

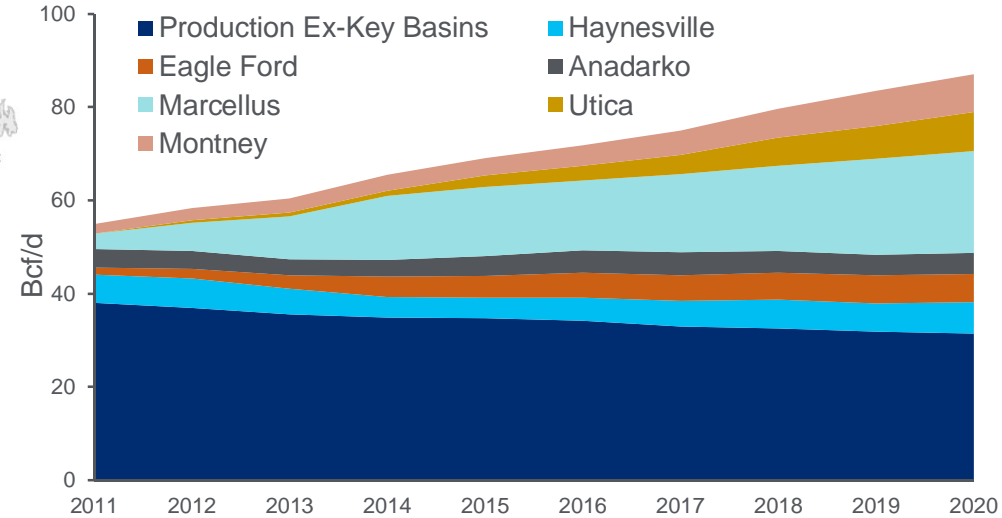
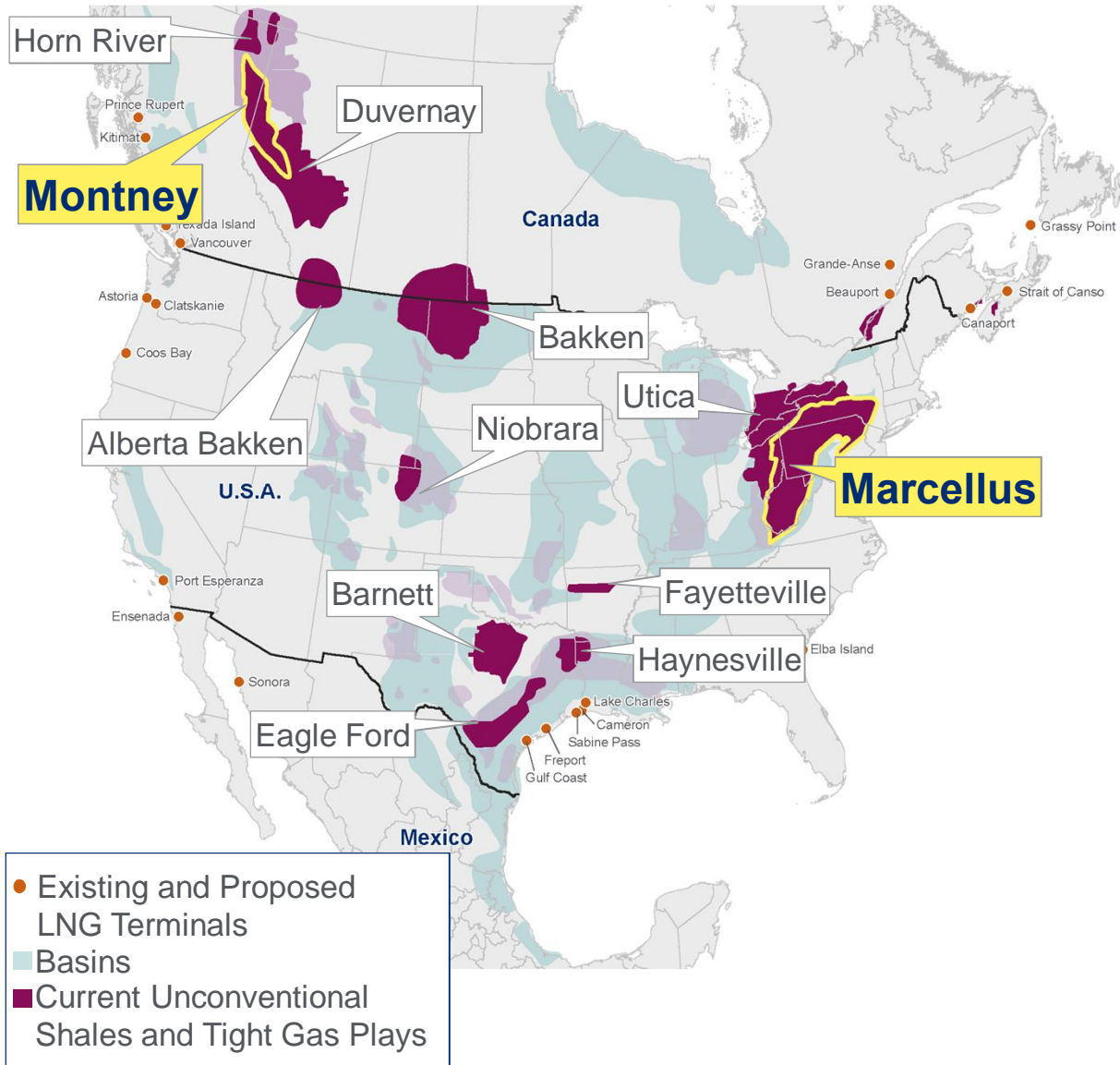
September 16, 2015

