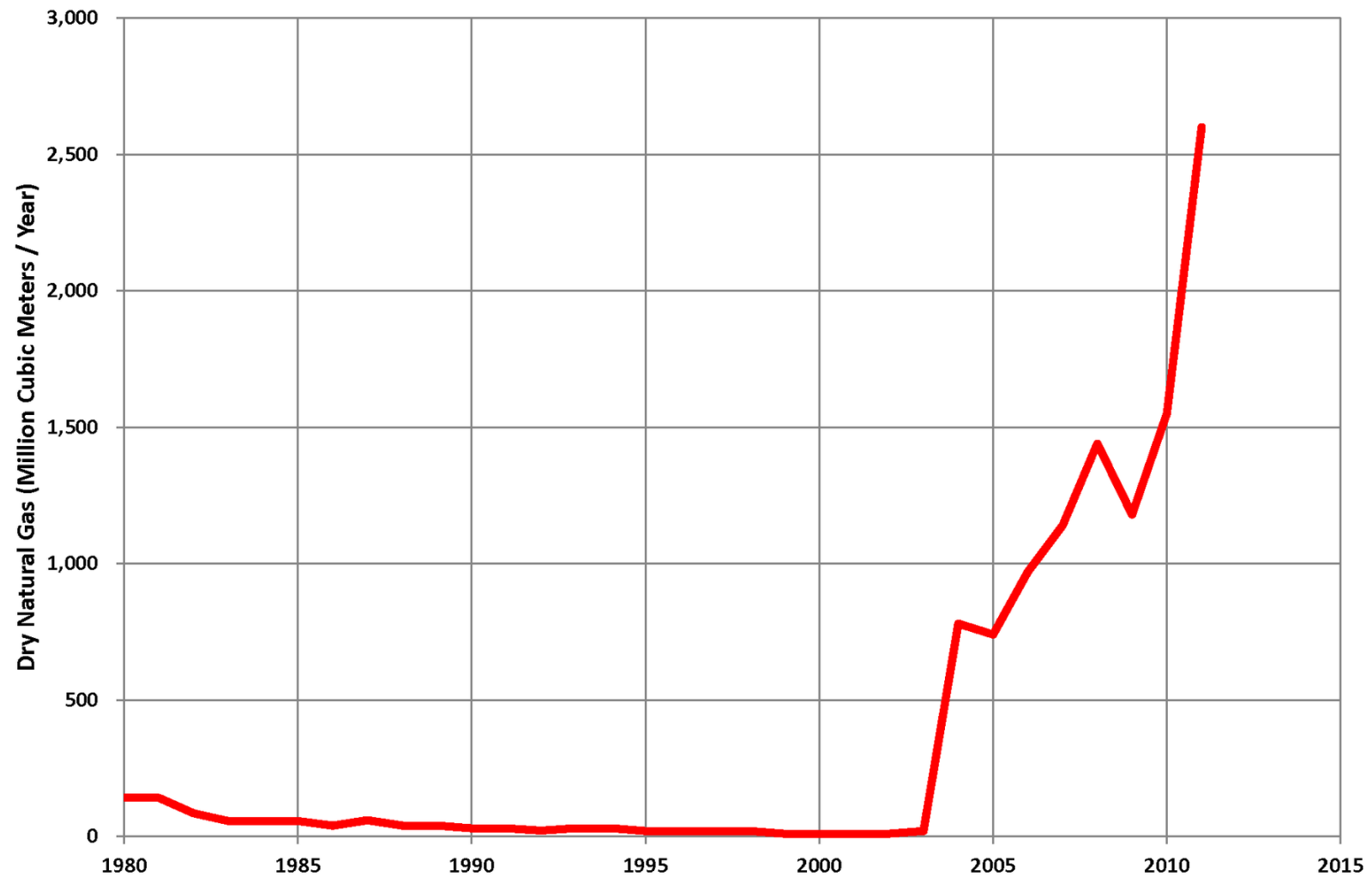


**Safe, sustainable, and resilient development of offshore reservoirs and  
natural gas upgrading through innovative science and technology:  
Gulf of Mexico – Mediterranean**



