

Corporate

 Current price **0.675p**

 Sector **Alternative Energy**

 Code **AEG.L**

 AIM **AIM**

Share Performance



Source: Thomson Reuters, Allenby Capital

Share Data

 Market Cap (£m) **26.3**

 Shares in issue (m) **3,902.1**

| | | |
|----------|--------------|--------------|
| 52 weeks | High | Low |
| | 1.75p | 0.39p |

 Financial year end **December**

Source: Company Data, Allenby Capital

Key Shareholders

| | |
|-----------------------------|--------|
| Gravendonck Prvt Foundation | 24.55% |
|-----------------------------|--------|

| | |
|---------------------------|--------|
| Lombard Odier AM (Europe) | 12.30% |
|---------------------------|--------|

| | |
|-----------------------|--------|
| Premier Fund Managers | 10.20% |
|-----------------------|--------|

| | |
|----------------------------|-------|
| AXA Investment Managers UK | 4.61% |
|----------------------------|-------|

Source: Company Data, Allenby Capital

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Active Energy Group plc (AEG.L)

CoalSwitch™ production to ramp up in 2021

Results from Active Energy Group (AEG) are very much historic, in that the revenues generated in 2020 are derived largely from lumber activities which do not form the core of the Group's future business plans and are either in the process of being closed down or under review. Equally, the capital base from which the Group operated during 2020 has fundamentally changed with the elimination of all Convertible Loan Notes in February 2021. Going forward, the Group's strategy is focused on exploiting and monetising its patented renewable fuel technology CoalSwitch™, initial orders for which are currently being delivered to PacifiCorp. We see 2021 as being a transformational year for AEG as demand for CoalSwitch™ increases and the Group invests further in CoalSwitch™ production facilities.

- Revenues primarily generated from lumber activities** – In the year to December 2020, AEG reported revenues of US\$1.8m (2019: US\$1.9m), US\$1.5m (2019: zero) of which were generated from its lumber activities at its Lumberton facility in North Carolina. Revenues in 2019, were largely attributable to fees received from the licensing of its CoalSwitch™ technology, such fees being absent in 2020.
- Losses enlarged by impairments charges** - Statutory pre-tax losses amounted to US\$9.0m (2019: US\$3.3m) but were stated after non-cash impairment charges of US\$4.8m and finance charges of US\$1.3m. On an underlying basis (excluding exceptional costs and share based payments) we estimate the pre-tax loss to be US\$4.2m. This resulted in a net liability on the balance sheet of US\$6.7m but which included £18.4m (US\$12.9m) of Convertible Loan Notes all of which have since been converted, redeemed, or cancelled.
- Future focus on CoalSwitch™ production** – With one CoalSwitch™ reference plant already producing next generation fuel and a second awaiting final permitting, AEG's focus and resources have moved squarely to exploiting its CoalSwitch™ technology. Lumber activities consisting of saw log exports from Lumberton have been closed and the remaining sawmill activities are under review. In addition, timber-cutting licences in Ukraine and Newfoundland are not deemed core activities and an impairment charge has been taken as noted above.
- CoalSwitch™ product now being shipped to PacifiCorp** – AEG is currently in the process of satisfying PacifiCorp's order for 900 tons of CoalSwitch™ from its JV plant in Ashland, Maine. The initial production permit allows the plant to produce 1,000 tons by no later than 31 July but it is anticipated that a permit to increase production capacity to 35,000 tonnes pa (5tph) will be promptly approved.
- Forecasts** – Given the shift in strategic focus and the initial delivery of CoalSwitch™ for testing it is not possible to offer meaningful forecasts at this stage. However, we are encouraged by the significant global interest in the technology both in terms of demand for the CoalSwitch™ product and for potential license agreements. In addition, the recent G7 agreement to adopt much stricter measures on coal-fired power stations as part of the battle against climate change suggests that CoalSwitch™ is pushing on open doors.

Year End:

| (US\$m) | 2020A | 2020A | 2021E | 2022E |
|----------------------|--------|--|-------|-------|
| REVENUE | 1.8 | Forecasts under review | | |
| ADJ. EBITDA | (2.3) | | | |
| ADJ. (L)/PBT | (4.2) | | | |
| ADJUSTED EPS (cents) | (0.26) | | | |
| NET (DEBT)/CASH | (21.1) | Note: Post balance sheet restructuring eliminated all CLNs | | |

Source: Active Energy Group plc; Allenby Capital. Allenby Capital act as joint broker to Active Energy Group plc.

Please refer to the last page of this communication for all required disclosures and risk warnings.

Full year results

Activities

AEG is a renewable energy company focused on the production and development of next generation biomass products that have the potential to transform the traditional coal fired-power industry and the existing renewable biomass industry.

The Company has developed a proprietary technology which transforms waste biomass material into high-value renewable fuels. Its patented product, CoalSwitch™, is a leading drop-in renewable fuel that can be co-fired with coal, completely replace coal as an alternative feedstock without requiring significant plant modifications or replace existing biomass feedstock resources.

