“Fraunhofer Centers in the USA“

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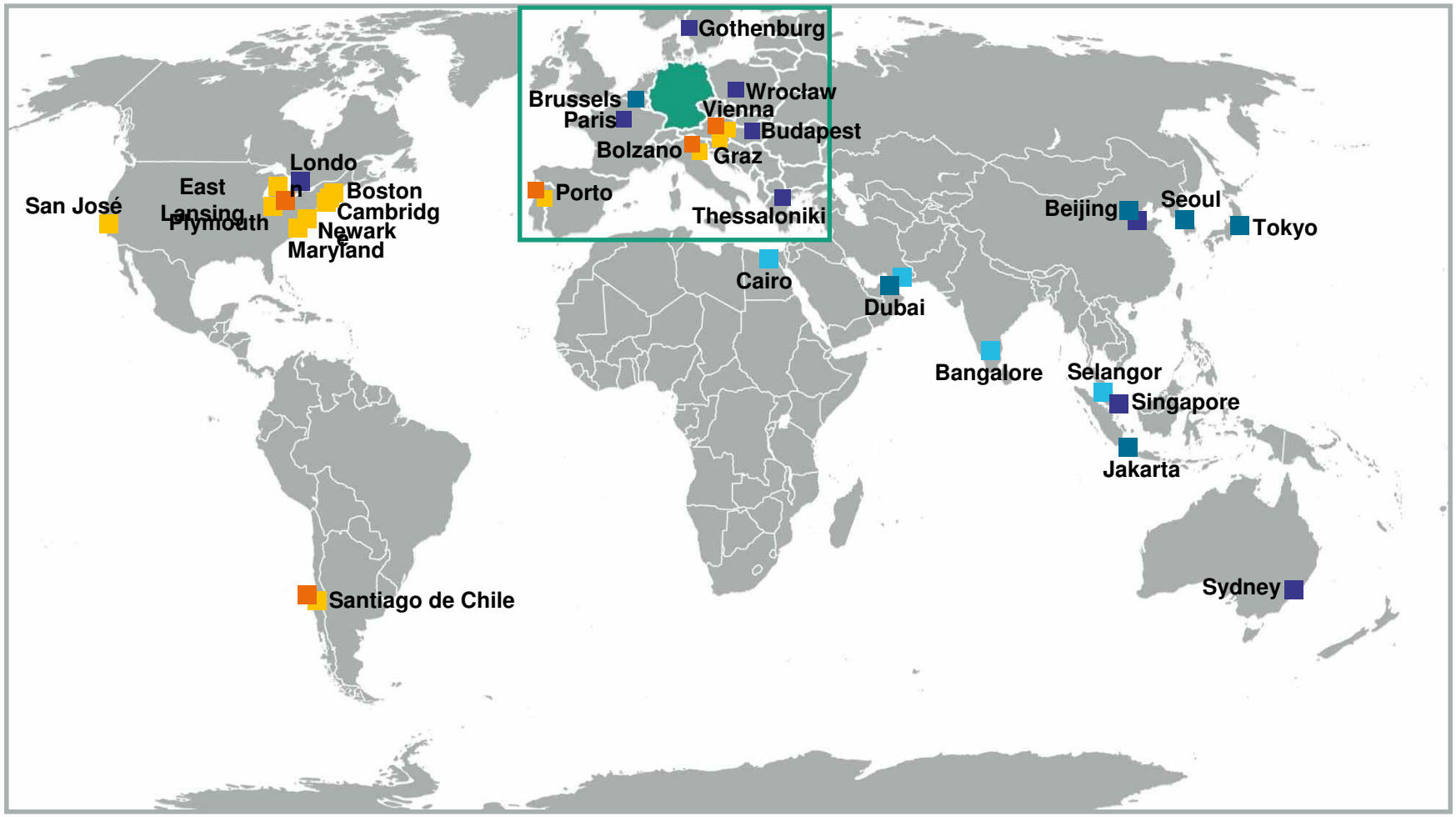
Fraunhofer worldwide



Subsidiary
Center
Project Center / Strategic Cooperation
Representative Office
Senior Advisor

