

Climate Impact Comes From Action

Global Listed Infrastructure assets lie at the heart of global efforts to reduce carbon emissions. With half of our universe being in utilities, our investments can create a measurable impact alongside a financial return.

Whilst divestment strategies have a sound moral standing they do not drive change. Investing to create change is needed in order to reduce emissions over the long term.

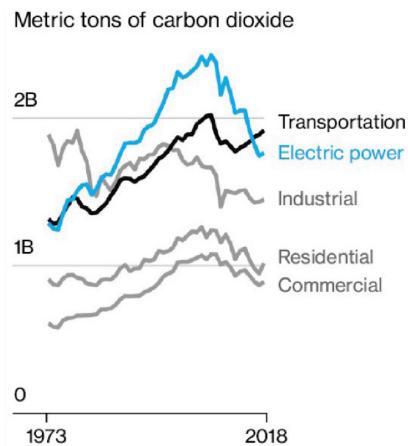
Developments within the electric power sector illustrate what lies in store for the transportation sector.

How the US electricity power generation market has changed

Over the last 11 years, carbon emissions from the US electricity sector have declined dramatically. This has been driven by (1) state based renewable energy targets, (2) renewable and natural gas-fired generation becoming cheaper than coal and more recently, (3) investors' behaviour – favouring companies with renewable power generation over those that are more reliant on coal.

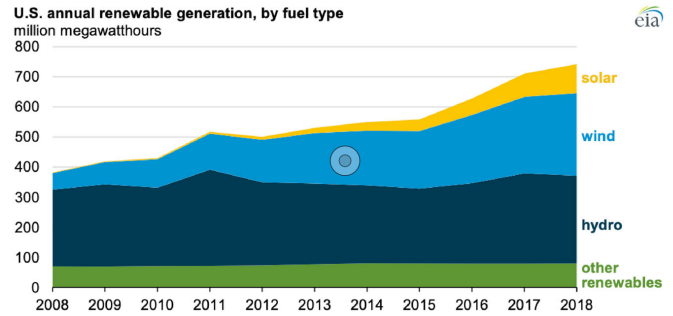
The US is in a unique position. Renewable generation has thrived as customer bills have remained flat, or even fallen. Plentiful supplies of cheap natural gas have provided bill headroom that utilities have quickly filled by spending on renewable growth and upgrading existing energy networks. This is proving to be a win-win-win situation for customers, state politicians and the environment.

U.S. Energy Emissions by Sector



Source: EIA.

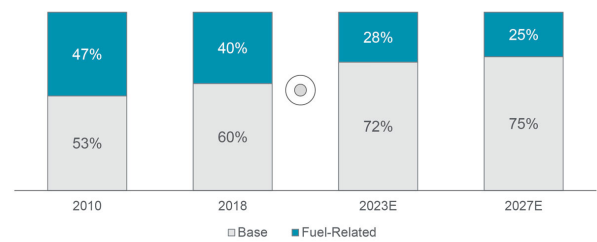
U.S. renewable electricity generation has doubled since 2008



Source: EIA.

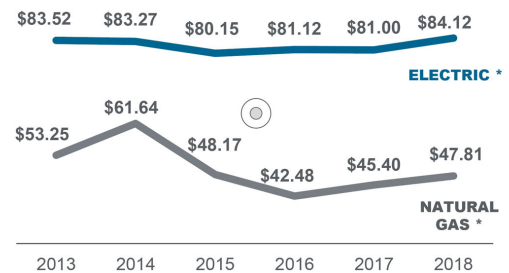
Composition of customer bills over time

LOWERING FUEL EXPENSE TO OFFSET CAPITAL INVESTMENT



Source: Xcel Energy.

DECLINING RESIDENTIAL BILLS



Source: Xcel Energy.

Whilst state-based renewable targets and declining renewables costs are not new, the behaviour of investors is something less explored and understood.

Divestment doesn't work

Divestment strategies, as employed by some institutions, focus on avoiding investments in fossil fuels. This can involve selling shares of companies that have fossil fuel exposure or screening out future investments.

Some socially responsible investors have undertaken divestment strategies to fulfil their moral obligations. Whilst the approach has its uses, I would argue that in the fight against climate change this strategy is flawed.

Firstly, the ultimate purpose behind a divestment strategy is to reduce emissions. It aims to do this by starving the company of capital. But in a world of cheap and free flowing capital, the reality is those shares are just sold to an investor who is agnostic to the impacts of climate change. As a result no emissions are reduced in the process.

Secondly, fossil fuel-based generation is rarely the sole activity of a utility. It is usually one part of a much bigger company and in some cases a relatively small component. Divesting the shares of such a company would deem its other activities null and void. Indeed NextEra Energy, the largest US wind operator, also owns and operates gas-fired power generation assets. Under this divestment strategy the benefits of their renewable roll-out would go unrewarded.

Thirdly, the intermittency of renewable generation has for the last decade needed to be combined with a peaking form of generation to ensure a truly reliable power supply. This peaking generation, in most cases, has been provided by gas. Hence it could be argued that if a divestment strategy prevented the build-out of gas generation, it would have had the unintended effect of impeding the build-out of renewable generation as well.