# LNG Conference 2015

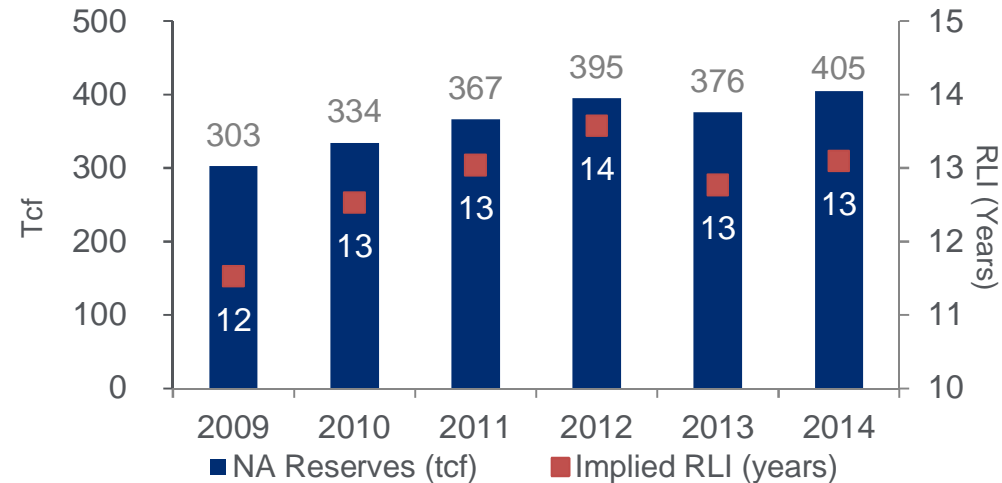
Kasey (Keisuke) Fukada - Managing Director, Citigroup

