS FOCUSED ON CREATING SOCIAL IMPACT AT SCALE



	2018	2019	2020
Number of projects supported	72	79	80
Monetary value of investments in support projects in CHF million	22.3	26.5	28.7

#### **Music for Social Change**

Offering young people opportunities to enhance their personal development, social skills and shared sense of responsibility for one another.

#### **Affordable Housing & Technology**

Developing innovative and sustainable technologies and building concepts, that contributes to the creation of safer and affordable living spaces.

#### **Economic Empowerment**

Applied training programs and resources to further develop economic abilities, which generates more income and a sustainable livelihood.

www.hiltifoundation.org

### WE DEFINED AMBITIONS FOR OUR GLOBAL PRIORITIES AND NOW WORK ON INITIATIVES TO REACH THEM



We Care for our Environment



Become CO2 neutral by 2023



Lead the industry in circularity



We Care for People: Customers, Employees, and Partners





Differentiate through user health & safety and building safety



Lead in employee health and safety



We Contribute to a Better Society and High Ethical Standards



Create **social impact** at scale



Uphold ourselves and the industry to highest standards in **business ethics** 



### WE OFFER PRODUCTS TO MAKE BUILDINGS SAFER & HAVE HELPED TO ESTABLISH HIGH STANDARDS IN THIS FIELD





### OUR JOURNEY FOR STRUCTURAL AND NON-STRUCTURAL SEISMIC SOLUTIONS FOR NEW + RETROFITTING PURPOSES

#### Where we were

No seismic qualification of fastening elements, unknown behavior of MEP supports

#### What we did

Research and committee work with accredited research institutes and laboratories

#### Where we are

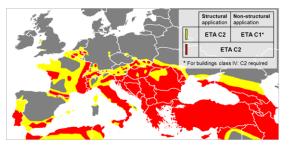
Deep know-how on real behavior, state-of-the-art seismic-resistant solutions and standards with broad portfolio solutions

#### Where we are going

Further progress the state-ofthe-art of entire structural and non-structural solutions













### BESIDE NEW BUILT LIFE EXTENSION PLAYS A MAJOR ROLE TO SUSTAINABILITY

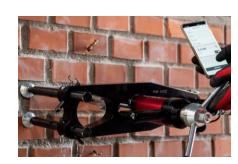














Structural performance improvement as per joint reinforcement and wall connections applications according to Italian building code

### **KEY MESSAGES**

- Proper design of fastenings and fire protection elements in seismic environments play a fundamental role for the overall safety, resilience and performance of all our building stock (heritage, existing, or new buildings)
- Safe installations mean:
  - Using suitable fasteners and fire protection systems for the right application
  - > Follow and understand proper design procedures
- Hilti R&D activities, in collaborations with accredited research institutes, allow to:
  - > fully understand the real behavior of the elements, in both structural and non-structural applications
  - proper understand the design and product requirements

We help to design and adopt **cost-effective innovative** solutions while keeping the **highest safety standards** ("people safety") in a **sustainable manner** ("reducing carbon footprint") and **extending service life** of the buildings.

