THE FINANCIAL SECTOR, COAL AND CLIMATE CHANGE: RISKS AND OPPORTUNITIES

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INTRODUCTION & BACKGROUND
Key issues facing the banking sector

The transition away from fossil fuels has two important elements for banks:

1. Structural change within the banks’ markets
   - traditional industries are being significantly transformed
   - new industries are emerging
   - geographically, regional markets are experiencing differential effects

2. The Regulatory framework is being updated
   - customers have to adapt to new regulations
   - banks themselves being more closely regulated
International agencies are grappling with the future

Banking issues are part of a broader global focus.

Noteworthy recent work includes:

- The **IMF’s** latest *World Economic Outlook* focused on macroeconomics issues associated with climate change.
- The **IEA** now stresses policy change scenarios.
- The **Financial Stability Board** has highlighted climate change risks for the financial sector.
Global focus follows the Paris conference

• The 2015 Paris Agreement\(^1\) was an historic event
• Signatories agreed to limit temperature rises to
  – less than 2°C; and to
  – pursue efforts for less than 1.5°C

• Emissions reductions targets to be determined individually by signatories
  – Australia has adopted a 26-28% target by 2030
    ○ CCA recommended a 40-60% reduction in emissions
  – Indonesia has a target of 29% by 2030
    ○ 41% with sufficient international support
Achieving Paris goals requires economic action

- Climate change is an economic problem
  - arises from pollution being ‘free’
- Policies to combat green house gas pollution include:
  - put a price on emissions
  - regulate polluting entities
  - subsidise non-polluting activities
- Australian experience shows policy consistency important
What are the main sources of emissions?

**Global Greenhouse Gas Emissions**

**By Sector 2013**

- **Energy** (72%)
- **Electricity and Heat** (31%)
- **Manufacturing and Construction** (12%)
- **Transportation** (15%)
- **Other Fuel Combustion** (9%)
- **Fugitive Emissions** (5%)
- **Agriculture** (11%)
- **Land-use Change and Forestry** (6%)
- **Waste** (3%)
- **Industrial Processes** (6%)

Source: Climate Analysis Indicator Tool, World Resources Institute, 2017

https://www.c2es.org/content/international-emissions/
FINANCIAL & ECONOMIC IMPLICATIONS: SOME BROAD OBSERVATIONS
New policies are driving structural change

Markets are anticipating/reacting to new policies:

• Mining industry undergoing substantial dislocation
  – for Banks: more lending risks for fossil fuels

• Property markets coming into focus
  – for Insurers: will no longer insure for sea-level rises

• Electricity generation switching away from coal
  – for Banks: renewables are new growth industries
Industry structural change: Electricity’s future?

Germany electricity supply: Hourly dispatch

* Flexible power technologies: Energy storage and gas generation
Rapid structural change increases bank risks

• Mark Carney highlighting climate change risks
  i. Physical risks – property damage; important for insurance
  ii. Liability risks – compensation for damage
  iii. Transition risks – falling asset values; stranded assets

• APRA went further
  – Directors of companies could be personally liable
  – Finance sector on notice: APRA is watching

• “Big Four” Aussie banks all now have climate policies
  – each major bank has ruled out funding the Adani mine
  – all are highlighting their low emissions credentials
FINANCIAL & ECONOMIC IMPLICATIONS: DRILLING DOWN
Coal outlook and implications: Big exporting countries
Global coal demand is forecast to fall

Global Coal Demand and Shares of Demand Under IEA Policy Scenarios

Global coal demand

Shares of primary energy


* CPS is Current Policy Scenario; NPS is New Policy; and SDS is Sustainable Energy Scenario
Falling renewables prices are reducing coal demand

Coal outlook: Financial markets implications

- for Australian banks, funding coal mines is risky
  - Adani mine in Queensland has been ruled out by the majors
- Investment funds also exiting coal investments
- Bank boards and executives must weigh personal risks
- As one project finance banker said to me recently
  "Project finance for coal mines just doesn’t stack up economically anymore...."
Electricity generation outlook: Banks won’t fund ‘clean coal' power generators

- Aust Government favours new ‘clean coal’ generators
- For banks, ‘clean coal’ looks very risky
- Some additional categories of risk include:
  - Supply
  - Off-take
  - Political
  - Reputational risks
No proven clean coal projects

• Clean coal project examples:
  – **Boundary Dam**, Canada, 2014 — Operational; reliability issues
  – **Petra Nova**, Texas, 2017 — “uneconomic”
  – **Kemper**, Mississippi, 2017 — $7.5bn; running on gas

• Government could direct fund non-commercial projects
  – But would face reputational and fiscal risks
FINANCIAL & ECONOMIC IMPLICATIONS: OPPORTUNITIES
Renewables: A growth sector for banks and investors

Renewable projects pipeline already substantial

Large-scale renewable energy projects under construction or committed

Total 5206 Megawatts $10,038m Investment 5470 Jobs

Coal Project pipeline dwindling

Source: Clean Energy Council
Banks are switching to ‘green’ activities
Funds managers are snapping up ‘green bonds’

Source: Climate bonds initiative, Green Bonds Highlights, 2017
Closing remarks

- Structural change always has winners and losers
- Governments, banks and investors all need to understand the financial and economic implications
- Banks need to measure and manage the risks
- And be flexible enough to act on the opportunities

“...financing clean energy is not only good for the environment, good for the planet, but good for business too “ ...

NAB Executive General Manager Capital Financing, Steve Lambert