# Unconventional Gas Development in North America

Future Canada and U.S. gas production growth driven by a few key shale plays



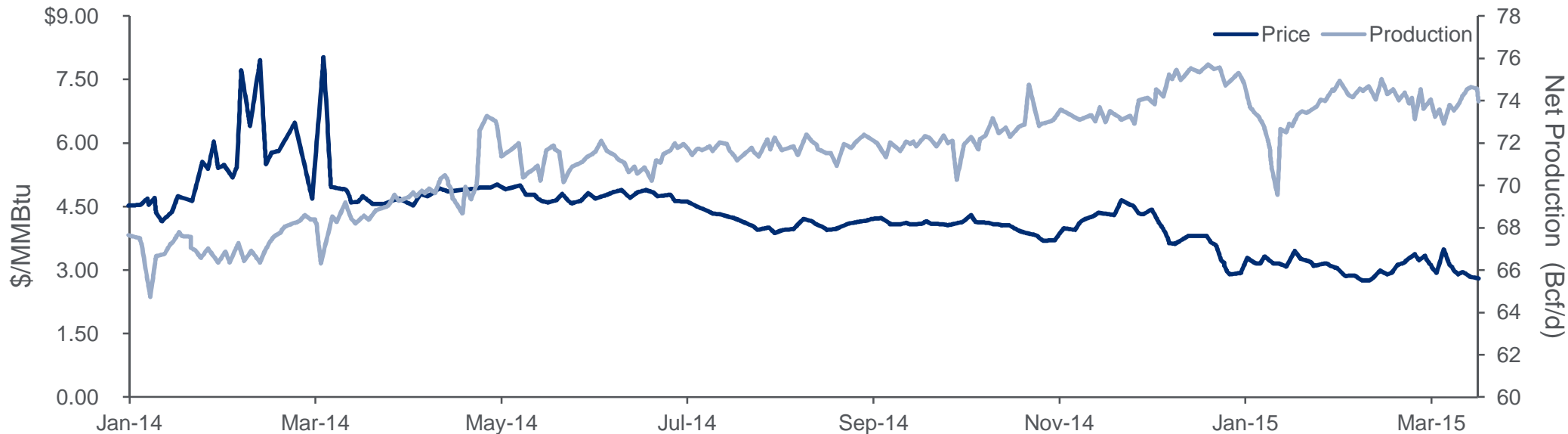
With large reserve base and long RLIs



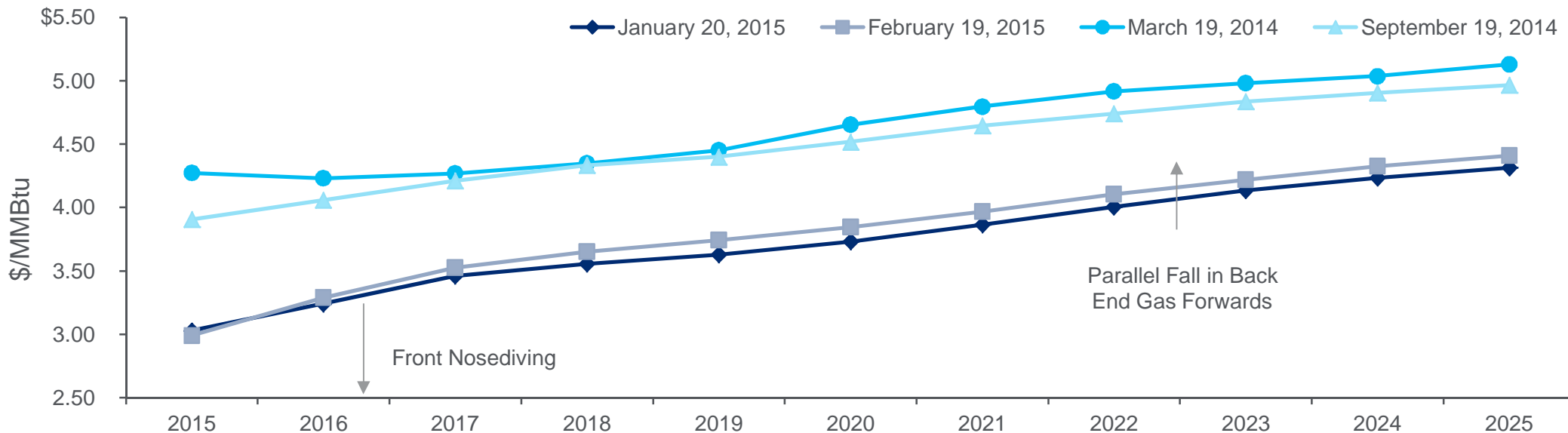
Source: Canadian Discovery, Citi Research, EIA

# Current Reality: Golden Age+ of Gas Production Continues, Keeping Prices Low

Daily cash Henry Hub prices have nosedived just as production surged



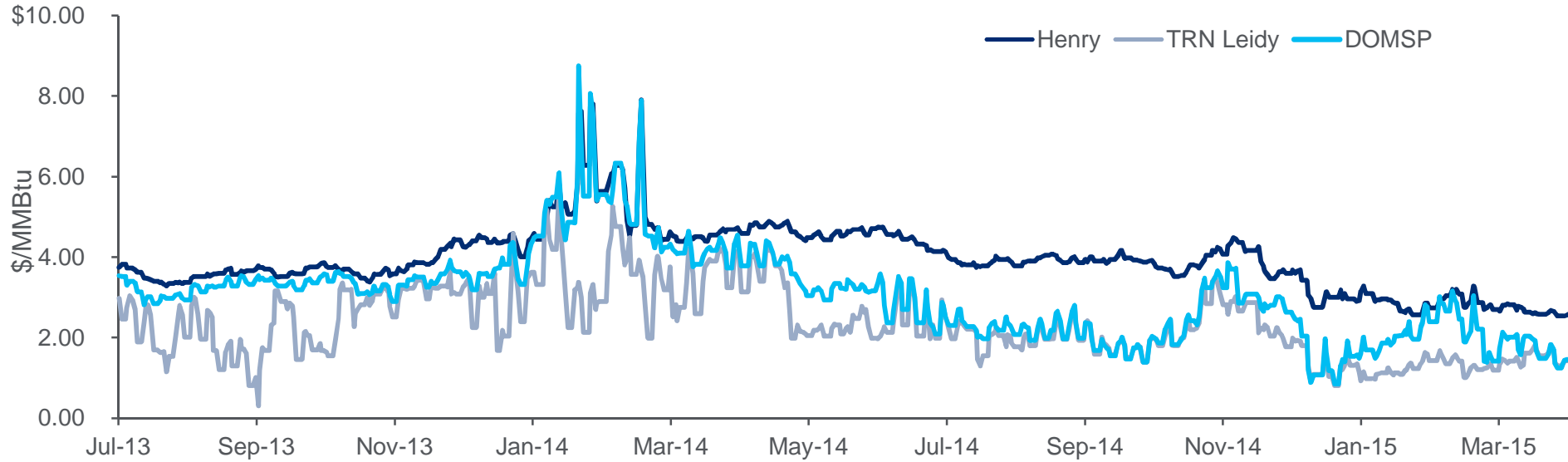
The front of the forward curve has collapsed due to oversupply



