



Energy Transition Committee

Energy Transition Committee - Agenda



- Welcome
- Membership, Mission, Values – 10 mins
- Energy Transition Strategy – 20 mins
 - Accenture David Rabley, Global and North America Lead for Energy Transition
- Goals for Committee in 2020 – 20 mins
 - Events
 - Deliverables
- Governance and Operating Rhythm – 10 mins

Committee Membership



Chair: **Marco Caccavale**: VP Americas, Baker Hughes

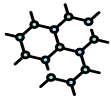
Co-Char: **Sanjiv Shah**: Managing Director, Investment Banking, Simmons Energy

Diana Hopkins	Caterpillar	Emerging Technology
Dave Christmas	Fluid Delivery Solutions	Chief Executive Officer (Temporary)
Travis Bolt	NOV Completion & Production Solutions	Product Development Manager
David Ulrey	NOV Completion & Production Solutions	Director – NOV Renewables
Don Bishop	Oerlikon Metco	Global Market Manager, Oil & Gas
Sikander Siraj	Schlumberger	Director Operational Sustainability
Brendan Gilbert	Solaris Oilfield Infrastructure	SVP for Customer Service and Quality
Sofia Barrios	TechnipFMC	Vice President, Measurement Products
Benoit Chambert-Loir	Vallourec	Development & Innovation Global Key Account Manager

Energy Transition - Mission



PESA Member Companies are committed to technology-driven efficiencies in their own operations, contributing technologies to increase efficiency of their customers, and thought leadership around a smart energy transition for the oil and gas industry.



The PESA Energy Transition Committee will share best practices in innovation and promote new solutions to meet the industry's lower-carbon commitments as technology in the sector evolves.



Through highlighting increased technological efficiencies, expanding uses of natural gas, and collaboration with innovative new energy technologies, the Energy Transition Committee will also promote using all available forms of energy to support the world's growing population.

Values



- **Informative:** we will bring clarity to the topic of Energy Transition, emissions reduction, decarbonization. Each member to lead a session.
- **Insightful:** we will seek outside perspectives to gain foresight in the space
- **Collaborative:** share views and foster collaboration on innovative technologies and approach. Suggest a coordinate approach on industry positioning and external communication on the matter

A BALANCED PURPOSE?

**ACCELERATE THE PATHWAY
TO NET ZERO**

August 2020



David Rabley

accenture

The energy transition will be unlike any other; today's energy system will be radically changed

Previous Energy Transitions

The Decarbonization Transition

Goals



Supply Driven

- Discovery or creation of a better energy source



Demand-driven:

- Need to decarbonize consumption

Demand less influenceable than supply

Proponents



Asset owner-driven:

- Pursuit of value creation



Society & stakeholder-driven

- Pursuit of environmental betterment

Imperative for change goes beyond (near term) financial results

Scope



Sector-driven:

- Certain fuel sources & sectors in certain geographies



Globally-driven:

- Required across all sectors & geographies

Distributed responsibility for coordinated action

Timeframe & Economics



Classical economics-driven:

- ~50 years of innovation & ~50 years of diffusion



Externality & deadline-driven:

