

Message

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Sent: 13/09/2018 05:01:26
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Subject: REQUEST FOR REVIEW: Updated Susan Dio slide deck with speaker notes and new map
Attachments: (09-12-18) Susan Dio presentation for BP board.pptx

Per our discussions, I've added a new, color-coded map highlighting BP's economic impact in the U.S., along with detailed speaker notes on each slide. To make the review process easier, I've also pasted the speaker notes below. Please let me know by 12:30pm EST on Thursday if you have any edits or concerns.

Thanks!

Duncan

Slide 2 ("Who Is BP in America?")

- Material to BP/Economic Impact
 - More shares held here than in any other country
 - Nearly a quarter of BP's global profits
 - Support more than 125,000 jobs from Alaska to South Carolina
 - Operations contributed \$85 billion to U.S. economy in 2017 alone
- Safety, E&C, D&I
 - Major progress on safety since DWH
 - Emphasis on training, technology, culture
 - Post-DWH process safety monitor (DoJ agreement) ended at beginning of 2018
 - Still have EPA Administrative Agreement until March
 - Focus on D&I defines our identity/culture in U.S.
 - Important part of business/talent strategy

Slide 3 (Asset map)

- 3 upstream businesses
 - 4 Gulf of Mexico production platforms (Atlantis, Mad Dog, Na Kika, Thunder Horse)
 - (Map includes BHP acquisitions in Texas, Louisiana)
- 3 refineries (including one JV — Toledo — with Husky)
- 2 petrochemical plants

- 2 major trading hubs (Houston, Chicago)
- 7 *Castrol* facilities
- 14 wind farms (13 operated)
- (Not included on map):
 - Pipeline assets (including terminals, control centers)
 - Air BP locations
 - San Diego Biosciences Center

Slide 4 (Color-coded economic impact map)

- 4,000+ jobs (Dark Green)
 - Alaska, Illinois, Indiana, Ohio, Texas, Washington
- 1,000-4,000 jobs (Light Green)
 - Colorado, Louisiana, New Jersey, Oklahoma, South Carolina
- 700-1,000 jobs (Yellow)
 - California, Mississippi, New Mexico, Wyoming
- 200-700 jobs (Orange)
 - Alabama, District of Columbia, Florida, Maryland, Pennsylvania
- 1-200 jobs (Light Blue)
 - (Every other state except Hawaii)

Slide 5 (“BP in America by the Numbers — 2009 vs. 2017”)

- By most measures, smaller company in U.S. than in 2009
- One exception: Significant greater wind power capacity (more wind farms today than in 2009)
- Still, the most noteworthy data-points on this slide are:
 - U.S. share of BP’s total operating revenues — same in 2017 as in 2009 (33%)
 - U.S. share of BP’s total global profits — increased from 18% in 2009 to 24% in 2017
- Those figures confirm that U.S. remains material to BP

Slide 6 (“Upstream”)

- Alaska
 - Operate entire Prudhoe Bay field
 - 2017 — produced average of 280,000+ barrels of oil per day

- Accounted for more than half the state's total oil production
- 2019 — BP Alaska plans to complete 3D seismic survey of Prudhoe Bay operating area
- Gulf of Mexico
- 2017 — used seismic processing and Houston supercomputer to identify additional 1 billion barrels of oil in place around GoM production hubs
- Plant Operations Advisor — successful pilot at Atlantis; now deployed at all four GoM platforms
- Mad Dog 2 project — estimated cost started at \$20 billion; now under \$9 billion; will produce up to 140,000 barrels from as many as 14 production wells
- Lower 48
- BHP acquisition — \$10.5 billion; world-class unconventional assets in the Permian-Delaware basin, plus two premium positions in Eagle Ford and Haynesville basins; assets currently produce 190,000 BOE per day (about 45% liquid hydrocarbons)
- Haynesville/Bossier shale gas formation — could have more gas in place than almost any other shale formation in U.S.

Slide 7 (“Downstream”)

- Refineries
- Whiting — daily production: 10 million gallons of gasoline, 3.5 million gallons of diesel, 1.7 million gallons of jet fuel
- Cherry Point — largest supplier of jet fuel to Seattle, Portland and Vancouver international airports
- Toledo — can process up to 160,000 barrels a day; BP supports more than 4,400 jobs in Ohio
- Chemical plants
- Cooper River — America's largest producer of PTA; \$200 million modernization project completed in 2017: will allow site to reduce amount of electricity it purchases from grid by 40%, slash CO2 emissions by up to 110,000 tons per year and boost production of PTA by 10%; Cooper River also will be able to supply U.S. plastic industry with *PTAir Neutral*, world's first certified carbon-neutral PTA
- Texas City — Project Hedera: completed 2017; expanded facility, significantly improved its operational efficiency and increased its production of MX by 10%; huge milestone for the business; made it stronger, more flexible
- Retail
- U.S. retail presence — around 7,200 BP- and *ARCO*-branded sites, more than 1,000 *ampm* convenience stores
- 2017 — 13.6 billion gallons of fuel delivered to U.S. customers (including 7.3 billion gallons of BP-branded fuel); *Amoco* brand reintroduced to its U.S. customers; added first new-to-industry *ARCO/ampm* retail sites on West Coast as part of new growth strategy
- Lubricants

