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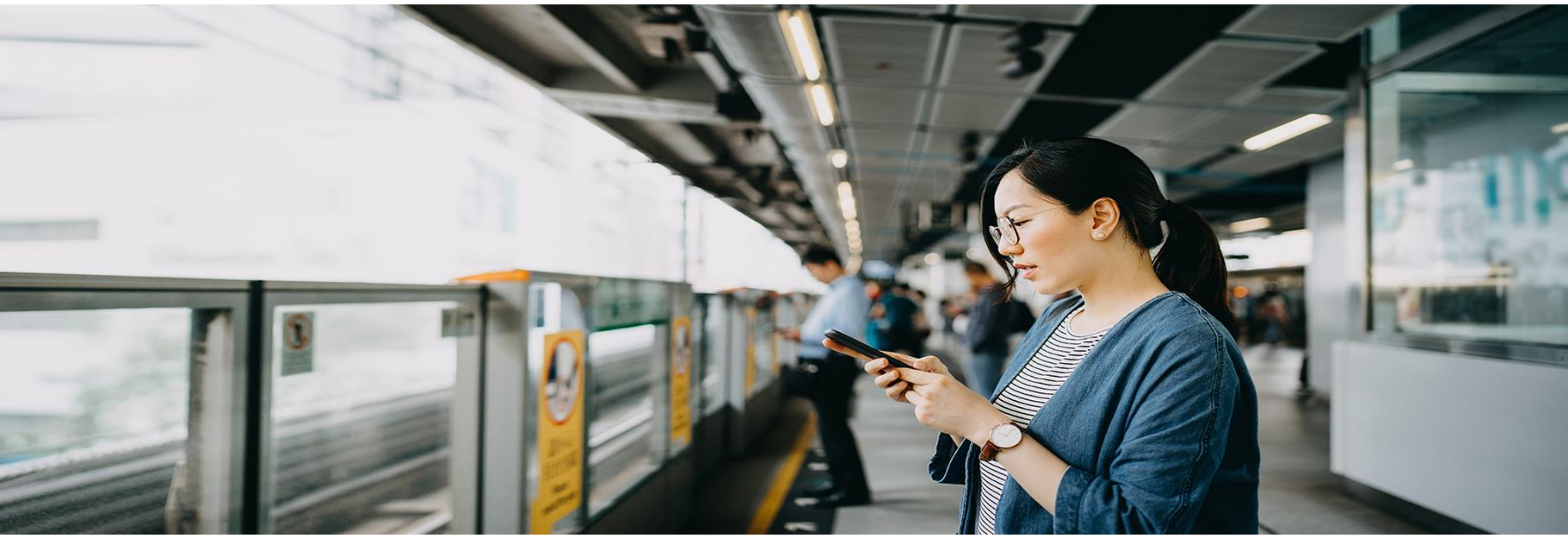
Responsible Investing

Putting ESG to work:
A case study in the telecoms sector



By AXA IM Head of ESG Research Virginie Derue

The global policy and regulatory environment is changing fast, pushing companies towards more sustainable practices and encouraging investors to change too. Environmental, social and governance (ESG) factors have become a fundamental route to assess corporate health. But as more companies seek to address ESG, how can investors make meaningful assessments about their relative progress?

At AXA IM we have more than 20 years' experience of building responsible investment strategies[1] and have set up detailed methods that inform and guide our fixed income managers.

In some areas that is straightforward: investments in energy companies require deep knowledge of how climate change and associated regulations will affect business models. But we also see ESG having powerful effects in sectors that at first glance do not lie on the front line.

This article will examine how AXA IM analysts handle certain ESG issues, challenges and opportunities in the telecommunications sector, and how their work can potentially bring value to investors.