Active Energy Group's immediate strategic focus is the production and commercialisation of CoalSwitch™ and further CoalSwitch™ fuel blends that utilise other waste wood and residual materials.

Results summary

Investors should be aware that the results for 202 are not representative of the Group as it is now constituted. We would make the important point that the lumber activities have either been exited during 2021 or are under review, therefore the contribution from this activity will be significantly lower than that generated in 2020.

EXHIBIT 1: 2020 FINAL RESULTS SUMMARY

| | 2020 | % change | 2019 |
|--|--------------------|----------|--------------------|
| | US\$ | | US\$ |
| P&L | | | |
| Revenue | 1,810,206 | -4.5% | 1,895,972 |
| Gross profit | -1,122,864 | | 1,895,972 |
| GP margin | -62.0% | | 100.0% |
| Admin costs (before exceptionals, D&A and share based charges) | -1,189,260 | -45.8% | -2,193,577 |
| Underlying EBITDA | -2,312,124 | | -297,605 |
| D&A | -497,652 | | -217,046 |
| Underlying operating loss | -2,809,776 | 446.0% | -514,651 |
| Finance (costs)/income | -1,347,230 | -45.3% | -2,461,376 |
| Underlying pre-tax loss | -4,157,006 | 39.7% | -2,976,027 |
| Tax | 214,176 | -75.5% | 874,655 |
| Post-tax loss | -3,942,830 | 87.6% | -2,101,372 |
| EPS (p) | -0.57 | 171.4% | -0.21 |
| Cash Flow | | | |
| Operating cash flow before working capital | -2,490,046 | | 1,274,143 |
| Net working capital movement | 1,192,020 | 196.8% | 401,688 |
| Net cash flow from operating activities | -1,298,026 | | 1,675,831 |
| Net cash flow from investing activities | -1,400,932 | -26.8% | -1,913,141 |
| Net cash flow from financing activities | 3,301,258 | 880.1% | 336,831 |
| Net increase/(decrease) in cash | 602,300 | 505.2% | 99,521 |
| Cash at end of year | 999,621 | 151.6% | 397,323 |
| Balance Sheet | | | |
| Non-current assets | 16,633,977 | -16.3% | 19,882,848 |
| Current assets | 1,507,892 | -2.3% | 1,544,138 |
| Total assets | 18,141,869 | -15.3% | 21,426,986 |
| Current liabilities | -2,400,320 | -4.0% | -2,500,079 |
| Non-current liabilities | -22,458,107 | 21.0% | -18,555,048 |
| Total liabilities | -24,858,427 | 18.1% | -21,055,127 |
| Net current assets/(liabilities) | -892,428 | -6.6% | -955,941 |
| Net assets/(liabilities) | -6,716,558 | | 371,859 |

Source: AEG

The summary P&L above shows the underlying position excluding one-off costs associated with the impairment charge relating to the timber-cutting licenses in Ukraine and Newfoundland and goodwill arising on the RLS acquisition of \$4.2m and \$0.6m respectively and share based charges of \$0.05m. We would also note that following the elimination of all CLNs in February 2021, the interest charge of \$1.3m taken in 2020 will be substantially reduced in 2021.

Revenue in 2020 was generated primarily from the sale of lumber and given that this activity will be significantly reduced in 2021 we expect to see revenue generation focused on the production and sale of CoalSwitch™ together with licensing income which we anticipate resuming with the onset of CoalSwitch™ production.

The 2020 summary cash flow reflects funds raised of \$1.75m from the issue of equity and the proceeds of loans, resulting in cash at the year-end of \$1m and net debt of \$21.1m. In 2021 to date, AEG has raised a total of £7m gross and restructured its CLN resulting in an elimination of all CLNs, thus allowing the Company to progress and accelerate its business plans for CoalSwitch™ at both Lumberton and Ashland. The securities underpinning the CLN's have also been removed.

The 2020 balance sheet shows total net liabilities of \$6.7m (2019: assets of \$0.4m) reflecting the intangible asset impairment noted above and the £18.4m of CLNs which have since been eliminated with the result that the Group is now in a net asset position of \$22m.

