LNG: Clean and Flexible

Ann Collins
GM, Gas Market Development
Shell
Marine LNG poised for growth

LNG fuelled vessels

- Tugs
- Ro-Ro cargo ships
- RoPax
- Other vessels*
- Oil/Chemical tankers
- Offshore supply ships
- General cargo ships
- Multi - gas tankers
- Cruise ships
- Crude oil tankers
- Container ships
- Car passenger ferries
- Car carriers
- Bulk carriers

Projections for LNG in Marine

Source: Shell LNG Outlook 2019 - Shell interpretation of DNV-GL & Woodmac

*Other vessels includes fishing vessels, dredgers, etc.
New countries choosing LNG for various benefits – example of Panama

- Replacing oil-fired power generation
- Complements renewable power generation
- Strategic location of Panama Canal offers opportunities for LNG bunkering

Source: Shell LNG Outlook 2019 - Shell interpretation of Woodmac Q4 2018 Data
Gas provides required flexibility for power generation

LNG complements wind and solar
Spain (Dec-2017)

Source: Shell LNG Outlook 2019 - Shell interpretation ENTSOG, REE, World Nuclear Association 2017 and 2018
LNG flexibility mitigates demand shocks and meets seasonal needs

Meeting heating demand in UK in 2018

Source: Shell LNG Outlook 2019 - Shell interpretation of National Grid, IHS Markit, Weather Channel 2018 data