

Monday, April 5, 2021

Virtual Meeting via Zoom

6:00 – 7:00 p.m.

HGS Members \$10 Non-Members \$25 Students \$5

<https://www.hgs.org/civicrm/event/info?id=2259>

Registered Attendees: A confirmation email will be sent upon registration with meeting links.

Event contact: Bryan Guzman – [bryanguzman85@gmail.com](mailto:bryanguzman85@gmail.com)

**\*\*Non-Members can submit an application and pay their dues before registering to get the member price. Please call the HGS office at 713-463-9476 to be registered only AFTER your application and dues are submitted.\*\***

# HGS General Virtual Dinner Meeting

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Synergeo LLC

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## The Energy Transition is Here: What to do?

The number of entities (countries, corporations, financial institutions) committing to carbon neutrality by mid-century increases rapidly. If all commitments are kept the Paris climate agreement goals are within reach by end century. To manage climate change and stay below 2°C increase by 2050 the world will need to decarbonize, Green House Gas (GHG) emissions will decline, and demand for fossil fuels will decrease significantly. Carbon Capture and Storage (CCS) is an essential part of realizing those commitments. This topic is hotly debated, contentious, and requires the industry's immediate attention.

The resultant energy transition imposes fundamental changes and unparalleled short-term and long-range challenges to the oil and gas industry. Concerns about stranding assets and financial risks abound. The presentation briefly introduces the current energy system and possible energy pathways. These are essential to understand the complexity and magnitude of the changes and challenges ahead.

Essentially there are three long-term choices in the oil and gas sector: i) to Dig In Your Heels; ii) “Maximize the Old and Go for the New”, and iii) Go Green and Go Fast. Which path to choose is key and will inform the subsequent business strategy, capital allocation, portfolio decisions, talent search strategies, etc.

Suggestions for immediate actions to prepare for the energy transition include consideration of lifecycle GHG emissions throughout the oil supply chain (as described by the Oil-Climate Index) when making portfolio and new business choices, standard emissions reporting (Scope 1, 2 and 3), and immediate methane emissions and flaring reductions. Employees in the industry can start learning skills that are of use in the new energy system and support a successful career transition. Think of e.g. PV Solar, offshore wind, and H<sub>2</sub> in refining.

Finally, we will look at the role of Carbon Capture and Storage (CCS) in the energy transition. The essential nature of what Carbon Capture & Storage must achieve is to dispose of billions of tons every year of an unwanted by-product of economic activity, carbon dioxide. Early identification of applications that can afford the premium CCS commands is key for the technology to establish at scale until new and cheaper pathways for carbon capture and sequestration become available

Developing CCS as a viable net zero carbon emission technology may well represent the single most significant opportunity for the oil and gas industry to apply its vast resources and skills to the energy transition. ■



### Biographical Sketch

**DR. RAYMOND C. FRANSSSEN**, owner Synergeo LLC, joined the upstream oil and gas industry 31 years ago as a geologist. He has worked in Europe, Gulf of Mexico, Middle East, North Africa and SE Asia for Shell and its JVs. A successful global explorer with multiple commercial oil and gas discoveries in multiple basins and wide

perspective on energy issues. Leadership roles include developing and implementing a global transformational change project for Shell global exploration. He earned a BSc from Leiden University, MSc and PhD from Utrecht University, the Netherlands.

In May 2020 Raymond he founded Synergeo LLC, a small forward-looking energy business consultancy supporting the oil and gas industry to navigate the energy transition.

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