Segmental analysis of revenue

| EXHIBIT 2: SEGMENTATION OF REVENUE | | | |
|------------------------------------|----------------|------------------|------------------|
| Years to December 2020 | H1 | H2 | Year |
| | US\$ | US\$ | US\$ |
| Wood processing & export | 382,659 | 1,109,076 | 1,491,735 |
| Forestry & Natural resources | 0 | 0 | 0 |
| CoalSwitch™ | 0 | 0 | 0 |
| Rental income | 117,234 | 201,237 | 318,471 |
| Total | 499,893 | 1,310,313 | 1,810,206 |

| Years to December 2019 | H1 | H2 | Year |
|------------------------------|----------------|------------------|------------------|
| | US\$ | US\$ | US\$ |
| Wood processing & export | 0 | 0 | 0 |
| Forestry & Natural resources | 0 | 0 | 0 |
| CoalSwitch™ | 99,830 | 1,617,846 | 1,717,676 |
| Rental income | 39,772 | 138,524 | 178,296 |
| Total | 139,602 | 1,756,370 | 1,895,972 |

Source: AEG

As shown in Exhibit 2 above, the majority of revenue was generated from AEG's lumber activities in 2020 whereas in 2019 this operation had yet to commence. In addition, 2019 saw a contribution from the CoalSwitch™ segment of \$1.7m which related to the licensing of the CoalSwitch™ technology to a third party.

In 2021, we expect to see the first revenues from the sale of CoalSwitch™ product, initially from the PacifiCorp order and a strategic reduction in revenues from the Lumber activities as these are either exited or reduced in scope.

We would also expect to see the current interest in CoalSwitch™ from prospective commercial customers and partners converted into firm orders which we assume would be satisfied from the JV plant at Ashland (assuming a new operating permit is received) and Lumberton (assuming the amended permit is received).

Operations - CoalSwitch™

Before discussing the progress that CoalSwitch™ has made in 2020, it may be worth revisiting what exactly CoalSwitch™ is and how it is differentiated from conventional fossil fuels and other biomass derived offerings on the market.

What is CoalSwitch™ and where does it sit in the market?

CoalSwitch™ is a drop-in 2nd generation pelletised biomass fuel that can directly replace coal or traditional white wood pellets. It can also be co-fired at high percentages with coal in industrial power plants or replace white pellet and biomass in biomass-fired power plants without requiring any furnace, logistics, handling, or storage modifications.

As well as CoalSwitch™, the development of alternative biomass fuels is ongoing utilising various feedstocks resulting in new novel fuels with specific properties. These developments are being conducted both within the Company’s ongoing internal product research and development runway and also in direct response to customer requests. This could lead to additions to the Group’s already extensive IP portfolio.

EXHIBIT 3: COALSWITCH™ PRODUCTION PHOTOS (w/c 7 June 2021)



Source: AEG

Most current fuels are distilled from crude oil or obtained from natural gas pumped from limited underground reserves or mined from coal. However, coal reserves are a finite and non-renewable resource, after they are burnt it is impossible for them to be recycled back into a useful energy source.

In addition, burning coal produces pollutants. Coal has inorganic impurities associated with its formation underground over millions of years. The inorganic impurities are not combustible, appear in the ash after combustion and contribute to air pollution as the fly ash particulate material is ejected into the atmosphere following combustion. Coal also contains impurities such as sulphur and trace elements (including mercury, germanium, arsenic, and uranium). Burning coal oxidises these compounds releasing oxides of sulphur which are notorious contributors to acid rain.

Nevertheless, there are still around 12,753 coal-fuelled power stations worldwide producing 37 billion tonnes of CO₂ emissions each year¹. Therefore, governments and industry are continuously seeking more effective, environmentally safe, carbon neutral fuels to replace fossil fuels and biomass has been an obvious alternative.

To date the most common biomass replacement for existing coal-fired plants has been the ubiquitous white wood pellet. Some utilities, like DRAX in the UK, have invested billions of dollars to retrofit their coal fired power plants to accommodate white pellets, however, the cost of retrofitting coal plants has been substantial, approaching \$1,000 per kilowatt.

The cost of white pellets is also quite high, given that they must be produced from the highest quality wood to meet the very strict fuel specifications imposed by the utilities. There are also further drawbacks in using these products as compared to coal, in essence:

- These pellets are typically expensive to transport long distances because of much lower bulk density
- They typically have a substantially lower calorific value than coal
- They contain salts and minerals that can damage power plant furnaces
- Coal plant fuel handling systems and furnaces can require major, costly retrofits to accommodate white-pellet fuels
- They can require special storage facilities to protect them from the elements and high humidity
- The feedstocks for biomass-derived fuels are expensive.

Despite these obvious drawbacks, and as noted earlier, some utilities such as Drax have made huge financial commitments to switching to biomass-derived fuels. Millions of tonnes of white wood pellets are shipped primarily from the east coast of the US annually to Drax. Similarly, other utilities world-wide have either made the switch to wood pellets (all or in part), or plan to do so over the next several years. We note that aside from several European countries, Japan and South Korea are becoming increasingly large users of biomass-derived fuels and it is believed that the US will also become an increasingly significant market over the next five years.

Coal plant owners can continue to invest in new controls equipment to satisfy increasingly stringent emissions requirements, but no practical technology exists that will allow coal plants to reduce their carbon footprints. Switching from coal to a typical biomass-derived fuel (all or in part) will allow the plant operator to reduce the plant's carbon footprint, but not without incurring huge capital costs and maintenance challenges.