Fraunhofer

Fraunhofer USA, Inc.
first overseas subsidiary, est. 1994

Fraunhofer USA Headquarters

Laser Technology CLT

Manufacturing Innovation CMI

Heinrich Hertz Institute (HHI) USA

Sustainable Energy Systems CSE

Molecular Biotechnology CMB

Digital Media Technologies DMT

Coatings and Laser Applications CCL

Experimental Software Engineering CESE

Fraunhofer

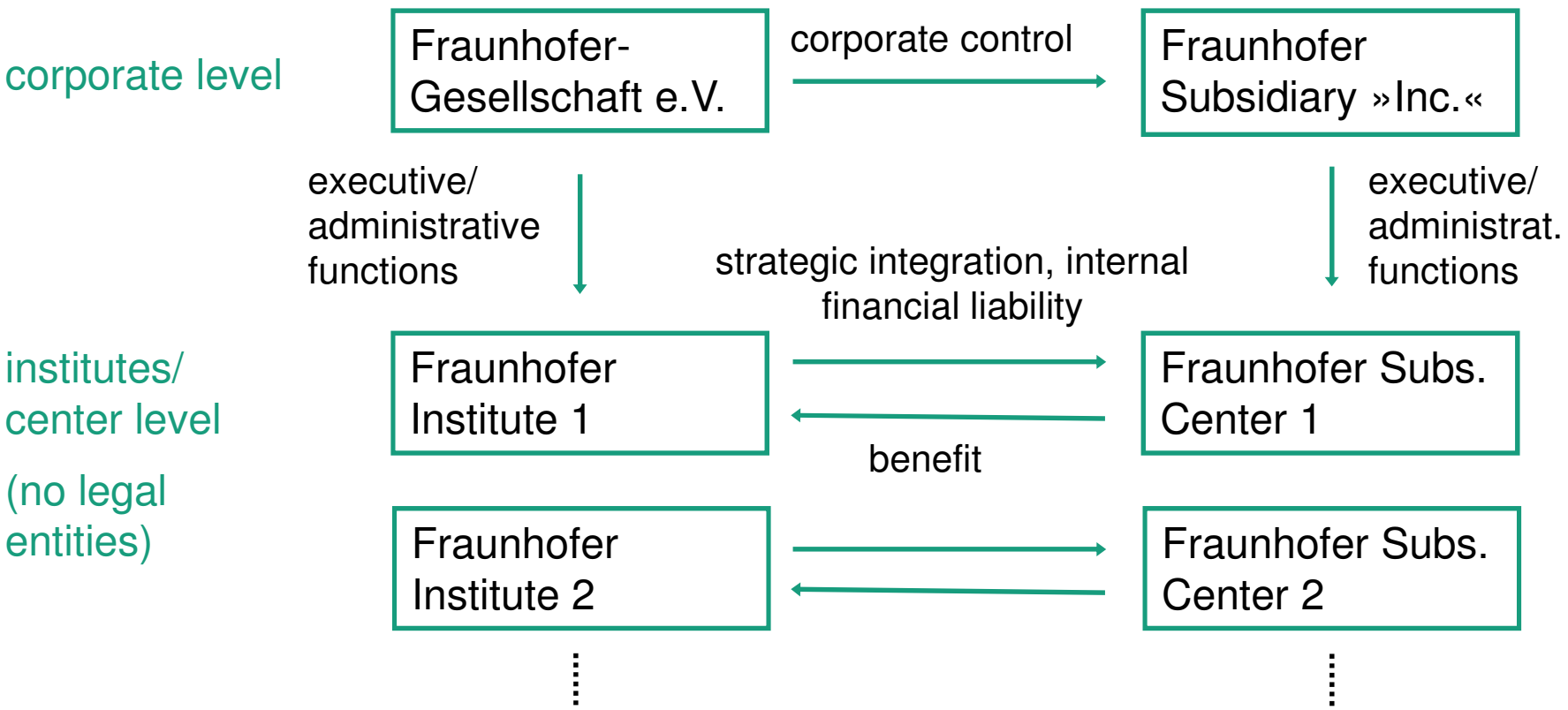
Fraunhofer Centers in the US and their parent Fraunhofer institutes in Germany

Fraunhofer Center for		Fraunhofer Institute for
Coatings and Laser Applications CCL	⇔	Material and Beam Technology IWS
Experimental Software Engineering CESE	⇔	Experimental Software Engineering IESE
Laser Technology CLT	⇔	Laser Technology ILT
Manufacturing Innovation CMI	⇔	Production Technology IPT
Molecular Biotechnology CMB	⇔	Molecular Biology and Applied Ecology IME
Sustainable Energy Systems CSE	⇔	Solar Energy Systems ISE