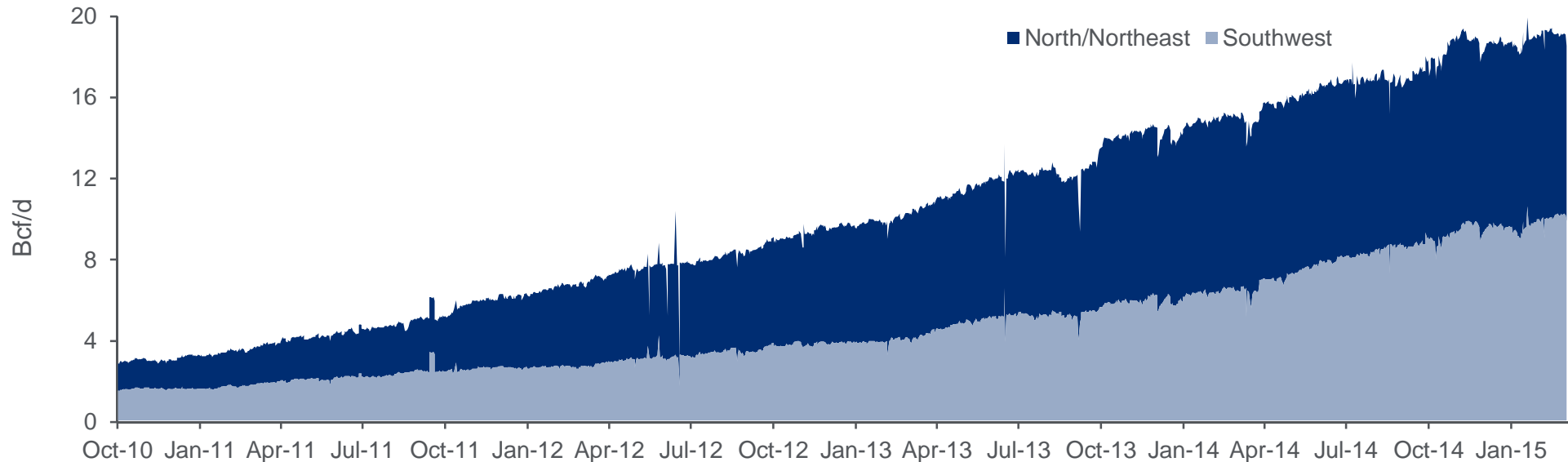
Source: Citi Research, EIA, Platts

# Northeast U.S. Gas Production Looks to be Very Resilient, Adding to Oversupply

U.S. Northeast gas prices have fallen substantially, hovering around \$1.00/MMBtu



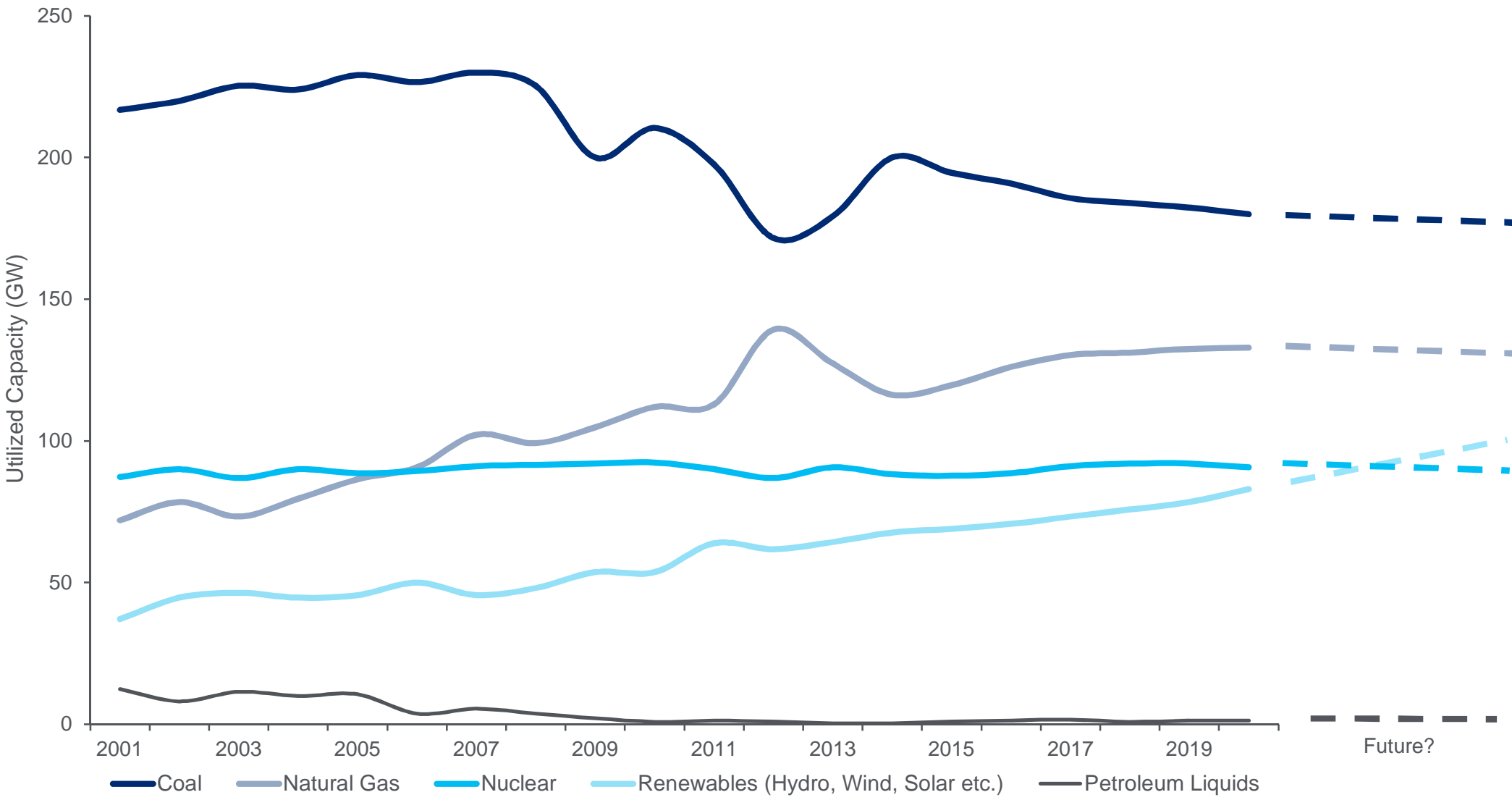
The strength of U.S. Northeast gas production has surprised higher beyond most expectations