Conversely, CoalSwitch™ is not a typical biomass-derived fuel. In fact, CoalSwitch™ is unlike any other biomass-derived fuel on the market. Initial tests showed that:

- It has a bulk density 46% higher than white wood pellets,
- It has an energy density higher than white wood pellets, and on a par with most coal, depending on the type of feedstock used.
- Because of CoalSwitch's™ substantially higher energy and bulk densities, shippers can transport on average 65% more GJ in the hold of a ship than the highest quality white wood pellets

¹ FutureMetrics

- CoalSwitch™ removes essentially all soluble minerals from the feedstock and will not cause fouling or slagging in a utility furnace
- The transition from Coal to CoalSwitch™ is entirely seamless. No plant retrofits are required to burn CoalSwitch™
- CoalSwitch™ is hydrophobic. It does not require any special storage facilities. A CoalSwitch™ pellet will not absorb more than 3.5% moisture. In a humid environment, a white wood pellet will absorb moisture until it disintegrates.
- CoalSwitch™ is an essentially sulphur-free, carbon neutral alternative that can be either blended with coal at the conveyor or supplant coal entirely.

In summary, CoalSwitch™ is the first true drop-in replacement for coal and offers much better thermal properties either equal to or better than coal, as can be seen in Exhibit 4.

EXHIBIT 4: COMPETITOR BIOMASS ANALYSIS

| | Coal | White pellets | | CoalSwitch™ |
|-----------------------|--------|---------------|---------|-------------|
| | | Conventional | Torried | |
| BTU | 11,200 | 7,308 | 10,300 | 10,200 |
| Calorific value MJ/Kg | 23.6 | 17 | 24 | 23 |
| EMC % | 9.5 | 25 | 13 | 3 |
| ASH % | 8.5 | 3 | > 5 | < 1 |
| Bulk density Kg/m3 | > 800 | 500 | < 400 | > 900 |

Source: AEG

Coal fired power plants - the most significant contributor to climate change

CoalSwitch™, if it lives up to its promise and generates sufficient interest from power plant operators and utilities, could make a significant difference to the reduction in the use of coal and a consequent reduction in associated carbon emissions.

Currently, one third of all carbon emissions come from burning coal, making it the single largest contributor to climate change and although in many parts of the world, coal-fired power plants are being retired, coal still generates nearly 40% of the world’s electricity, close to its highest share in decades.

The number of coal-fired power stations due to be retired is increasing but the retirement process can take many years to be effected. In the meantime utilising CoalSwitch™ as a coal substitute or co-fired with coal could help reduce coal usage with no detriment to the overall calorific value of the substitute fuel.

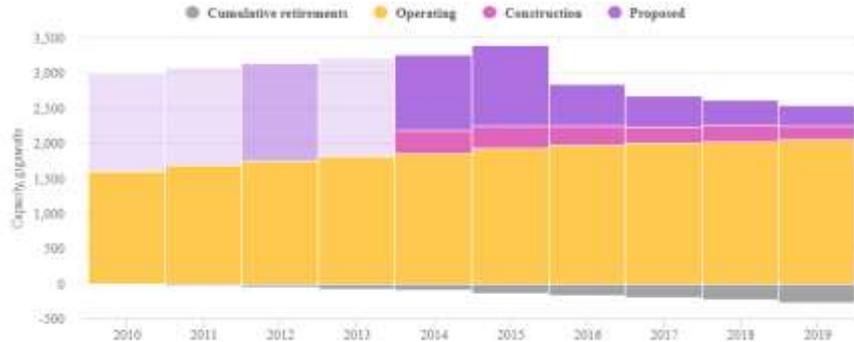
There are now 80 countries using coal power, up from 66 in 2000 with a further 13 planning to join the club, notably Egypt and the United Arab Emirates, though this is down from 16 last year. All unabated coal would have to close by 2040 to stay “well below” 2C, according to the International Energy Agency (IEA). This would mean closing 100GW of coal capacity every year for 20 years, or roughly one coal unit every day until 2040.

For the more ambitious 1.5C limit, global coal use for all purposes would need to fall by around 80% this decade, according to Carbon Brief analysis of pathways gathered by the Intergovernmental Panel on Climate Change (IPCC). This would be equivalent to closing every coal plant in the world.²

² Carbon Brief: <https://www.carbonbrief.org/mapped-worlds-coal-power-plants>

This bleak outlook for the climate is tempered by signs of rapid change. Exhibit 5 below illustrates that the pipeline of plants under construction (pink) or proposed (purple) has shrunk by two-thirds since 2015. Retirements (grey) are also accelerating, reaching a cumulative 268GW between 2010 and 2019.

