JUPITER OXYGEN CORPORATION

TRANSITION TOWARD A ZERO CARBON SOCIETY: WHO AND WHERE ARE THE ACCELARATORS?

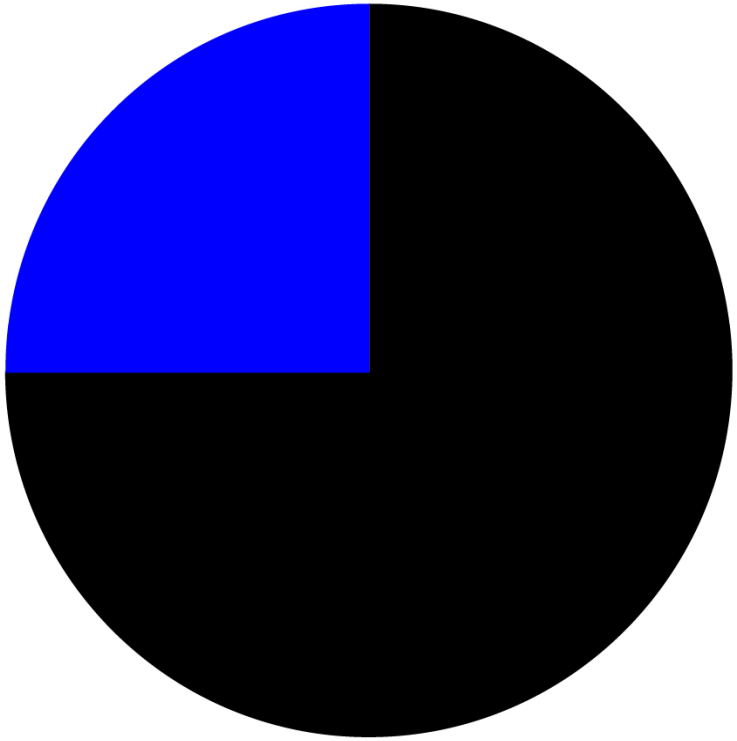
OXY-COMBUSTION CARBON CAPTURE & CO_2 UTILIZATION

UNITED NATIONS CLIMATE CHANGE CONFERENCE

BONN GERMANY ï MAY 24, 2016

THE CHALLENGE

PROJECTED GLOBAL ENERGY USE IN 2040



25% NON-FOSSIL FUELS BASED

75% FOSSIL FUELS BASED

SOURCE: International Energy Agency World Energy Outlook 2015 / Executive Summary / Central Scenario

THE OPPORTUNITY
CARBON CAPTURE & UTILIZATION AT SCALE

- **CARBON CAPTURE from large point sources:**
  - Coal, oil, and natural gas fired power plants
  - Industrial plants