Source: Citi Research, Bentek, EIA

# Long-Term Gas Demand Growth Could Be Subdued on Weak Power Demand

Rapid rise of renewables limits the potential for much stronger gains in gas demand for power generation

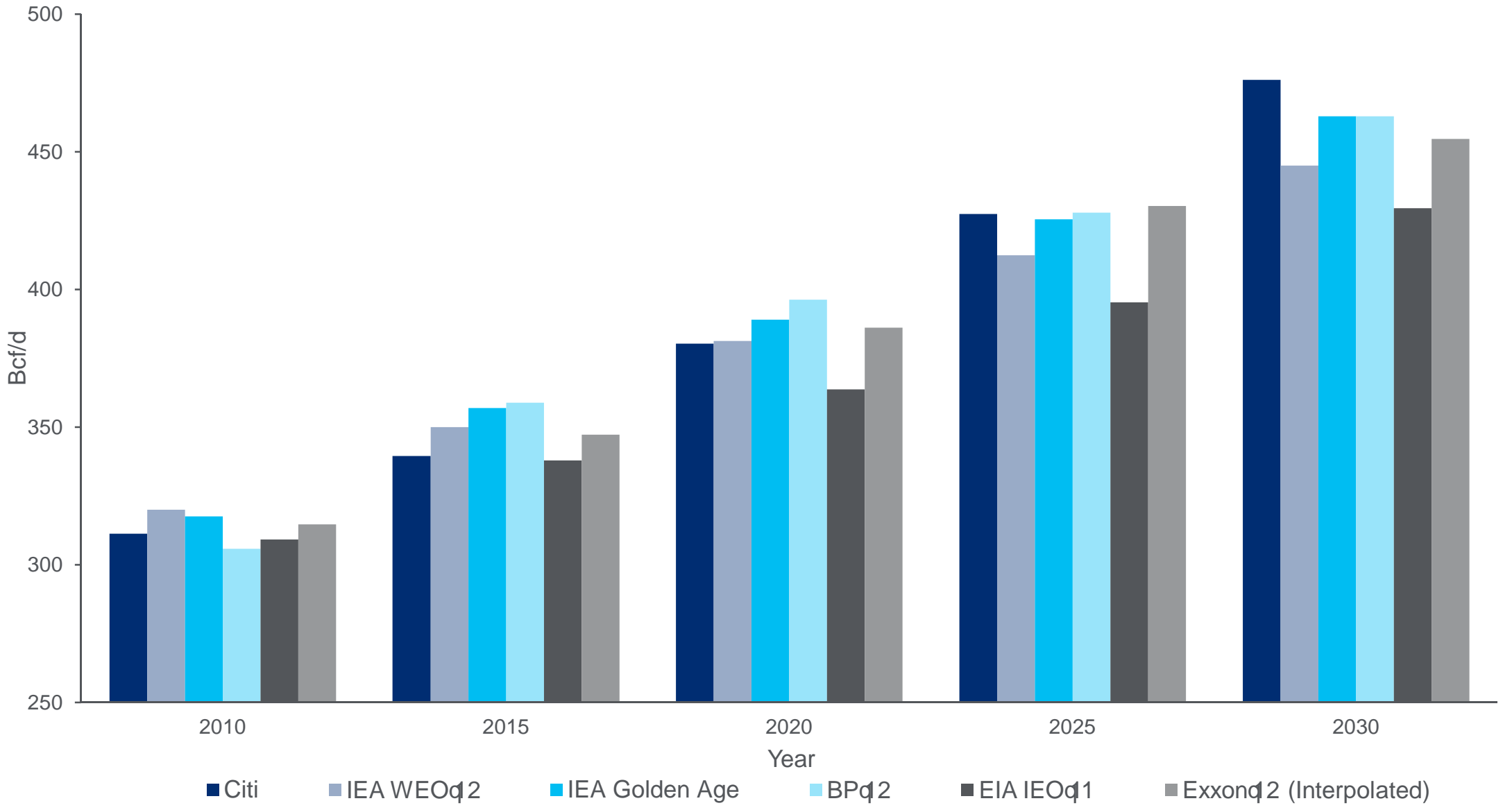


Source: Citi Research, EIA



# LNG Demand Lackluster so Far; But Could Supply Shortage Loom Post-2020?

Global demand growth, though modest now, should accelerate with low prices in the out years

