



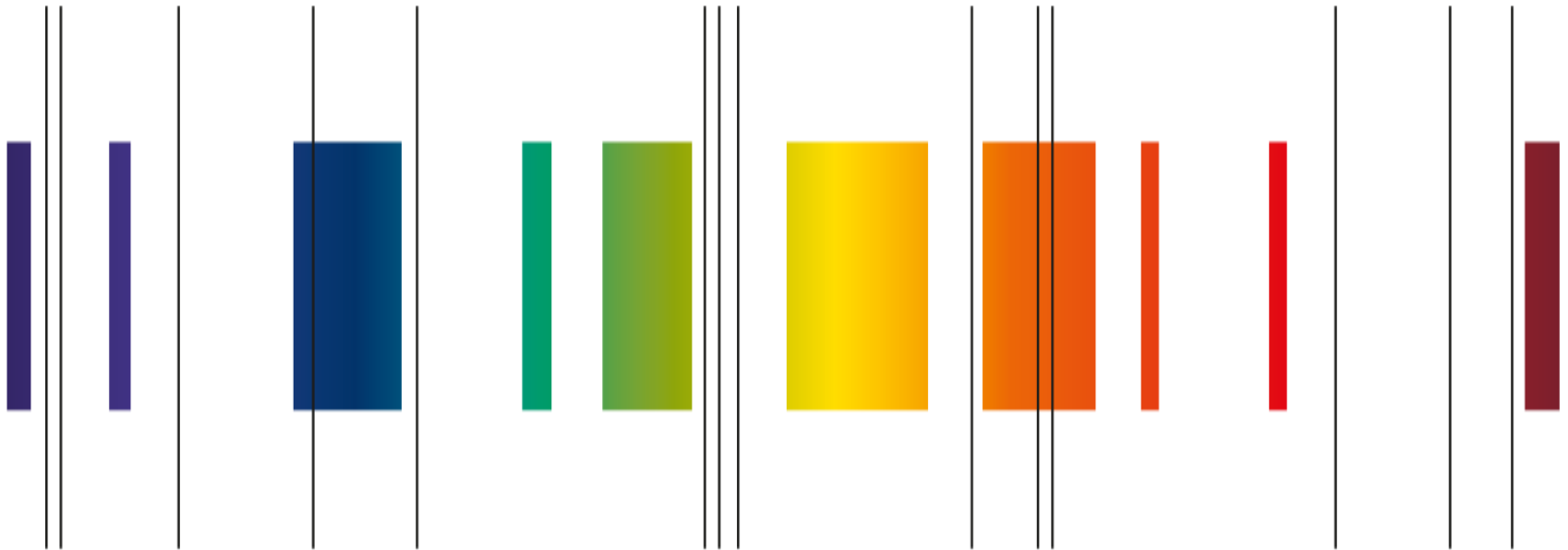
29

#InnoMineChile2016/2017

Shaping Chile's Mining Future

FRAUNHOFER AND INNOVATION IN GERMANY

InnoMine Chile
Santiago, January 17, 2017



Joseph von Fraunhofer (1787 – 1826)