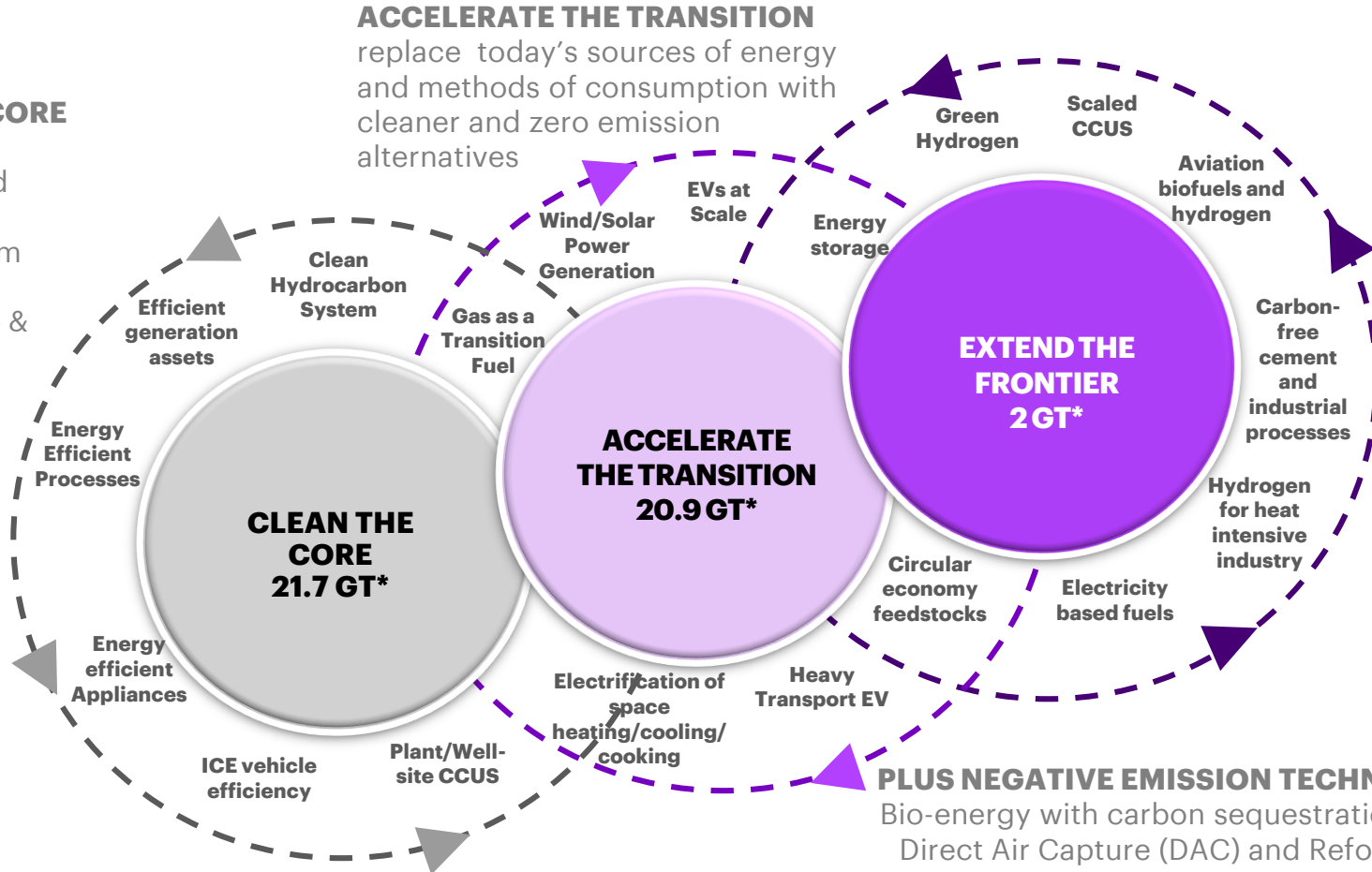
- Race against 2050 emissions reduction goal

Need for new markets and re-pricing

Three types of action will set the pace and success

CLEAN THE CORE

minimize emissions and maximize efficiency from current infrastructure & value chains



ACCELERATE THE TRANSITION

replace today's sources of energy and methods of consumption with cleaner and zero emission alternatives