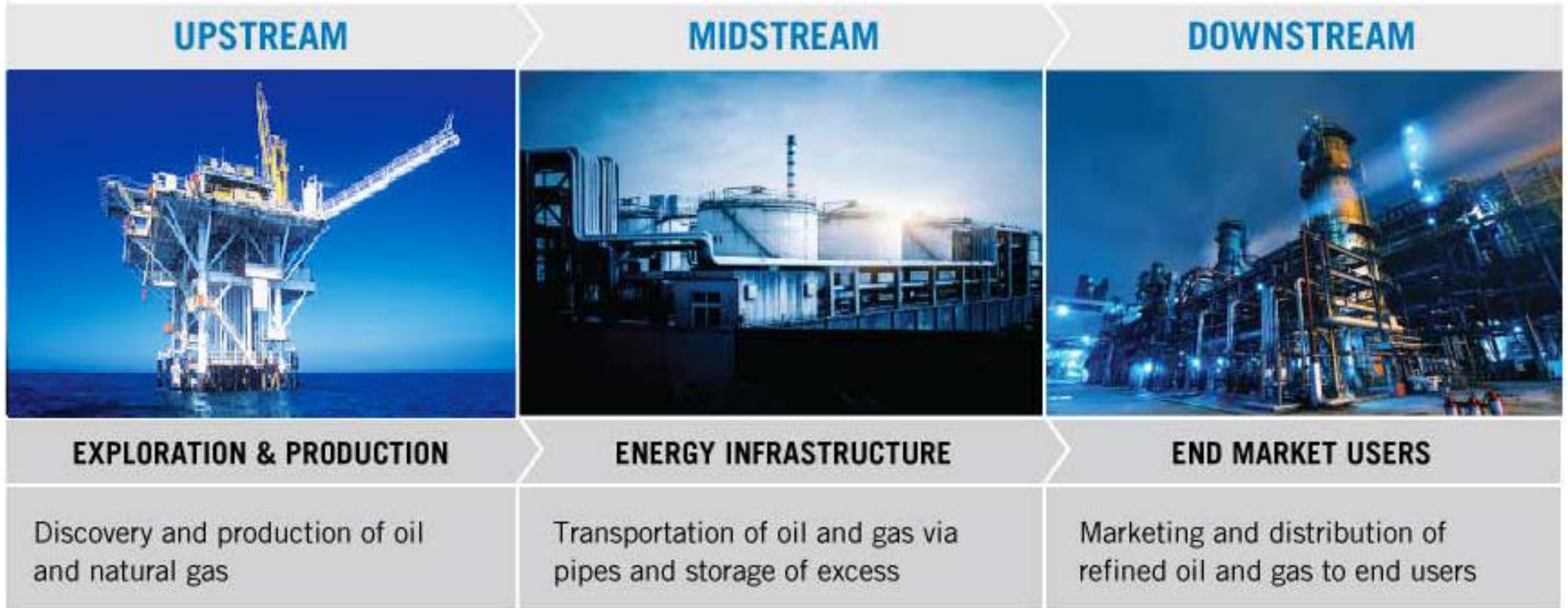
**GoMed Consortium**

# GoMed's motivation



**Gas production in Israel took off in 2004.**

# GoMed's vision and implementation maps across Energy Value Chain





## Upstream



## Midstream



## Downstream



### Offshore reservoir analysis

Developing machine learning and image analysis tools for reservoir assessment

Structure and quality of offshore reservoirs in the Eastern Mediterranean

Improved geochemical tools for the assessment of natural gas quality

Gas hydrate formation and dissociation mechanisms

### Offshore reservoir production

Fiber optic sensing for well control and production optimization

Advanced well-control for offshore operations in the Eastern Mediterranean

Developing new sealants for long-term wellbore integrity

Transport and dispersion of marine pollutants in the Eastern Mediterranean

### Hazards to seafloor infrastructure

Impact of submarine channels on seafloor infrastructure

Induced seismicity to seafloor infrastructure

Gas seepage and seafloor stability in northern Gulf of Mexico

Risk based evaluation of offshore operations

### Upgrading oil and gas

Novel catalysts/reactors for conversion of methane to methanol, methane dry reforming, CO<sub>2</sub>-based Fischer-Tropsch, and dehydrogenation of C2-C3 alkanes

Direct conversion of methane to high-value aromatics and hydrogen

Developing catalysts for removal of sulfur compounds from natural gas

# VISION

- **Build a strong group of researchers to develop innovative science and technology enabling the *safe and sustainable* development of offshore reservoirs.**
- **Leverage the expertise of consortium members to create a *knowledge base and infrastructure* that will benefit both the US and Israel.**

# GoMed Consortium – Israeli team



האוניברסיטה  
העברית  
בירושלים  
THE HEBREW  
UNIVERSITY  
OF JERUSALEM



Delek Drilling



**Technion**  
Israel Institute of Technology



TEL AVIV  
UNIVERSITY



אוניברסיטת חיפה  
University of Haifa  
جامعة حيفا



## GoMed Consortium – US team



LOUISIANA STATE UNIVERSITY



UNIVERSITY  
OF  
LOUISIANA  
*L a f a y e t t e*™

# Timeline

- Notification of award end of first week of March 2020
- End of second week of March 2020 – COVID shut things down!
- Center officially started September 1 2020
- COVID has made increasing the number of industrial partners and staffing challenging
- Should have all tasks (15 total) staffed and started in the next few months