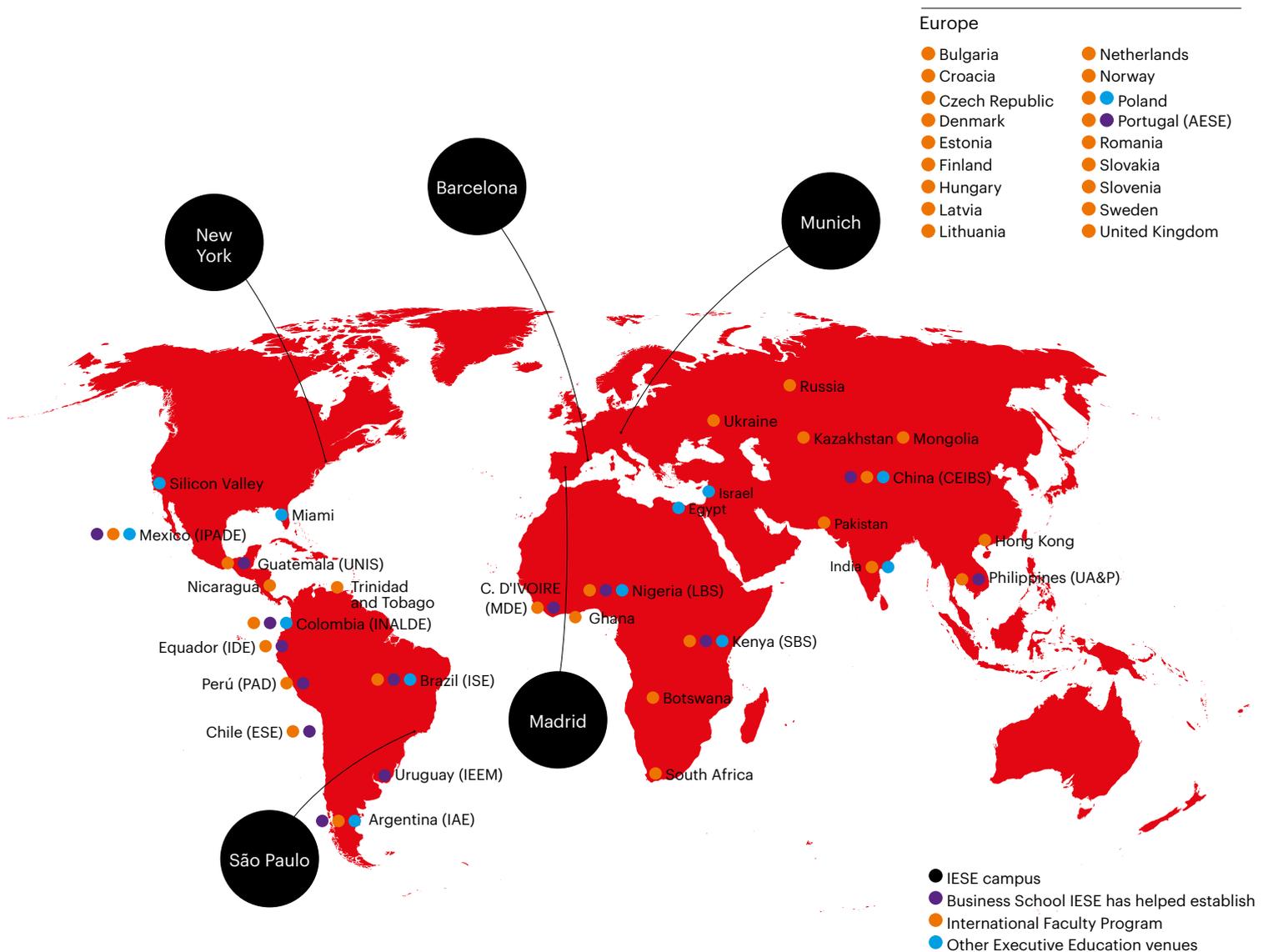


Fuel Freedom Chair for Energy and Social Development

Corporate Development

IESE campuses and global reach



IESE Africa initiative

Africa has always been important to IESE and, through the Africa Alliance, IESE reaffirms its commitment to jointly improving the quality of management education and social development on the African continent. IESE helped create Lagos Business School in 1991, Strathmore Business School in 2005, and MDE Business School in Côte d'Ivoire in 2011.



