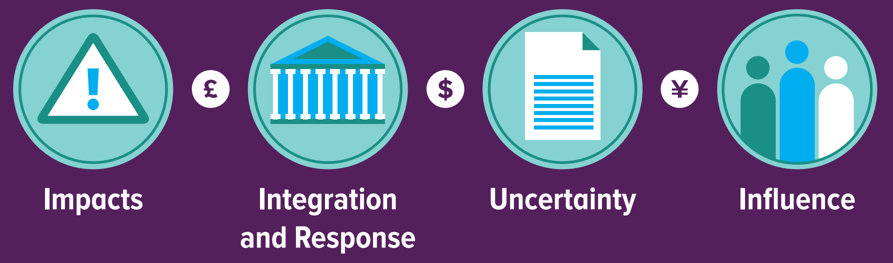
# Climate Change: Investors and Financial Institutions

Impacts of climate change can have significant effects on investments by introducing previously unforeseen risks. Policies to restrain climate change can also affect investments. However, opportunities are likely to open up in fields such as renewable energy and energy efficiency.




## Responding to Climate Change

Investors and financial institutions will continue to be exposed to downside risks as a result of climate change. Investment consequences may include dramatic reductions in the value of particular assets and, for banks, reductions in the creditworthiness and solvency of clients. However, they may also include new openings and opportunities.

## Impacts

**Physical risks and policy measures could have major impacts on investors and financial institutions**

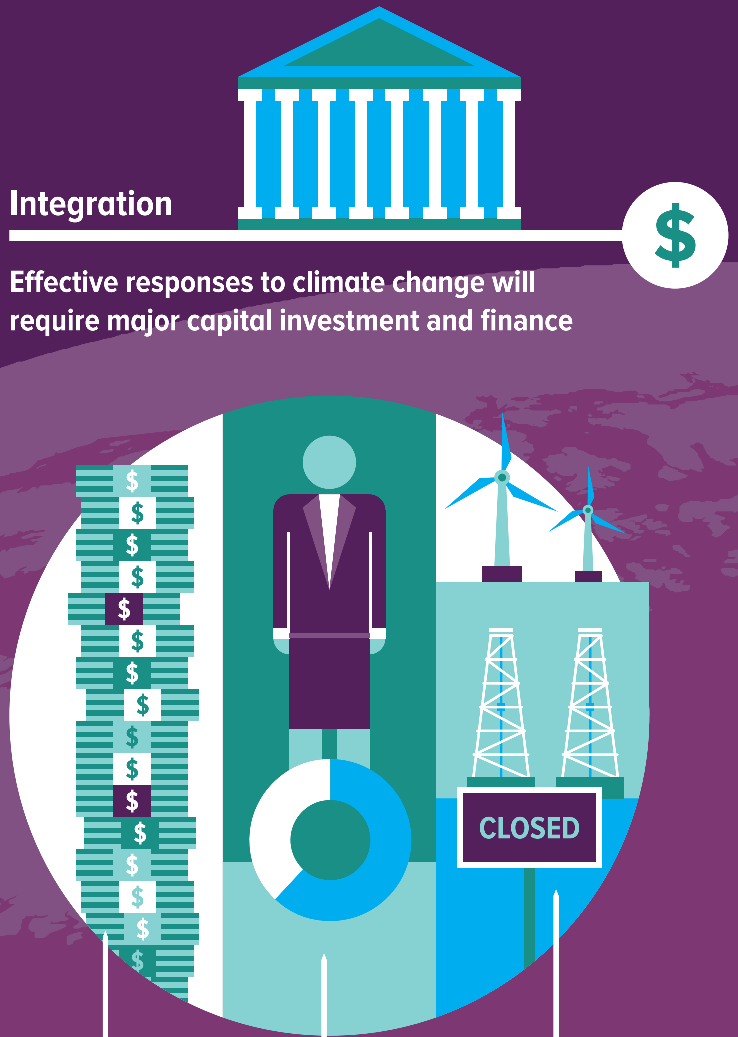
**Extreme Weather Events**
Between the 1950s and 1990s, the annual economic losses from large extreme events, such as floods and droughts, increased ten-fold. In the period 1990 to 1996 alone, there were 22 floods with losses exceeding USD 1 billion each.

**Stranded Assets**
Assets become stranded for a number of different reasons: they can be supplanted by greener alternatives or technological innovations, or in sectors experiencing change due to new regulations or resource constraints.

**Food Security**
Climate impacts on agriculture are expected to lead to higher prices and increased volatility in agricultural markets. Higher and more volatile prices may affect socio-political stability.

## Integration

**Effective responses to climate change will require major capital investment and finance**




**Scale of the Challenge**
To keep the global temperature increase below 2°C, additional investment required in the energy supply sector alone is estimated to be between USD 190 and 900 billion per year through to 2050.

**New Sources of Capital?**
USD 340 billion was invested in reducing global GHG emissions in 2011/12, with some 62% of this amount provided by the private sector.

**Changing Patterns of Investment**
The energy supply sector is likely to see a significant shift away from fossil fuels towards nuclear and low-carbon sources such as renewables. In 2012, renewables made up more than half of worldwide investment in the electricity sector.

## Uncertainty

**The specific investment made and the financing mobilised will depend on government policy**

**Policy Signals**
The amount of capital required and allocated for emissions reduction and in addressing the physical impacts of climate change will depend on the specific policy measures adopted.

**Macroeconomic Impacts**
There are significant challenges in estimating the global economic impacts from climate change – both in terms of the costs associated with the physical impacts and in terms of the cost of GHG emissions mitigation.

**Trade-offs**
Decoupling economic growth from GHG emissions will have profound implications for capital allocation decisions and risk-adjusted returns.

## Influence

**Investors' and financial institutions' decisions are a critical influence on society's response to climate change**

**Expectations**
Governments are likely to look to the private sector to provide much of the capital required to deliver significant reductions in GHG emissions and to respond to physical impacts of climate change.

**Dependencies**
Decisions made by private sector investors and financial institutions will have a major influence on how society responds to climate change.

**Investments**
The willingness of private investors and financial institutions to provide this capital will depend on the risk exposure of potential investments, including policy risk, and on the incentives that are provided.