Fraunhofer Centers in the US cooperate with leading academic institutions

Fraunhofer Center for		cooperates with
Coatings and Laser Applications CCL	⇔	Michigan State University
Experimental Software Engineering CESE	⇔	University of Maryland
Laser Technology CLT	⇔	University of Michigan
Manufacturing Innovation CMI	⇔	Boston University
Molecular Biotechnology CMB	⇔	University of Delaware
Sustainable Energy Systems CSE	⇔	Massachusetts Institute of Technology (MIT)

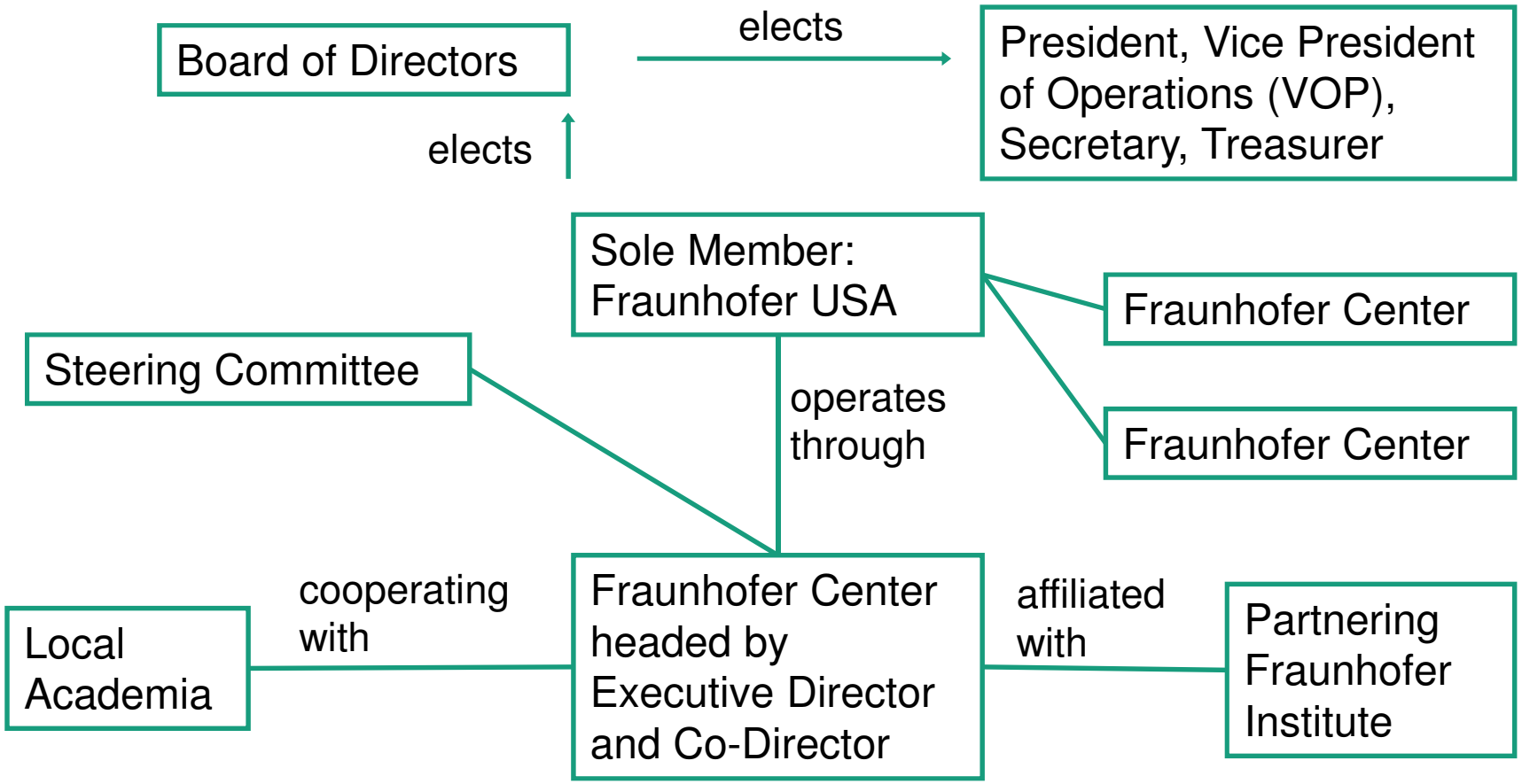
Global Integration: Fraunhofer Centers Abroad



Fraunhofer

Fraunhofer USA Inc.