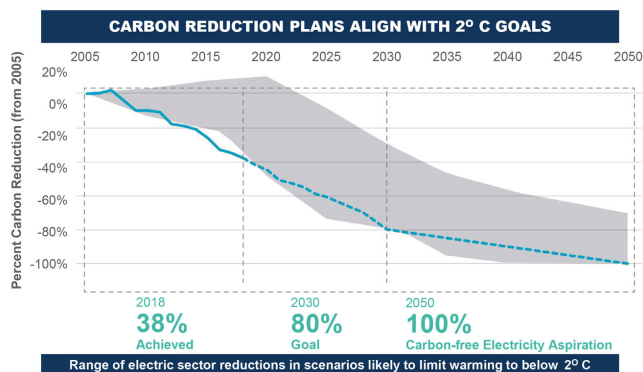
How to make a difference

Directing capital towards those companies that can have a positive environmental and social impact whilst also delivering strong financial returns is the way to drive change.

Many people focus on absolute levels of carbon emissions to determine whether a company's climate change credentials are good or bad.

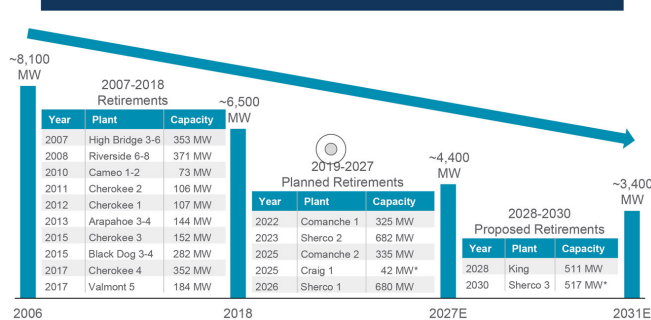
This completely misses the point. The key focus needs to be the reduction in emissions. The largest sub-sector within the global listed infrastructure universe, the electric power sector, is leading the way by reducing emissions. Companies within this space are doing this by shutting down coal plants and replacing that generation capacity with renewable energy. This is how we measure success.

Measuring carbon reduction



Source Xcel Energy.

DECLINING COAL RELIANCE ENABLES SIGNIFICANT CARBON REDUCTIONS



Source Xcel Energy.

This type of investing is also dynamic and nimble enough to evolve. For the last decade we have been targeting a reduction in the use of coal and promoting the use of renewables. Over the next decade I anticipate that we will be targeting a reduction in the use of gas and promoting the use of batteries. Today this transition is nascent as the technology is not at a stage to be used at utility scale deployment but it is only a matter of time till this changes. The automotive sector is making significant investment into batteries to meet their electric vehicle targets. As the cost curves come down we expect to see the size of batteries used in the utility space increase. In fact over the last two years the scale of batteries has already started to increase as shown in the table below.

Combined wind, solar, energy storage projects

Project	State	Partner	Capacity MW			Combined
			Wind	Solar	Storage	
Wilmot	Arizona	TEP	100	100	30	230
Arlington	California	KP	50	131	110	291
Wheatbridge	Oregon	PGE	300	50	30	380
Skeleton Creek	Oklahoma	WFEC	250	250	200	700

Source: NextEra Energy.

As electric vehicles (EVs) start to take market share from internal combustion engines we will see the emissions from the transportation sector decline. Utilities have a role to play in this through building out the infrastructure to support electric vehicle penetration and through using their regulatory relationships to talk about the benefits of decarbonising the transportation sector. We believe investors will reward those companies that can (1) use battery technology to back up renewable generation at scale and (2) promote electric vehicle infrastructure in their service territories.

Conclusion

Global Listed Infrastructure assets have a key part to play in effectively reducing global carbon emissions. We invest in the sectors that are driving the most change. We measure success through the rate of change.

Divestment strategies do not reduce emissions. We need to create change by directing capital to those companies that can reduce emissions over the long term.

Remember "The future belongs to the few of us still willing to get our hands dirty".

This material has been prepared and issued by First Sentier Investors (Australia) IM Ltd (ABN 89 114 194 311, AFSL 289017) (Author). The Author forms part of First Sentier Investors, a global asset management business. First Sentier Investors is ultimately owned by Mitsubishi UFJ Financial Group, Inc (MUFG), a global financial group.

This material is directed at persons who are professional, sophisticated or 'wholesale clients' (as defined under the Corporations Act 2001 (Cth) (Corporations Act)) and has not been prepared for and is not intended for persons who are 'retail clients' (as defined under the Corporations Act). This material contains general information only. It is not intended to provide you with financial product advice and does not take into account your objectives, financial situation or needs. Before making an investment decision you should consider, with a financial advisor, whether this information is appropriate in light of your investment needs, objectives and financial situation. Any opinions expressed in this material are the opinions of the Author only and are subject to change without notice. Such opinions are not a recommendation to hold, purchase or sell a particular financial product and may not include all of the information needed to make an investment decision in relation to such a financial product.

To the extent permitted by law, no liability is accepted by MUFG, the Author nor their affiliates for any loss or damage as a result of any reliance on this material. This material contains, or is based upon, information that the Author believes to be accurate and reliable, however neither the Author, MUFG, nor their respective affiliates offer any warranty that it contains no factual errors. No part of this material may be reproduced or transmitted in any form or by any means without the prior written consent of the Author.

In Australia, 'Colonial', 'CFS' and 'Colonial First State' are trade marks of Colonial Holding Company Limited and 'Colonial First State Investments' is a trade mark of the Bank and all of these trade marks are used by First Sentier Investors under licence.

Copyright © First Sentier Investors (Australia) Services Pty Limited 2019

All rights reserved.