EXHIBIT 5: COAL-FIRED POWER PLANTS

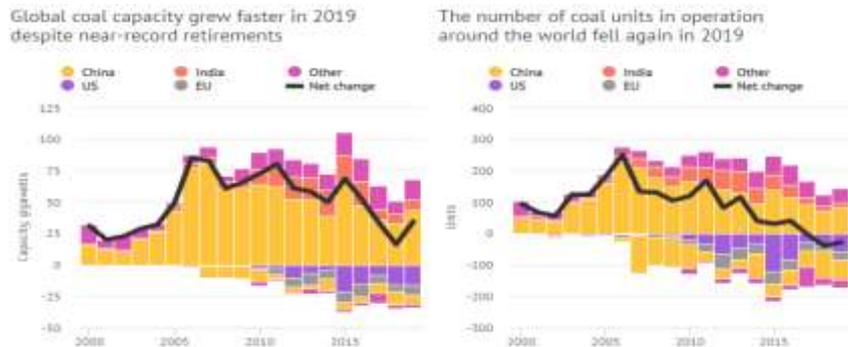


Source: Carbon Brief

The IEA says global coal investment has already peaked and is now in a “dramatic slowdown”. It says that China, which is building much of the current pipeline, has no need for new plants.

This fall in investment means coal capacity growth is slowing, as Exhibit 6 below shows. In 2011, global coal capacity increased by 82GW. This figure was 80% lower in 2018, at 16GW, though it ticked up again in 2019 to 34GW.

EXHIBIT 6: GLOBAL COAL CAPACITY AND UNITS IN OPERATION



Source: Carbon Brief

The number of plants newly under construction each year is falling even faster, down 66% in 2019 compared to 2015, according to the latest annual status report from Global Energy Monitor. Meanwhile, coal retirements are at historically unprecedented levels, with the 34GW of closures in 2019 a close third behind 2015 (37GW) and 2018 (35GW).

In its 2018 status report, GEM speculated that global coal power capacity could peak as soon as 2022. However, a new and potentially much higher cap on coal capacity in China, being debated as part of its 14th five-year plan for 2021-25, could cast doubt on this outlook.³

³ Carbon Brief: <https://www.carbonbrief.org/mapped-worlds-coal-power-plants>

CoalSwitch™ developments in 2020

The Group made substantial progress in 2020 against the dual headwinds of COVID-19 and the unexpectedly long process of being granted air and construction permits from the North Carolina Department of Environmental Quality (NCDEQ) for its 5tph reference plant at Lumberton.

The requisite permits were eventually granted in August 2020 thereby allowing AEG to commence construction of the first CoalSwitch™ reference plant. The permits allow for CoalSwitch™ production through to November 2028 in volumes of up to 5tph (c.35,000 tonnes per annum).

However, in early May as construction neared completion – on time and on budget - AEG received a notice from NCDEQ requiring suspension of construction on certain components which were designed to further improve emission controls from the plant.

NCDEQ then required AEG to submit an amended application and provide additional information before construction could finish and the plant commissioned, which the Company has done. Discussions are ongoing but one must be curious as to why the NCDEQ is taking such a harsh stance on what the Company considers to be an uncontroversial improvement to a minor permit.

This would only be regarded as an additional irritation to the extended permitting process, were it not for the contract awarded to AEG in December 2020 for the delivery of up to 900 tonnes of CoalSwitch™ from PacifiCorp to test CoalSwitch™ fuel in its Hunter coal-fired power plant in Utah. The fuel is to be co-fired with coal, monitored by both the University

HUNTER POWER PLANT, UTAH



of Utah and Brigham Young University. The results will be published later this year to demonstrate the co-firing results from CoalSwitch™ and the emissions benefits.

This order was to be delivered by mid-June 2021 and the further delays to the commissioning of the Lumberton reference plant would have made the completion of the order impossible were it not for a joint venture formed with Player Design Inc (PDI) in April 2021 to construct a new 5tph plant at PDI's facility in Ashland, Maine. PDI was the company appointed by AEG to orchestrate the planning and construction of the 5tph reference plant at its Lumberton facility.

Thus, following a meeting with local regulatory and environmental agencies in Maine, an operating permit was granted for the construction of the plant and an initial production run of 1,000 tons of CoalSwitch™ by no later than 31 July 2021.

The PacifiCorp order is therefore now being satisfied through production at the JV reference plant and deliveries are being made at the time of writing this report and will be finalised in the timeframe originally agreed in the contract.

It will then take around three months for the test results to be analysed but in the meantime, we expect further interest to test the CoalSwitch™ fuel from other prospective commercial partners as well as potential licensing opportunities. The results of the study will provide exceptional data and analysis of CoalSwitch™ performance in an operating environment, which it is anticipated will support future marketing activities and additional commercial interest.

The joint venture with PDI and the assembly and completion of a second CoalSwitch™ facility in Maine within 14 weeks demonstrate the forthcoming commercial opportunities AEG is seeking to realise.

Sales & Marketing

AEG has assembled a sales team in North Carolina who are currently marketing to a variety of prospective off-take customers for CoalSwitch™ fuel and potential commercial production partners across North America. The Company has complemented these activities with the addition of a data analysis team building a proprietary database on the fuel requirements of prospective customers throughout North America.