- *Castrol* — No. 1 brand among do-it-yourself American consumers; stocked in more than 20,000 outlets; Western Hemisphere HQ in Wayne, New Jersey; growing number of lower-carbon or carbon-neutral lubricants
- 2017 — introduced *Castrol EDGE Bio-Synthetic*, made with 25% plant-based oil
- Pipelines & Logistics
 - BP Midstream Partners — new master limited partnership formed in 2017; first initial public offering in BP history
 - BPMP assets include:
 - pipelines that transport onshore crude oil production to Whiting and offshore oil/gas production to key refining markets and trading and distribution hubs
 - pipelines that deliver refined products and diluting agents from Whiting and other U.S. supply hubs to major demand centers
 - U.S. Pipelines and Logistics business continues to operate and manage BPMP pipeline assets with BP employees

Slide 8 (“IST, Shipping, Alternative Energy & Ventures”)

- IST
 - Hubs in Chicago and Houston
 - Largest marketer of natural gas; one of largest suppliers of renewable natural gas (“biogas”) to U.S. transport
 - In average year, serves more than 3,500 customers across North America
 - NAGP manages more than 11 billion cubic feet of transportation capacity and schedules gas flows on approximately 180 pipelines across North America
- Shipping
 - 2017 — completed about 1,400 voyages and moved more than 47 million metric tons of cargo to or from U.S. ports
- Wind
 - 13 BP-operated wind farms; also hold stake in Hawaii wind facility
 - Gross generating capacity of 2,259 megawatts — enough electricity to power every home in city the size of Philadelphia
 - Tesla partnership — installed high-storage battery at BP’s Titan 1 wind farm in South Dakota; BP will integrate battery with its Titan 1 facility and configure it to help manage internal electricity demands when wind isn’t blowing; this will enable site to store electricity and make available whenever needed
 - Flat Ridge 1 repower project — team recently completed 24-hour test run of repowered turbine; still deciding whether to repower all 19 remaining turbines; final decision expected in 4Q 2018
- BP Ventures
 - \$300 million+ invested in U.S. companies since 2006
 - Key examples:

- Fulcrum (\$40 million, low-carbon jet fuel from household waste)
- Beyond Limits (\$20 million, artificial intelligence and cognitive computing software)
- Solidia (concrete production with up to 70% fewer GHG emissions)
- FreeWire (\$5 million, manufacturer of mobile electric vehicle rapid-charging systems)
- Non-operated JVs
 - 26 active in U.S.
 - Key examples:
 - Butamax (biofuels JV with Dupont; produces bio-isobutanol)
 - Lightsource BP (U.S. HQ in San Francisco)
 - Alaska Tanker Company (25% stake)

Slide 9 (“Business Challenges”)

- Washington state carbon tax initiative
 - Would exempt six of 10 largest stationary emitters in Washington
 - Would leave families/businesses at risk of double taxation
 - Would make good policy that much harder to achieve
- Federal regulatory reforms and risks
 - Encouraged by many recent or proposed regulatory reforms, but concerned that some reforms will get tied up in court or be reversed by next administration
- Tariffs
 - Risks to Gulf of Mexico, Lower 48 and other BP businesses from steel and China tariffs
- Sanctions
 - Iran and Russia sanctions threaten key BP projects and businesses, including Shah Deniz 2 and Southern Gas Corridors
- USW negotiations
 - Contracts expiring in early 2019; unclear what USW will demand in talks; could affect Alaska, Whiting, Toledo and Texas City
- State & local policy initiatives
 - Key examples:
 - Alaska — “Stand for Salmon” ballot initiative (Ballot Measure 1) would reclassify every lake, stream and river as spawning habitat for fish, thereby limiting ability of state regulators to issue development permits (including for existing projects)
 - Colorado — ballot initiative would ban oil and gas drilling within 2,500 feet of buildings and certain green spaces; current limit is 500 feet

Redacted - First Amendment

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- Tariffs
 - BP has around 20 steel tariff exclusion applications pending at Department of Commerce; already secured two exclusions for Lower 48
- Sanctions
 - Iran — ensured that previous exemptions for Shah Deniz 2 and Southern Gas Corridor were included in new, tougher sanctions
 - Russia — continue to monitor debate in Congress; indications are legislative action won't happen until after November election
- USW negotiations
 - C&EA working closely with labor team and businesses on multifaceted campaign to educate employees/contractors while also preparing for possibility of work stoppage

Redacted - First Amendment

- STEM initiatives

- Donated more than \$42 million to U.S. STEM education programs between 2013 and 2017 alone
- Support programs that encourage students to pursue STEM careers, that educate and train teachers, and that mobilize employees to volunteer in their communities
- 2017 and 2018 — partnered with Offshore Technology Conference (OTC) in Houston to present OTC Energy Challenge, a competition in which teams of high school students developed and presented solutions to real-world energy challenges
- BP MS 150
 - National Multiple Sclerosis (MS) Society's largest annual fundraising event
 - BP is title sponsor
 - Since 2001, BP and Team BP riders have raised or contributed more than \$20 million to support MS research and programs