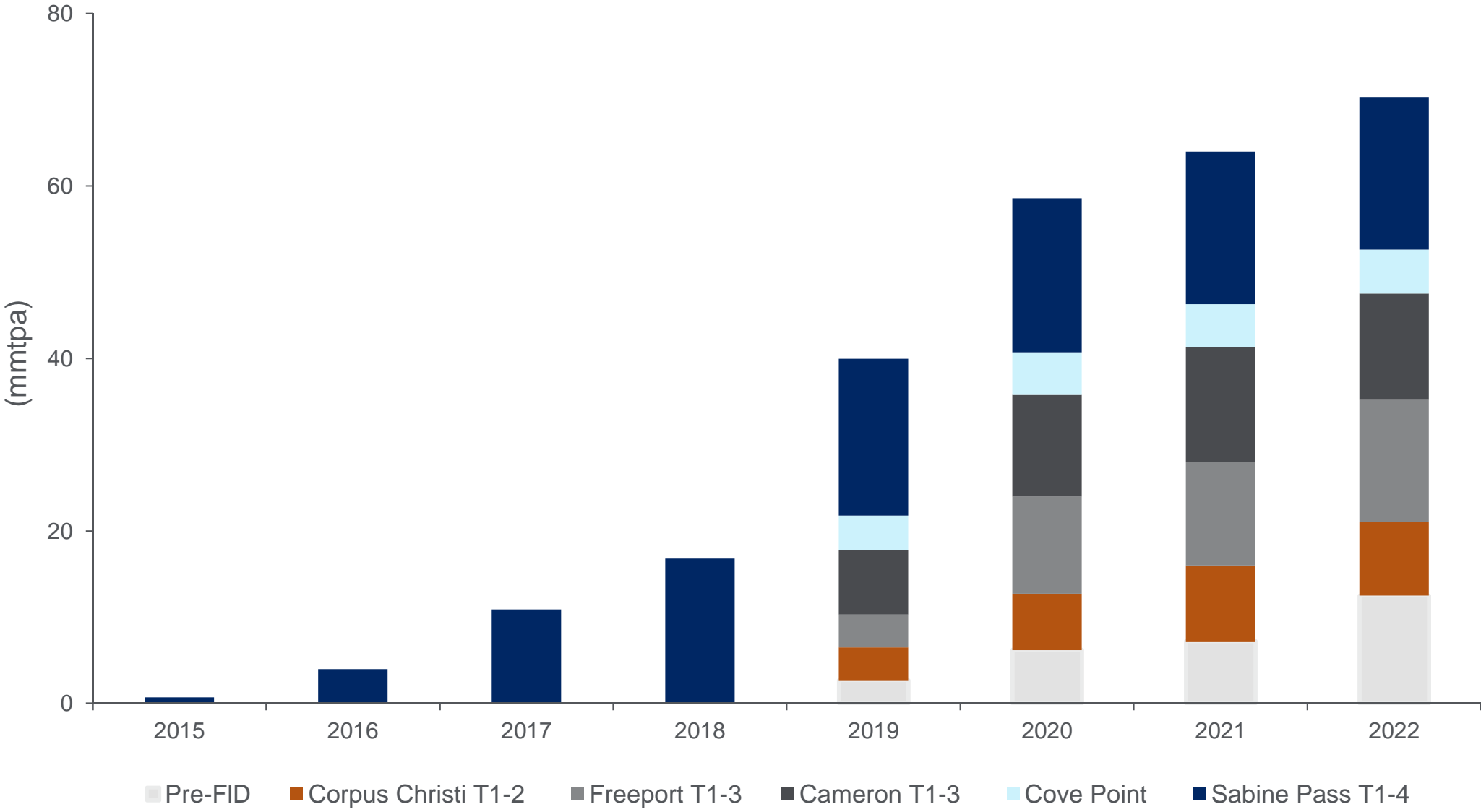


Source: BP, Citi Research, EIA, Exxon, IEA



# The U.S. Gulf Coast Will Lead North American LNG Exports