The marketing feedback, the expanding data information and general background of increasing environmental awareness in the US has accelerated prospective customer interest for CoalSwitch™ fuel and the immediate customer demand for test samples of the fuel.

Therefore, the JV with PDI, complementing the activities at the Lumberton Facility, form a further critical step forward for the full-scale commercial roll out of CoalSwitch™.

Future developments

Subject to emissions results, it is anticipated that a permit application to increase production capacity up to 35,000 tonnes per annum (5tph at 80% capacity) at Ashland will be promptly approved.

Future developments with regard to production of CoalSwitch™ may include the construction of much larger plants (plans are already in place to increase the Lumberton capacity from 5tph to 50tph, depending on demand and permitting) and production through future licensing of the technology to commercial partners. However, even very small power plants would have the ability to consume everything that AEG could produce very quickly, hence the attraction of licensing.

International interest for licensing the CoalSwitch™ production technology has also continued and with those forthcoming opportunities, AEG has ensured that the proprietary technology is correctly protected. Applications are being processed for patents for the EU (including the UK) and territories in South-East Asia. The timing of any such patent awards will not affect the timing of prospective commercial opportunities, given the current validity of the US and Canadian patents.

EXHIBIT 7: CURRENT INTEREST IN COALSWITCH™



Source: AEG

From an AEG perspective, there are more factors than just production, and the idea of ‘much larger plants’ is not necessarily the route the Company will seek to take, initially at least. Given that the principle of using waste materials is to be maintained, then it could mean that more plants of a smaller scale would more directly support waste usage.

Thus, current thinking is to produce 20tph plants (say 125,000/140,000 tonnes per annum, depending on operating conditions). Such projects would likely to be conceived within some form of commercial tie up – options for which are already under discussion.

The key is to have the production facility integrated within existing lumber facilities whose operations are established and operating, providing an ideal, economic and environmental way dealing with the waste lumber products. Invariably these facilities would already have rail spurs in situ, so logistics would not be a problem. AEG’s prime focus would be to build such a facility as soon as possible.

We look forward to completion of the initial 1,000 tonnes of CoalSwitch™ production at Ashland, as per the temporary licence and then, as noted above, the receipt of a permit allowing the JV to increase production capacity up to 35,000 tonnes per annum (5tph).

Further out, the Group will seek to extend CoalSwitch™ production through licence agreements and commercial partnerships supported by off-take agreements and the establishment of feedstock partners. However, all of this depends on establishing a market for CoalSwitch™ and a subsequent sustainable increase in demand. Clearly, if the demand is not forthcoming then the planned expansion of Lumberton and Ashland and the associated increase in production will not be undertaken.

In that regard it is encouraging that AEG has received several enquiries from prospective customers and partners who wish to test CoalSwitch™ product and observe an operational production facility in the heart of North Carolina. The Company has also received commercial enquiries about additional uses for the Lumberton site and these are currently being evaluated by AEG to work alongside the forthcoming reference plant.

Operations - The Lumber activities

In 2020, the operations of the Group were centred around the production of saw logs for export and the production of rail ties by the sawmill for domestic consumption. Neither activities reached sufficient scale to cover operating costs and the former business has now been exited while the latter activity is currently under review.

These businesses were developed as an ancillary operation to CoalSwitch™ to demonstrate to prospective commercial partners how CoalSwitch™ could align with traditional timber operations and to make a contribution to the cost base of the Lumberton site while also providing feedstock in the form of sawdust for the CoalSwitch™ reference plant.

These operations succeeded in the desired goal of establishing the Company’s reputation in North Carolina with local lumber suppliers and commercial partners to supply forestry waste and residuals for the Lumberton reference plant. However, the Board makes the valid point that the act of felling trees and exporting lumber products could not be supported in the context of a corporate strategy which focuses on environmental credentials as a core operating principle.

In mid-2020, AEG still had ambitions to expand these activities but by Q2 2021, as the CoalSwitch™ opportunity became increasingly compelling, it was decided to focus the Group’s limited management time and resources on CoalSwitch™.

To achieve a profitable Lumber operation, AEG would need to invest heavily in equipment to expand production and scale up operations. The Board therefore decided to focus its capital allocation toward CoalSwitch™ production activities and to withdraw from saw log export operations. The sawmill, which is viewed as more complementary to the Group's strategy, has continued to operate through H1 2021 and has currently processed residual feedstock of over 5,000 tonnes of material which is now ready for use towards the Company's forthcoming CoalSwitch™ production at Lumberton.

Decisions made on its future will depend on NCDEQ's approval of the permit amendments and how the Lumberton Facility develops in the coming months.

Operations – Forestry Assets in Ukraine and Newfoundland

Prior to 2018, under previous management, AEG had created a strategy based upon the ownership of timberland assets which might assist in the commercial development and production of biomass fuels.