© Deutsches Museum

Researcher

- Discovery of the “Fraunhofer lines” in the solar spectrum

Inventor

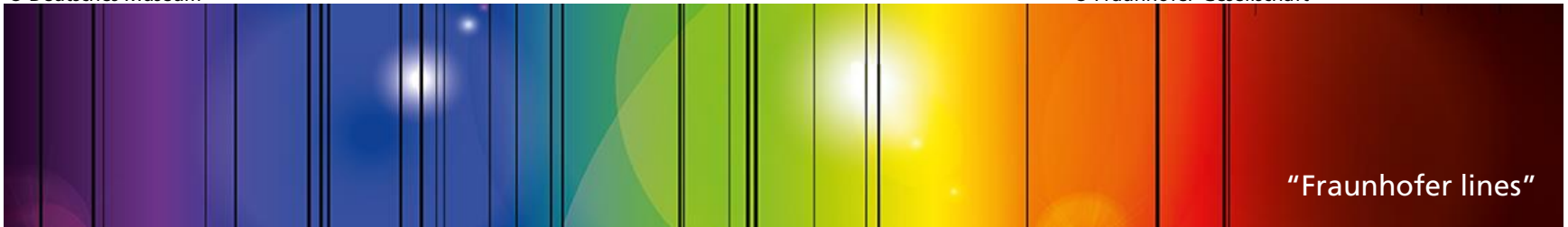
- New methods for processing lenses

Entrepreneur

- Director and partner in a glassworks



© Fraunhofer-Gesellschaft



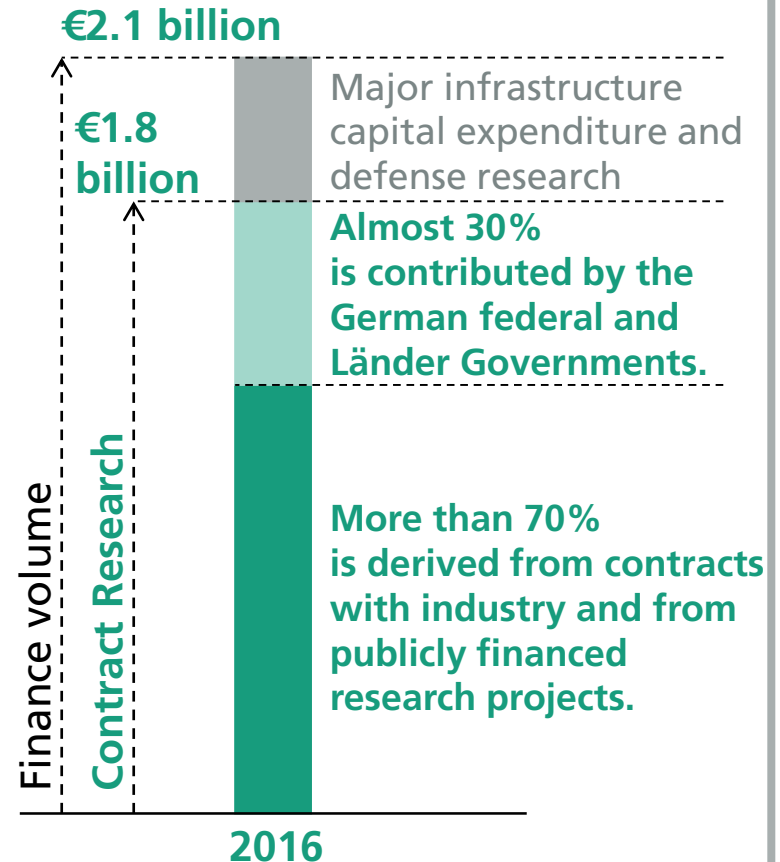
24 000 people work at 69 places for innovation

The Fraunhofer-Gesellschaft undertakes applied research of direct utility to private and public enterprise and of wide benefit to society.