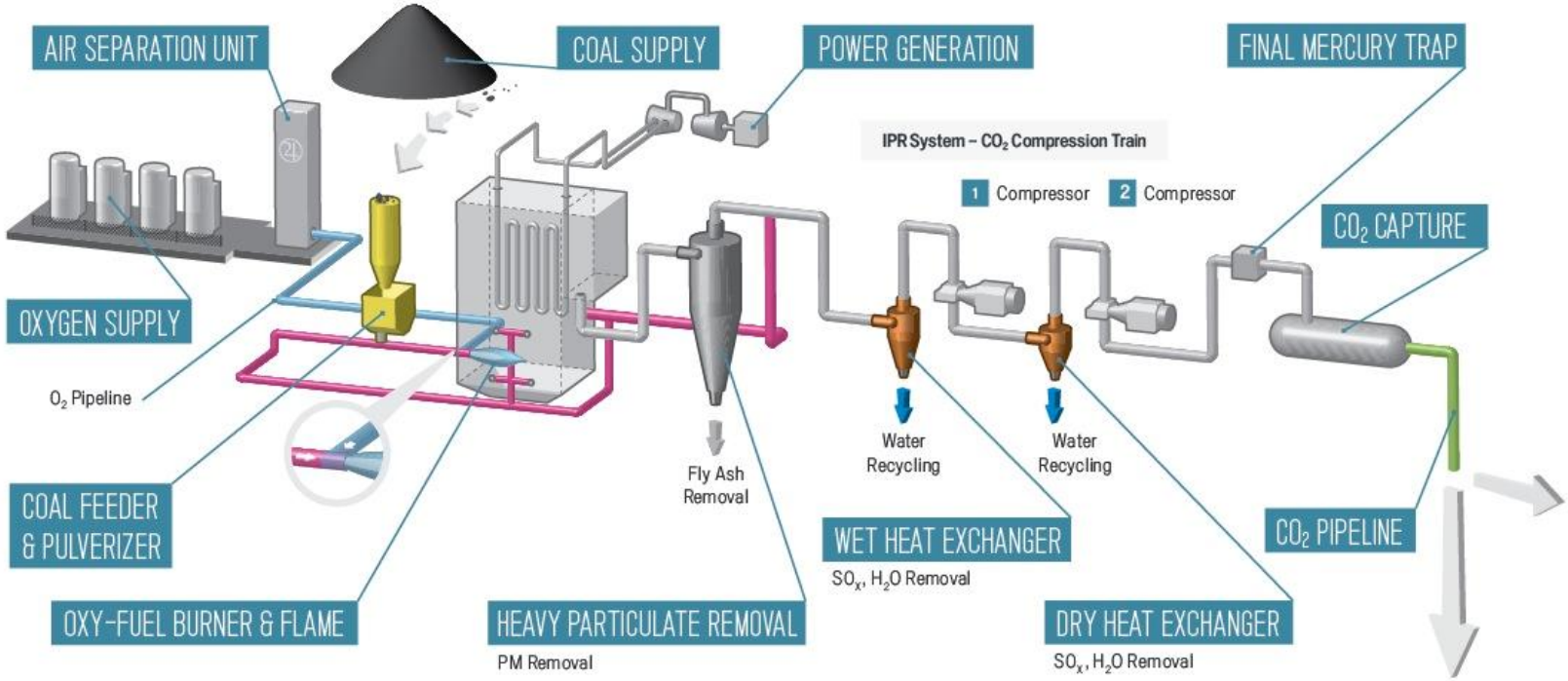
- **CARBON UTILIZATION options & worldwide potential:**
  - Enhanced oil recovery (EOR)
  - Enhanced coalbed methane recovery (ECBM)
  - Algal Biomass and related industries (for example carbon fiber)

- **Carbon lock-in in carbon fiber based construction materials**

BENEFITS & BARRIERS
FOR CO_2 CAPTURE & UTILIZATION / REUSE?

- ***Using CO_2 for EOR / ECBM will increase energy independence***
- ***Utilizing CO_2 will control and store substantial amounts of CO_2***
- ***Carbon capture cost will be offset in part by recovered resources***
- ***So why is Carbon Capture Technology not deployed widely?***
- ***Carbon capture technology is considered to be expensive***

JOC OXY-COMBUSTION & CARBON CAPTURE SYSTEM



Flue Gas Recirculation | Latent Heat Recovery | O_2 Pipeline | Water Recycling | CO_2 Pipeline

CO_2 Underground Storage and Use

- Specific Geological Formations
- Enhanced Oil/Natural Gas Recovery
- Enhanced Coal Bed Methane (ECBM) Recovery
- Algal Biomass Industry
- Submarine Extraction of Methane from Hydrate

XINJIANG CCUS – ECBM
COMMERCIAL SCALE PROJECT

► **BEIJING: NOVEMBER, 18 2015**

Agreement just signed for commercial scale CCUS – ECBM project in western China

► **Includes retrofitting coal power plants with JOC's high flame temperature oxy-combustion and CO_2 capture technologies**

DRIVING ENERGY INDEPENDENCE & GLOBAL CARBON MITIGATION & LOCAL AIR POLLUTION CONTROL

- Combining oxy-combustion carbon capture with enhanced coalbed methane recovery provides huge cost advantages and co-benefits
- Increased domestic production of natural gas can replace imported fuels, saving capital cost and enhance energy security
- Financing support for CCUS demonstration projects in emerging economies is imperative for accelerated technology deployment

MORE INFORMATION AT WWW.JUPITEROXYGEN.COM

U.S. based clean energy technology:

- High flame temperature oxy-combustion process Know-How
- Patents and Licensing
- Consulting Services

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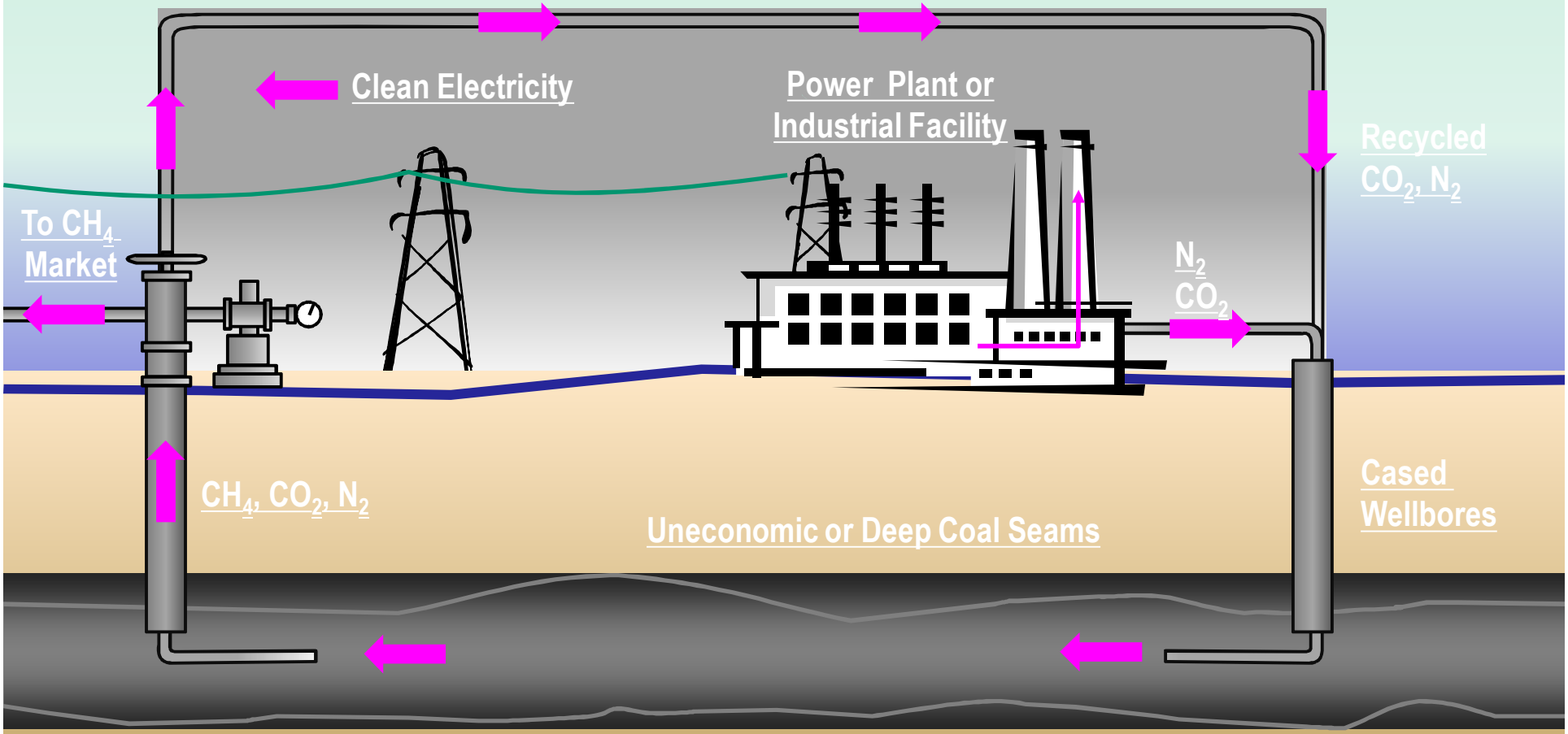
Thomas Weber, President
Jupiter Oxygen Corporation

What is Enhanced Coalbed Methane (ECBM)?



Process

- CO_2 adsorption into coal
- CO_2 displaces clean burning methane (ratio varies by coal)
- Flow of CO_2 controlled by permeability of coal seam

Advanced Resources International, Inc.