Researching energy solutions for Africa

We are facing an extreme energy shortage globally. In developing countries around the world, people do not have sufficient access to the energy they desperately need for cooking, transportation, fertilizers and electricity. They also lack the tools and knowledge to implement effective solutions.

Access to affordable fuels would create significant and positive change in developing nations.

IESE Business School and the Fuel Freedom Foundation have teamed up to mitigate energy poverty by creating the Fuel Freedom Chair for Energy and

Social Development to address this problem through research, energy education and knowledge transfer. Prof. Ahmad Rahnema is the holder of the Chair.

The Fuel Freedom Chair leads research projects in selected countries in partnership with local associated business schools in order to deliver a program – adapted to each country's reality - that focuses on understanding the key challenges, mapping potential solutions and encouraging their adoption in **four critical energy areas:** cooking, transportation, fertilizers and electricity.



Focused on four critical energy areas:



Transportation

Transportation (oil-based) fuel costs are embedded in every product and service and are significantly higher in Africa and other developing nations than in the developed world. Africans could convert cars already on the road to run on locally produced replacement fuels such as ethanol, methanol and butanol, which burn cleaner than gasoline.



Cooking fuels

Approximately 3 billion people around the world cook and heat their homes using open fires and simple stoves that burn biomass. This leads to premature deaths, pollution and gender-based violence. Solutions include domestically produced ethanol or LPG to fuel cookstoves instead of using firewood, encompassed by business models that can overcome the last-mile distribution challenge and the upfront cost barrier.



Fertilizer production

Lack of affordable fertilizers is the main reason for low agricultural yields and the primary driver of food insecurity. Alternatives can be developed through local fertilizer facilities using residual natural gas, by improving the access to credit for small farmers or eliminating barriers that increase the distribution costs.



Electricity

Two-thirds of the population in Sub-Saharan Africa still lives without access to electricity, especially in rural areas, where most electricity is diesel/ gasoline-based and comes from small generators. Diesel generators can be converted to run on cheaper, cleaner and locally produced methanol and other fuels. Furthermore, new business models can harness on solar photovoltaic and off-grid technologies to connect remote localities.

Impact

Our first research project and course in Kenya (2016/2017), in partnership with Strathmore Business School, was so successful that the participants took the initiative of forming a company to incubate several projects based on the opportunities discussed during the program.

In 2017/2018 we worked in Côte D'Ivoire, with MDE Business School. The course was delivered in May 2018 in Abidjan – with the support of the Ministry of Oil, Energy and Renewable Energy Development - and the first steps are being made

to launch and support the implementation of the solutions and business opportunities identified through our research project.

Since this program inspires more locally driven projects across the region, ultimately it will create greater economic opportunities and better living conditions for millions of Africans.

About the Fuel Freedom Foundation

The Fuel Freedom Foundation is a non-profit, non-partisan U.S. organization working to break the world's crippling oil addiction by opening the market to cleaner and cheaper locally-produced fuels.

The foundation seeks to create the market conditions that will enable cars to run on multiple fuels, clearing a path for cleaner-burning fuels to compete on an even footing with gasoline. Competition will reduce the cost of fuels across the board, as well as produce health and environmental benefits.

About IESE Business School

Since 1958, IESE Business School has been committed to developing exceptional leaders who aspire to have a deep, positive and lasting impact on people, firms and society. IESE's humanistic approach puts you at the center of the learning experience with a focus on your personal and professional development. At IESE, you will hone your strategic leadership competencies within a global framework.

Our top-ranked programs and world-class international faculty will help you craft strategies for sustainable growth and profitability, and give you the vision to drive meaningful change across your organization. IESE's thriving alumni community includes more than 46,000 executives and entrepreneurs who work in more than 100 countries.

IESE was the first international business school to become established on the African continent, where it develops management programs in collaboration with leading business schools.



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