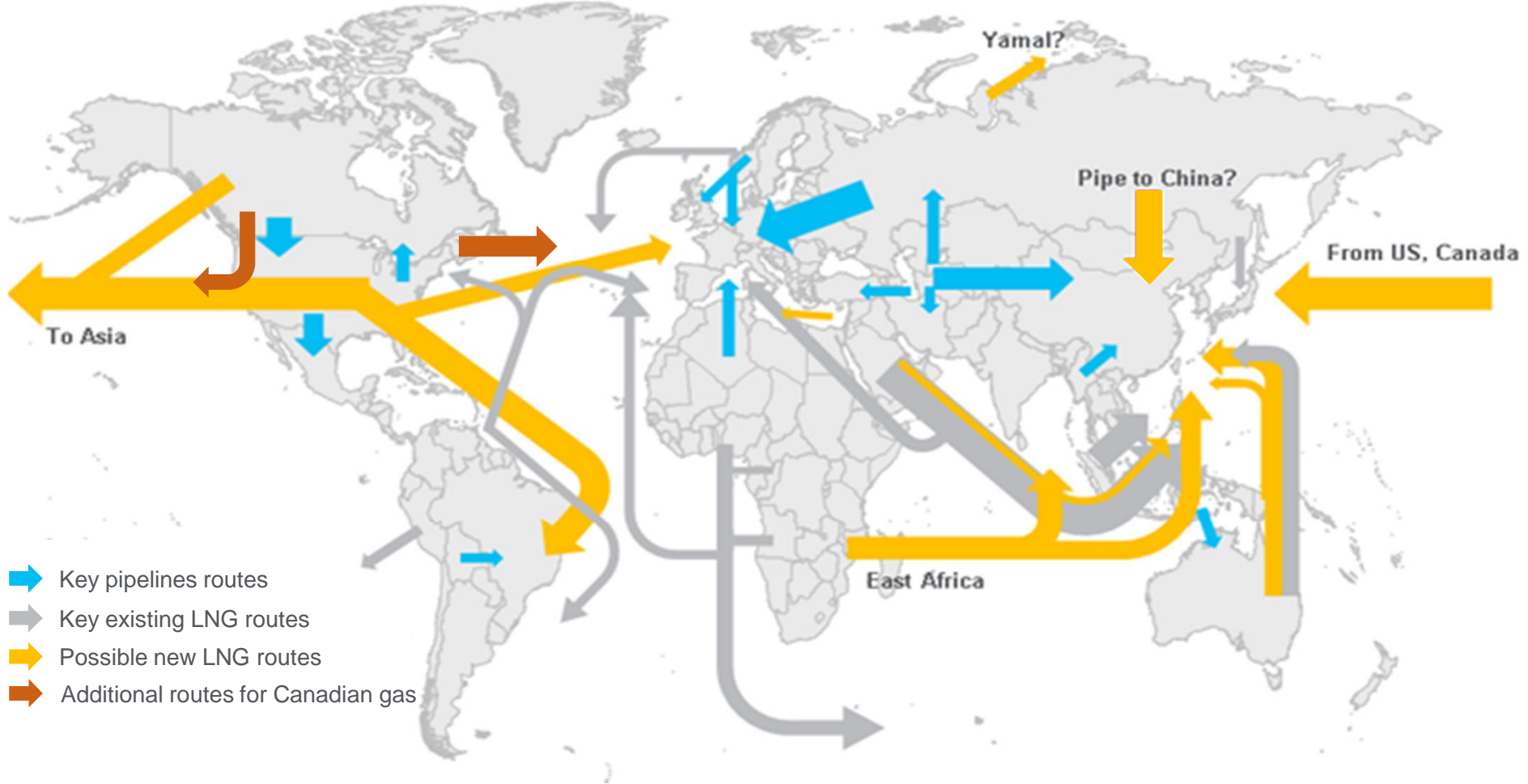
Canadian LNG facilities are not expected to be online until after a number of U.S. facilities are already in operation



