WWF

SUMMARY

HK

2016

# NO MIDDLE ROAD

## CLIMATE CHANGE AND FINANCIAL RISK: THE GROWTH OF ELECTRIC VEHICLES AND THEIR IMPACT ON OIL

**Key conclusions of the report *No Middle Road*:**

- The cost of EVs is likely to fall, due to continued improvements in battery technology.
- We expect cost parity with internal combustion engine (ICE) vehicles in the mid-2020s.
- As a direct consequence of EV proliferation, 1 million b/d of crude oil could be displaced by the late 2020s.
- Facing the risk of holding a permanently impaired asset, rational oil producers would have no choice but to offload their oil reserves quickly.

**1.3m**
EVs ON THE ROAD IN 2015 GLOBALLY

**2025**
EVs WILL BE CHEAPER TO OWN

**1m b/d**
OF OIL DISPLACED IN CHINA IN LATE 2020s

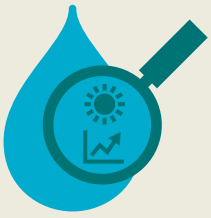
**25%**
OF EVs ARE FOUND IN CHINA


**2045**
100% PENETRATION IN CHINA

## RECOMMENDATIONS

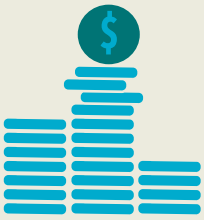
### POLICY

Establish a prudent carbon risk-exposure policy. Compared with their European counterparts, very few Asian asset owners have developed an explicit risk policy that sets forth their portfolios' maximum exposure to carbon-related assets. This is partially a function of the scarcity of publicly available environment, social and governance (ESG) disclosures.



### DE-RISK

There is an overwhelming case for a significant reduction in exposure to oil and oil-related assets. Our analysis in this report shows that prudent climate and investment policies are not necessarily in conflict.



### HEDGE

Construct a dynamic hedging strategy. The decarbonized index is effectively a "free option on carbon", allowing investors to substantially reduce their exposure to carbon risks while maintaining a very similar risk-reward profile to their benchmark index. This significant reduction in carbon intensity is due primarily to the fact that climate-related risks tend to be heavily concentrated in a small number of index constituents.