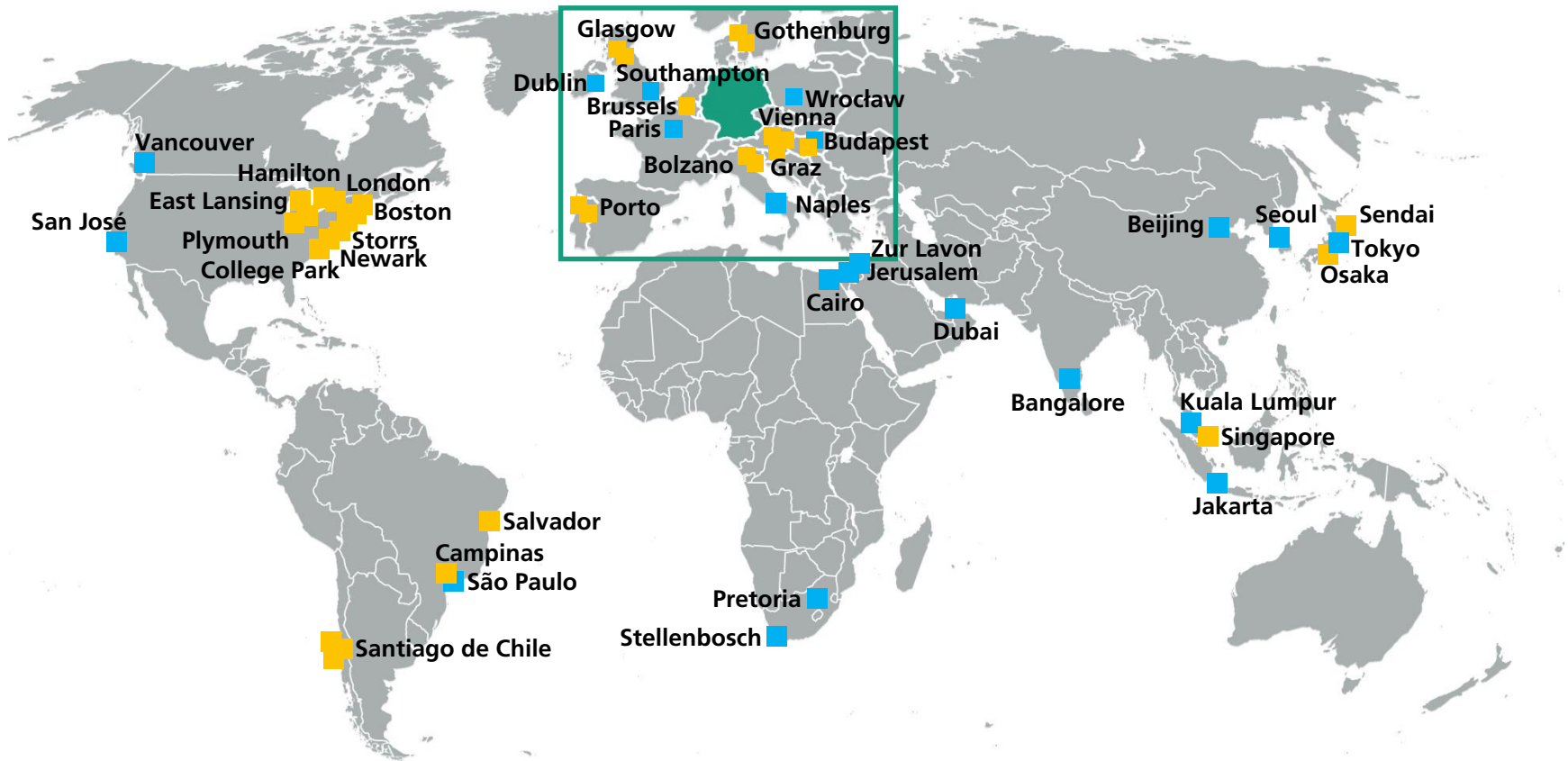

24,000 staff



69 institutes and research units



Worldwide cooperation with the best



- Subsidiary, Center, Project Center
- Representative Office, Senior Advisor, Joint Lab

Fraunhofer research covers future challenges

Health and Environment

e.g. tissue engineering,
smart cities of the future



Communication and Information

e.g. big data analytics, AR/VR
next generation internet, 5G,
Artificial Intelligence



Production and Services

e.g. internet of things / Industry 4.0,
smart robotics, human-machine interaction