Making ESG sector specific

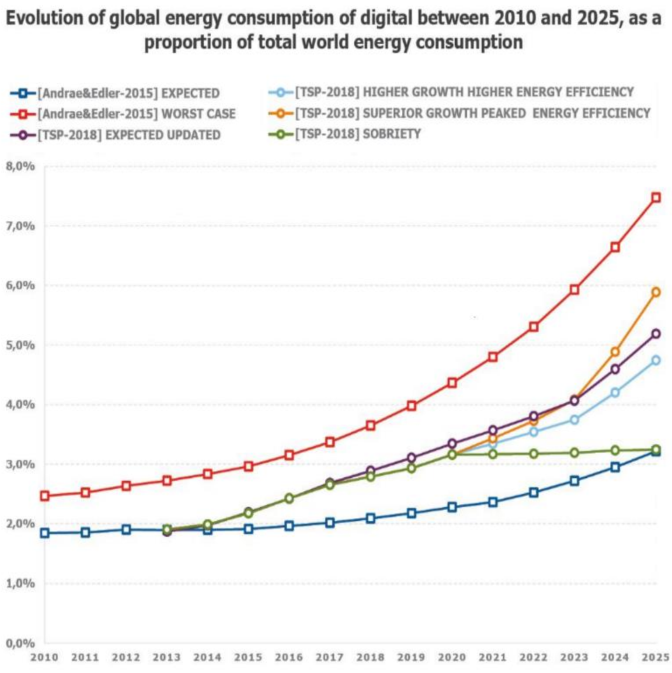
Telecoms companies face the same problem as many others when it comes to ESG analysis – there is a huge range of potential inputs and criteria that make up the full picture, but harmonization of data across players, and how they report it, remains quite low. Our first step is to look top down at the fundamental drivers and specificities of the sector in question, and then to examine how those apply to key ESG issues.

One example of this in telecoms is in the exponential rise in connectivity needs and data traffic, that will be further exacerbated by the rollout of 5G. According to GSMA, the

[1] AXA IM was given its first first RI mandate in 1998 with the goal of supporting sustainable job creation in France.

mobile communications industry association, the 5G era could result in a potential rise in traffic data of up to 1,000 times. Factoring in the infrastructure to cope with it, this could lead to the consumption of two to three times as much energy[2]. According to France-based think tank The Shift Project and depending on different assumptions for traffic growth and energy efficiency, the digital industry could emit up to 5% to 6% of the world's carbon emissions by 2025, or even more in certain scenarios (see chart below).

Figure 1: Evolution of global energy consumption of digital



[Source: *The Shift Project 2018*, as of Andrae & Edler 2015]

One mitigating factor is that the telecoms sector is considered to be 'enabling' other industries to reduce their CO2 emissions through digitalization. However, the net effect remains difficult to gauge, which explains the lingering questions over the sector's net zero transition commitments. Indeed, the CO2 emission reductions required are currently calculated on an absolute basis.

As for the social pillar, the focus on [data privacy and security] is crucial and likely to become more so, meaning that in-depth analysis of individual companies should offer a knowledge advantage. By contrast, the governance pillar is probably easier to assess, and definitely less sector specific.

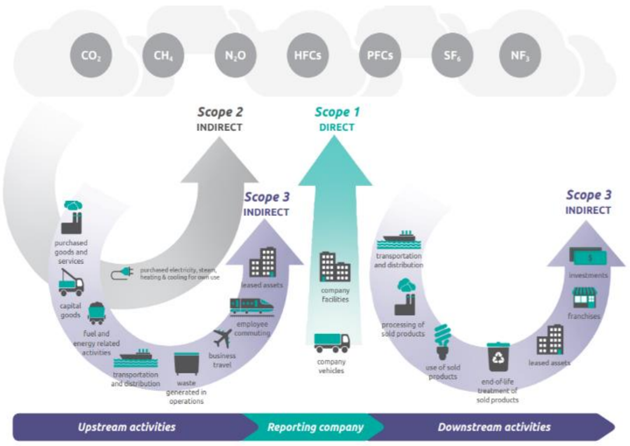
In general, we focus on areas where there do exist comparable, harmonized and measurable key performance indicators (KPIs). These can be quantitative or qualitative, and we include our own considered judgment related management teams' track record on delivering against targets.

Environment: What KPIs?

Major European players in the telecoms industry have set net-zero carbon commitments for 2040-2050[3], and have become more and more vocal about energy efficiency (often expressed as a ratio of energy consumption per data volume).

However significant those energy efficiencies from fiber networks might be though, if we include end-users through so-called Scope 3 emissions (see graphic below), the result can only be an increase in absolute CO2 emissions going forward.