In respect of the Province of Newfoundland and Labrador (the "Province") AEG was awarded commercial cutting permits with a 5-year duration which included certain performance thresholds required to be achieved prior to May 2021. During 2020 and 2021, Covid-19 restrictions prevented any travel to the Province.

In 2020, AEG appointed advisers to seek modifications to the commercial cutting permits, which were initially rejected by the Province. Nonetheless, AEG continues to mitigate the consequences resulting from not achieving the required harvesting thresholds during this difficult period.

AEG continues to believe that there are benefits for the Province in establishing a CoalSwitch™ solution and working with local lumber partners to utilise the cutting permits.

In Ukraine, AEG also held timberland interests for an area surrounding Lybomyl through its operating subsidiary, AE Ukraine. During 2020, AEG sought to dispose of these assets, however it was unable to do so.

Consequently, the Board has taken the view that it is prudent to fully impair the Ukraine and Newfoundland assets and a non-cash impairment charge of US\$4.2 million has been raised.

Forecasts and conclusion

We do not offer forecasts at this stage in the Group's transition to a pure-play business focused on the production and development of next generation biomass products. These products clearly have the potential to transform the traditional coal-fired power industry and replace existing renewable biomass products such as white pellets.

That AEG is now able to provide sample CoalSwitch™ fuel to prospective customers is a significant milestone and achievement in itself.

However, there is already enough evidence of the potential global demand for the CoalSwitch™ technology for management to have the confidence to now focus all of its activities on the promotion of the CoalSwitch™ product, securing future off-take agreements and cementing future licensing opportunities.

At this early stage in the Group's transition, it is not possible to offer any meaningful guidance with regard to future revenues and income generation. Suffice to say that prospects are highly encouraging and the Group is now in good shape financially, with significant net liabilities on its balance sheet now transformed into a very comfortable net asset position.

We expect the share price will now be driven by news flow on the CoalSwitch™ roll-out which we hope will be both regular and positive. As the Group progresses over the coming months, we would hope to be in a position to resume forecasts when there is sufficient revenue visibility and certainty to make such forecasts meaningful.

Income statement

| EXHIBIT 8: P&L | | | |
|---|---------------|---------------|---------------|
| Y/E December | \$m | \$m | \$m |
| | FY 2018A | FY 2019A | FY 2020A |
| UNDERLYING | | | |
| Licence fees & royalties | 0.000 | 1.618 | 0.000 |
| Lumber | 0.000 | 0.000 | 1.492 |
| CoalSwitch | 0.000 | 0.000 | 0.000 |
| Rental | 0.000 | 0.178 | 0.318 |
| Other | 0.195 | 0.100 | 0.000 |
| Revenue | 0.195 | 1.896 | 1.810 |
| Cost of sales | 0.000 | 0.000 | -2.933 |
| Gross profit/(loss) | 0.195 | 1.896 | -1.123 |
| <i>margin</i> | <i>100%</i> | <i>100%</i> | <i>-62%</i> |
| Admin expenses (excluding D&A and share based payments) | -2.043 | -2.194 | -1.189 |
| Underlying EBITDA | -1.848 | -0.298 | -2.312 |
| D&A | -0.045 | -0.217 | -0.498 |
| Underlying operating loss | -1.892 | -0.515 | -2.810 |
| Finance income | 0.000 | 0.000 | 0.000 |
| Finance costs | -0.407 | -2.461 | -1.347 |
| Underlying (loss) before tax | -2.299 | -2.976 | -4.157 |
| Tax | 1.346 | 0.875 | 0.214 |
| Underlying (loss) after tax | -0.953 | -2.101 | -3.943 |
| STATUTORY | | | |
| Underlying operating loss | -1.892 | -0.515 | -2.810 |
| Impairment charges | -0.951 | 0.000 | -4.759 |
| Share based charges | -0.895 | -0.369 | -0.056 |
| Statutory operating (loss) | -3.739 | -0.884 | -7.625 |
| Finance income | 0.000 | 0.000 | 0.000 |
| Finance costs | -0.407 | -2.461 | -1.347 |
| Statutory (loss) before tax | -4.145 | -3.345 | -8.972 |
| Tax | 1.346 | 0.875 | 0.214 |
| Statutory (loss) after tax | -2.799 | -2.470 | -8.758 |
| WAS | 1,013.576 | 1,201.907 | 1,541.178 |
| WAS FD | 1,013.576 | 2,118.447 | 1,541.178 |
| Year end shares | 1,208.676 | 1,273.539 | 3,902.052 |
| BASIC EPS (cents) | | | |
| Underlying basic EPS (cents) | (0.09) | (0.17) | (0.26) |
| Statutory basic EPS (cents) | (0.28) | (0.21) | (0.57) |
| BASIC EPS (pence) | | | |
| Underlying basic EPS (p) | (0.07) | (0.12) | (0.18) |
| Statutory basic EPS (p) | (0.19) | (0.14) | (0.40) |