A Massachusetts non-profit corporation within the meaning of Section 501 (c) (3) of the Internal Revenue Code of 1986, founded in 1994 in Rhode Island



Fraunhofer

Cooperation Fraunhofer centers with partnering Fraunhofer institutes

- The Fraunhofer centers are the main business units of Fh USA. At the same time, they are affiliated with one or more Fraunhofer institutes in Germany (partnering institutes). The cooperation between centers and institutes should be advantageous for both partners.

- The centers provide the institutes with opportunities for R&D services to both the business and the public sector in the US, and to enhance their scientific cooperation with US partners.

- The partnering institutes provide the centers with know how, manpower, equipment and financial assistance in accordance with the long-term and annual cooperation agreements.

Relationship between Fraunhofer centers, Fraunhofer USA as legal body and the partnering Fraunhofer institutes

Cooperation Fh USA with partnering Fh Institutes (1)

- The long-term goals and objectives for each center and the partnering institute(s) are developed by the center director and the Vice President Operations (VPO) with the FhI director(s).

- The long-term goals and objectives agreements require approval by the BoD.

- Each center´s annual business and budget plan is set up by the center director and the VPO with the respective FhI director(s). The center plans are integrated into the overall Fh USA business and budget plan by the Treasurer and approved at the BoD´s winter meeting.

Relationship between Fraunhofer centers, Fraunhofer USA as legal body and the partnering Fraunhofer institutes

Cooperation Fh USA with partnering Fh Institutes (2)

- The Executive Director has comprehensive authority to manage the center.
- Center directors must comply with the Rules of Procedure of Fh USA.
- Center directors carry out their management tasks with the support of the VPO and the FhI director(s).

Example 1: Fraunhofer CSE- PV Test Lab USA

Fraunhofer USA, Center fort Sustainable Energy Systems (CSE), is building up a measuring lab in the field of photovoltaic in Arizona– it shall be supported by Fraunhofer ISE by consulting services and later by measurement services.

Lab is intended to carry out measurement requests for the photovoltaic industry.

Fraunhofer USA - as the legal person - has rented rooms in the science park in Arizona.

Fraunhofer ISE shall support lab with ist know-how; certain measurements shall be accomplished by Fraunhofer ISE. CSE shall bear the costs fort bulid-up and investment required.

Framework agreement has been concluded between Fraunhofer and Fraunhofer USA that regulates the conditions under which measurements by Fraunhofer ISE can be accomplished.

On the basis of the framework agreement project contracts can be concluded for the regulation of individual projects.

Example 2: Orthopedic Rehabilitation Research Cooperation: Minneapolis VA Health Care System and Fraunhofer IPA

Fraunhofer IPA intends to cooperate with Minneapolis VA in the field of Orthopedic Rehabilitation. Parties intend to perform cooperative research and development projects either in Europe or in the US. Other parties may participate in the projects.

Fraunhofer IPA which is contracting to a German manufacturer of orthopaedic products plans to subcontract to Minneapolis VA.

Joint acquisition of new projects is planned.

Joint application for public funding is planned (in the USA and in Germany).

Common presentations on congresses are planned.

Secondment of staff from the USA to Germany is in preparation.

IPs shall be owned seperately or jointly while parties shall generally grant each other a non-exclusive, non-transferable, non-sublicensable right to use the results fort internal scientific purposes free of charge.

Example 3: Clean Transportation Innovation Cluster

Cooperation of Fraunhofer Gesellschaft (Fraunhofer institutes), Fraunhofer USA, universites in the USA and local industry to establish a Clean Transportation Innovation Cluster („CTIC“).

A CTIC is a research program with the focus on developing advanced electrical storage systems for the automotive industry fort the electrical vehicle of the future.

The Innovation cluster will approach the State of Michigan to recieve governmental aid, state funding is supposed to be 25%, 25% shall come from the involved actors and 50% of the contributions shall come from the industries.

One project shall run for 4-5 years.

Letter of intent between Fraunhofer, Fraunhofer USA and the University of Michigan, the Wayne State University and the Michigan State University will be signed to start the establishment of this project.