Figure 2: Scope 1,2 and 3 emissions



Source: World Resources Institute, GreenHouse Gas Protocol

This is where that 'enablement' factor comes in, by measuring the degree to which telecom operators enable customers to reduce CO2 emissions through digitalization. These avoided CO2 emissions (also called Scope 4 emissions)

[2] GSM Association
[3] AXA IM data

will benefit operators through deduction/abatement from their own emissions.

From a responsible investment perspective, it should be an environment where the most innovative and effective companies can stand out as top ESG performers, well placed for the transition economy.

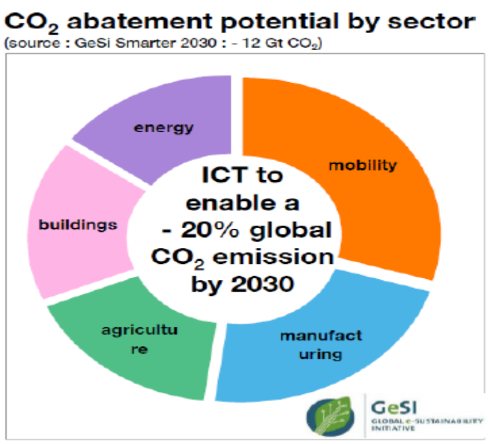
Going forward, our assessment over the different operators' environmental performance will necessarily evolve, taking into account:

- Harmonized Scope 3 emissions
- Harmonized Scope 4 or CO2 abatements
- Enhanced clarity around data center energy use, which today accounts for 2% of the world's electricity, and is expected to rise to 10% by 2030 according to financial technology firm HP Enterprise.

Clearly, the introduction of the enabling factor of CO2 abatements, is a crucial point in the transition to net zero commitments.

The methodology for abatement calculation is being developed by the Global Enabling Sustainability Initiative (GeSI) and considers that the ICT sector should enable a 20% reduction in global CO2 emissions by 2030, mostly driven by increased digitalization in the mobility, manufacturing, agriculture and buildings sectors, as shown in the graph below:

Figure 3: CO2 Abatement Potential by Sector



Source: GeSI

If endorsed by the ICT sector, GeSI methodology could potentially lead to holistic, harmonized and measurable key performance indicators (KPIs) on the sector's CO2 footprint.

The lesson for investors here is to remain aware and responsive. It is a challenge to have a clear view on the net combined impact of all these coming effects, and so it is vital that we keep a close watch to ensure a pragmatic analysis of each company's relative environmental impact.

For the moment, our analysis of the environment pillar in the Telecoms sector focuses on three KPIs, based on measurability and comparability:

1. Scope 1 and 2 CO2 emissions rebased by group revenues
2. Current share of electricity from renewables
3. Horizon for 100% renewables

We believe that these fundamental datapoints give us a clear view of telecoms companies' relative performance in the environmental pillar.

We expect to include Scope 3 and Scope 4 emissions when available on a comparable basis, as well as data on waste recycled (the production of a smartphone accounts for the bulk of its carbon footprint).

Social climbers

The 'digital divide' sparks lively debate among telecoms operators – and their critics. The idea that access to telecommunications is a crucial part of modern life is unarguable, but the impetus and approaches to securing wide access differ markedly between small and large countries, and between those with different regulatory histories or policy imperatives.

Operators need to invest heavily to establish their networks but have often been constrained on the pricing side by governments promoting competition and low consumer prices. This means we need to moderate the weight given to this aspect of ESG in our analysis – and this is emphasized as we move into the 5G era by the strict coverage obligations set out for operators.

We can, however, draw practical conclusions about a company's performance on the Social pillar from its record on significant workforce reductions or the existence of severe controversies, whether employee-related or in the supply-chain. Analysis of these factors can help to mark out the best social performers for our portfolio managers and this may help them to avoid exposure to operational, reputational and financial risks.

It is a similar story for social and instability risks, most often linked to exposure to emerging markets or politically unstable regions. Here, we add our own insights to those from MSCI or Sustainalytics.