Mobility and Transportation

e.g. electric mobility,
autonomous driving



Energy and Resources

e.g. renewable energy,
resource efficiency

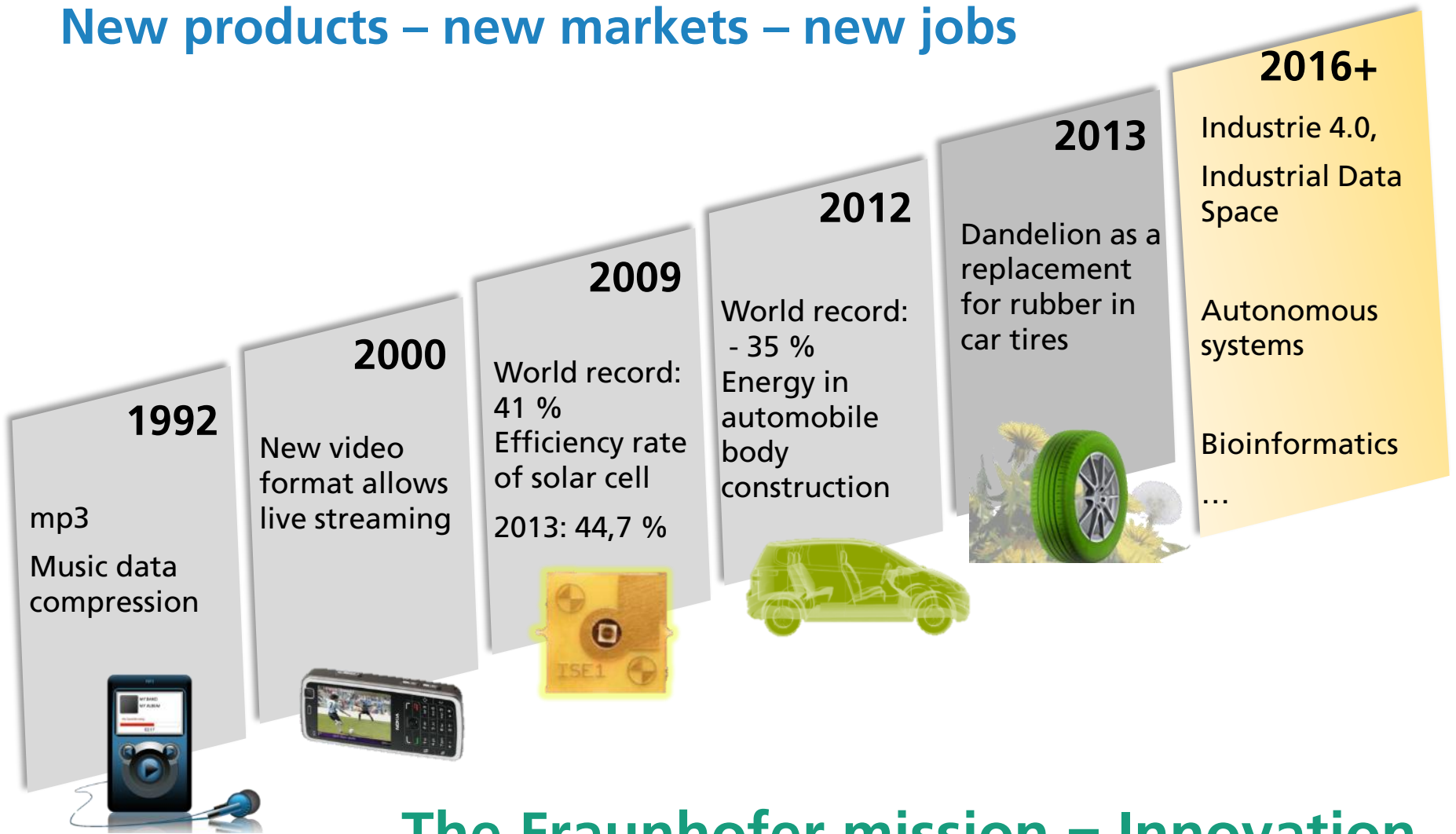


Safety and Security

e.g. cyber security,
rescue robotics,
advanced sensor
systems, cyber
security, encryption



Fraunhofer highlights: New products – new markets – new jobs



The Fraunhofer mission = Innovation

Exklusive Research with Industry – from SME to Big Companies (customers 2015)

SME (1-250 employees)
60% of customers (≈3500)
30% of revenues



Mid-size comp. (>251 empl.)
30% of customers (≈2000)
30% of revenues



Large corp. (>10001 empl.)
10% of customers (≈500)
40% of revenues



Fraunhofer's motivation is more relevant than ever

„I have to set aside everything in my scientific endeavours which does not further the product.“

Joseph von Fraunhofer

(correspondence with entrepreneur Utzschneider)



© Deutsches Museum