EXTENDING THE FRONTIER

scales solutions commercializes beyond what is feasible today

CLEAN THE CORE
21.7 GT*

ACCELERATE THE TRANSITION
20.9 GT*

EXTEND THE FRONTIER
2 GT*

PLUS NEGATIVE EMISSION TECHNOLOGIES

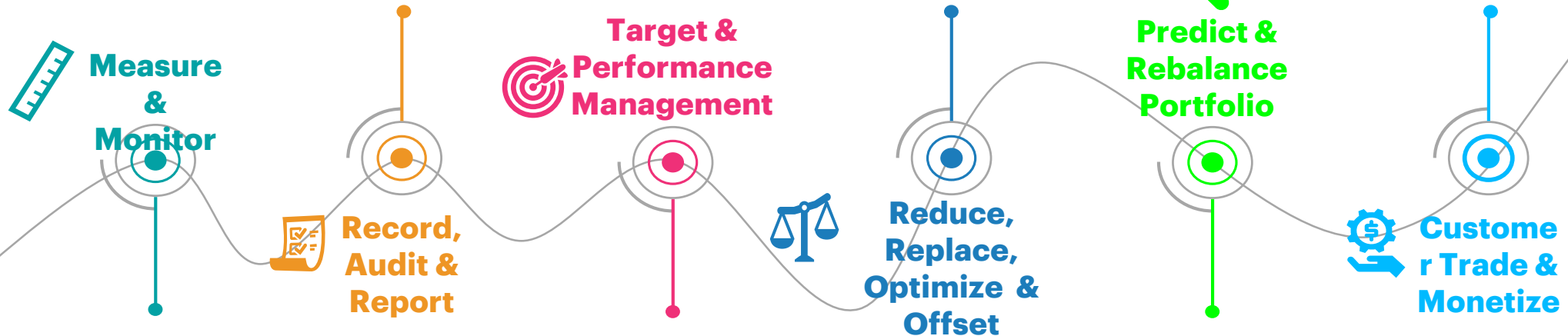
Bio-energy with carbon sequestration (BECS), Direct Air Capture (DAC) and Reforestation

Embedding carbon “as a currency” opens new roles across supply chain

- Accreditation and assurance of emissions measurement & reporting process, including “asset grade data”
- Reports scope 1, 2 & 3 emissions to relevant stakeholders and integrates with financial models and metrics (e.g. for TCFD Scenarios) and compliance systems
- Single and auditable source of data truth

- Innovate, identify and catalogue actions / interventions to reduce, replace and offset Scope 1, 2 and 3 emissions
- Includes financial and performance metrics of interventions at asset and portfolio levels
- Tracks execution of interventions and disseminates learning and best practice

- Enables production of commodities e.g. ESG-attributed fuels
- Creates a platform for integrated energy solutions
- Allows transactions of carbon and other accredited Environmental Attribute Certificates



- Automated and standardized measurement of Scope 1, 2 and 3 emissions
- Provides real-time visibility
- Traces the carbon molecule, links to hydrocarbon molecule and the full physical and business context
- Continuous “carbon thread” across systems, processes and people

- Helps set scope 1, 2 & 3 absolute and intensity targets against Science Based and other decarbonisation glidepaths
- Helps allocate targets across assets, business units, market units, and employees, over time
- Tracks performance against targets

- Forecasts emissions to track against decarbonization glidepaths
- Simulates financial impact of different emissions, carbon cost and interventions scenarios at asset and portfolio levels and supports definition of optimized response
- Informs portfolio, capital plan, M&A, operational, HR decisions

Goals and Deliverables in 2020



EXAMPLES

- **Supply chain support to the industry**– Members will increasingly find themselves being asked by their customers for specific and detailed emissions data. Support PESA ET members’ understanding about the role they will play in reporting Scope I, II and III emissions data.
- **Policy Support** – “Own your narrative”
Develop policy statements that support and incentivize energy transition adoption. Support methane regulations, CCUS, hydrogen, energy storage are key elements of the energy transition and provide significant upside opportunity for PESA members to serve their customers in these spaces.

Governance and Operating Rhythm



- 2-3 meetings before year end (will rotate facilitation)
- +
- 1 event per quarter for the remainder of 2020... some ideas:
 - External perspective on Natural Gas
 - Experts to walk organizations through CDP reporting
 - Investor focus on Energy transition