Source: AEG

Balance sheet

EXHIBIT 9: BALANCE SHEET

| Y/E December | \$m FY 2018A | \$m FY 2019A | \$m FY 2020A |
|---|-----------------|-----------------|-----------------|
| Non-current assets | | | |
| Intangible assets | 8.460 | 9.180 | 5.259 |
| PP&E | 5.376 | 9.232 | 10.444 |
| Available for sale financial assets | 0.752 | 1.471 | 0.931 |
| Total non-current assets | 14.588 | 19.883 | 16.634 |
| Current assets | | | |
| Inventory | 0.000 | 0.000 | 0.238 |
| Trade and other receivables | 1.704 | 1.147 | 0.271 |
| Cash | 0.299 | 0.397 | 1.000 |
| Total current assets | 2.003 | 1.544 | 1.508 |
| Total assets | 16.591 | 21.427 | 18.142 |
| Current liabilities | | | |
| Trade & other payables | -2.852 | -2.391 | -2.092 |
| Borrowings | -1.328 | -0.109 | -0.022 |
| Finance leases | 0.000 | 0.000 | -0.137 |
| Other | 0.000 | 0.000 | -0.150 |
| Total current liabilities | -4.179 | -2.500 | -2.400 |
| Non-current liabilities | | | |
| Deferred tax | -0.242 | -0.364 | -0.150 |
| Finance leases | 0.000 | 0.000 | -0.202 |
| Borrowings | -11.673 | -18.191 | -22.106 |
| Total non-current liabilities | -11.914 | -18.555 | -22.458 |
| Total liabilities | -16.094 | -21.055 | -24.858 |
| Net current assets/(liabilities) | -2.176 | -0.956 | -0.892 |
| Net assets/ (liabilities) | 0.497 | 0.372 | -6.717 |

Source: AEG

NOTE: Post the Balance Sheet restructuring in February 2021 the net liability figure of minus US\$6.7m has been transformed to a net asset position of US\$22.0m

Cash flow

EXHIBIT 10: CASH FLOW

| Y/E December | \$m | \$m | \$m |
|---|---------------|---------------|---------------|
| | FY 2018A | FY 2019A | FY 2020A |
| Loss for the period | -3.186 | -2.470 | -8.758 |
| Share based charges | 0.895 | 0.369 | 0.056 |
| Depreciation | 0.000 | 0.066 | 0.498 |
| Amortisation | 0.045 | 0.151 | 0.000 |
| Impairment of PP&E | 0.065 | 0.000 | 0.000 |
| Impairment of intangible assets | 0.951 | 0.000 | 4.759 |
| Loss/(profit) on disposal of PP&E | 0.002 | 0.679 | 0.000 |
| Revaluation of investment for sale | 0.035 | 0.000 | 0.539 |
| FX | -0.967 | 0.613 | -0.773 |
| Finance expense | 1.047 | 1.744 | 1.403 |
| Income tax | -0.143 | 0.123 | -0.214 |
| Operating cash flow before WC | -1.256 | 1.274 | -2.490 |
| <i>(Increase)/decrease in inventories</i> | <i>0.020</i> | <i>0.000</i> | <i>-0.213</i> |
| <i>(Increase)/decrease in receivables</i> | <i>-1.187</i> | <i>0.558</i> | <i>0.589</i> |
| <i>(Decrease)/increase in payables</i> | <i>0.907</i> | <i>-0.156</i> | <i>0.816</i> |
| Net WC movement | -0.259 | 0.402 | 1.192 |
| Cash outflow from operating activities | -1.515 | 1.676 | -1.298 |
| Income tax | 0.000 | 0.000 | 0.000 |
| Net cash outflow from operating activities | -1.515 | 1.676 | -1.298 |
| Purchase of intangible assets | -1.109 | -0.519 | -0.662 |
| Purchase of PP&E | -1.777 | -1.757 | -0.739 |
| Sale of PP&E | 0.123 | 0.363 | 0.000 |
| Net cash outflow from investing activities | -2.763 | -1.913 | -1.401 |
| Issue of equity net | 3.299 | 0.000 | 1.754 |
| Loans raised | 2.350 | 2.763 | 1.577 |
| Unsecured loans repaid | 0.000 | -1.219 | -0.087 |
| Unsecured loans proceeds | 0.000 | 0.000 | 0.191 |
| Principal element of lease payments | 0.000 | 0.000 | -0.096 |
| Finance expenses | -1.193 | -1.207 | -0.038 |
| Net cash inflow from financing activities | 4.456 | 0.337 | 3.301 |
| Net increase/(decrease) in cash | 0.178 | 0.100 | 0.602 |
| Cash at start of year | 0.142 | 0.299 | 0.397 |
| FX | -0.021 | -0.001 | 0.000 |
| Cash at end of year | 0.299 | 0.397 | 1.000 |

Source: AEG

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