Source: Citi Research, Wood Mackenzie

# North America to Lead a New Wave Of Global Gas Trade

Future global gas flow



Source: Citi Research, Wood Mackenzie



**IRS Circular 230 Disclosure: Citigroup Inc. and its affiliates do not provide tax or legal advice. Any discussion of tax matters in these materials (i) is not intended or written to be used, and cannot be used or relied upon, by you for the purpose of avoiding any tax penalties and (ii) may have been written in connection with the "promotion or marketing" of any transaction contemplated hereby ("Transaction"). Accordingly, you should seek advice based on your particular circumstances from an independent tax advisor.**

**In any instance where distribution of this communication is subject to the rules of the US Commodity Futures Trading Commission ("CFTC"), this communication constitutes an invitation to consider entering into a derivatives transaction under U.S. CFTC Regulations §§ 1.71 and 23.605, where applicable, but is not a binding offer to buy/sell any financial instrument.**

Any terms set forth herein are intended for discussion purposes only and are subject to the final terms as set forth in separate definitive written agreements. This presentation is not a commitment to lend, syndicate a financing, underwrite or purchase securities, or commit capital nor does it obligate us to enter into such a commitment, nor are we acting as a fiduciary to you. By accepting this presentation, subject to applicable law or regulation, you agree to keep confidential the information contained herein and the existence of and proposed terms for any Transaction.

Prior to entering into any Transaction, you should determine, without reliance upon us or our affiliates, the economic risks and merits (and independently determine that you are able to assume these risks) as well as the legal, tax and accounting characterizations and consequences of any such Transaction. In this regard, by accepting this presentation, you acknowledge that (a) we are not in the business of providing (and you are not relying on us for) legal, tax or accounting advice, (b) there may be legal, tax or accounting risks associated with any Transaction, (c) you should receive (and rely on) separate and qualified legal, tax and accounting advice and (d) you should apprise senior management in your organization as to such legal, tax and accounting advice (and any risks associated with any Transaction) and our disclaimer as to these matters. By acceptance of these materials, you and we hereby agree that from the commencement of discussions with respect to any Transaction, and notwithstanding any other provision in this presentation, we hereby confirm that no participant in any Transaction shall be limited from disclosing the U.S. tax treatment or U.S. tax structure of such Transaction.

We are required to obtain, verify and record certain information that identifies each entity that enters into a formal business relationship with us. We will ask for your complete name, street address, and taxpayer ID number. We may also request corporate formation documents, or other forms of identification, to verify information provided.

Any prices or levels contained herein are preliminary and indicative only and do not represent bids or offers. These indications are provided solely for your information and consideration, are subject to change at any time without notice and are not intended as a solicitation with respect to the purchase or sale of any instrument. The information contained in this presentation may include results of analyses from a quantitative model which represent potential future events that may or may not be realized, and is not a complete analysis of every material fact representing any product. Any estimates included herein constitute our judgment as of the date hereof and are subject to change without any notice. We and/or our affiliates may make a market in these instruments for our customers and for our own account. Accordingly, we may have a position in any such instrument at any time.

Although this material may contain publicly available information about Citi corporate bond research, fixed income strategy or economic and market analysis, Citi policy (i) prohibits employees from offering, directly or indirectly, a favorable or negative research opinion or offering to change an opinion as consideration or inducement for the receipt of business or for compensation; and (ii) prohibits analysts from being compensated for specific recommendations or views contained in research reports. So as to reduce the potential for conflicts of interest, as well as to reduce any appearance of conflicts of interest, Citi has enacted policies and procedures designed to limit communications between its investment banking and research personnel to specifically prescribed circumstances.

© 2015 Citigroup Global Markets Inc. Member SIPC. All rights reserved. Citi and Citi and Arc Design are trademarks and service marks of Citigroup Inc. or its affiliates and are used and registered throughout the world.

Citi believes that sustainability is good business practice. We work closely with our clients, peer financial institutions, NGOs and other partners to finance solutions to climate change, develop industry standards, reduce our own environmental footprint, and engage with stakeholders to advance shared learning and solutions. Highlights of Citi's unique role in promoting sustainability include: (a) releasing in 2007 a Climate Change Position Statement, the first US financial institution to do so; (b) targeting \$50 billion over 10 years to address global climate change: includes significant increases in investment and financing of renewable energy, clean technology, and other carbon-emission reduction activities; (c) committing to an absolute reduction in GHG emissions of all Citi owned and leased properties around the world by 10% by 2011; (d) purchasing more than 234,000 MWh of carbon neutral power for our operations over the last three years; (e) establishing in 2008 the Carbon Principles; a framework for banks and their U.S. power clients to evaluate and address carbon risks in the financing of electric power projects; (f) producing equity research related to climate issues that helps to inform investors on risks and opportunities associated with the issue; and (g) engaging with a broad range of stakeholders on the issue of climate change to help advance understanding and solutions.

Citi works with its clients in greenhouse gas intensive industries to evaluate emerging risks from climate change and, where appropriate, to mitigate those risks.

efficiency, renewable energy and mitigation