Data security and privacy is a burgeoning topic of concern. And again, it is a difficult area in terms of assessing and comparing practices from operator to operator. Our solution here is to use MSCI's established criteria for the quality of practices in place: right of access, rectification and data deletion for customers, existence of external and independent audits, board-level oversight and independence. All these factors then feed into our assessment process. Looking more broadly, we also draw on insights into recent controversies and data breaches, as provided by Sustainalytics or MSCI.

Clearly, controversies are a business-critical aspect with a direct relevance to enterprise value, and we integrate any significant events in our assessment on the different KPIs of the Social pillar, as seen in the anonymized table below. A similar process is repeated for each pillar:

Operator	Workforce Evolution/ Employee Controversies	Corruption & Instability Risks	Data Privacy & Security	**Social Assessment**
Operator 1	Below peers	In line	In line	**Below peers**
Operator 2	Below peers	In line	Above peers	**Below peers**
Operator 3	N/A	In line	In line	**In line**
Operator 4	N/A	In line	Above peers	**Above peers**
Etc.				

Across the ESG pillars, if we can deliver portfolio managers with a deep understanding of the tangible risks in play, then we believe we should be able to offer an advantage for our clients.

Governance

Corporate governance is at the heart of ESG. When executives take active responsibility for the oversight and direction of these key aspects of their business, be they risks or opportunities, then we believe companies can perform better. There is perhaps less that is specifically related to the telecoms sector in this ESG pillar, but governance quality remains a crucial foundation for achieving success in the other two.

Therefore, we review governance across three central themes: Board oversight; audit and risk oversight; and management quality and incentives. Our assessment is then drawn from important sub-criteria within those themes, which include the separation of roles at the CEO/Chair level, gender diversity on the board, and board independence, among others.

Into this mix comes quantitative data on aspects such as pay, or qualitative views on things like internal controls on each operator. These are then compared to peers in the sector, and for the latter might come from third parties such as Institutional Shareholder Services (ISS) or Sustainalytics. Here also, the integration of severe controversies is a key component of our assessment.

We deem it an important aspiration that ESG-linked KPIs are included in top executive compensation plans. We believe this can demonstrate the credibility of the board on sustainability issues – it will help to put skin in the game. It is therefore our goal to fully integrate this into in our governance KPIs as soon as we are happy with the levels of transparency available, and we support moves by regulators to encourage this change.

Pulling it all together

The analysis described above allows us to make our assessment on the individual environmental, social and governance pillars, further complemented by insight into significant controversies.

We pull them all together as shown in the anonymized table below, to make our global ESG assessment on each operator and give an understanding of how each of them is performing relative to peers.

Operator	E	S	G	Highest Controversy Level	Global ESG Assessment
Operator 1	Above peers	Below peers	In line	3	In line
Operator 2	In line	Below peers	Below peers	3	Below peers
Operator 3	Above peers	In line	Below peers	2	In line
Operator 4	Above peers	In line	Above peers	2	Above peers
Etc…					

This simple tool lies at the end of a complex road. It draws together a huge sweep of data, analysis and experience to give a practical assessment of E, S and G set against KPIs appropriate for each pillar, within each sector.

We believe that the depth of our experience in analyzing and engaging with issuers – allied with third-party data – allows us to form a rounded, holistic view that acknowledges not only corporate targets, but also management teams' ability to hit those targets. This is another area where we think AXA IM can deliver added value, and ultimately create a useful, robust investment tool for a new era in the industry.

Ahead of the curve

The telecoms sector, in common with other industries, presents difficulties for investors seeking to truly grasp how companies are meeting ESG challenges. However, we believe that by examining in detail the distinct characteristics of each pillar and how it relates to sector specifics, investors can better understand which companies are well positioned from an overall ESG perspective.

By choosing the right KPIs, gathering the right data and deploying a depth of experience we believe we are able to put a valuable tool in the hands of AXA IM's active managers. Their task is then to seek out issuers among sector leaders and also from those showing progress through credible strategies. To assist in that, we operators' trends on ESG factors (improving, stable or deteriorating), providing a more forward-looking approach.

In short, our goal is to keep clients ahead of the regulatory and policy curve, to protect portfolios from ESG risks and reduce the potential effects of downgrades or impairments. There is no easy way to do that. For each sector, investors must carefully tailor and monitor their ESG work if they are to truly build more resilient fixed income strategies long into the future.