

3Q 16

# **EARNINGS REPORT**

As of September 30, 2016





3Q16

# **EARNINGS REPORT**

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### **Conference Call** 3Q16 Results

Date: Friday October 28th 2016
Time: 11:00 AM Eastern Daylight

Time 12:00 PM Chile Time **US Toll Free:** 1 877 415 3185 International Dial: +1 857 244 7328 **Password:** 647 389 39

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# 1. HIGHLIGHTS



Consolidated **EBITDA** in 3Q16 reached **US\$122.5** million, 32% lower than the EBITDA of US\$180.9 million in 3Q15. The lower EBITDA was mainly given by the lower rainfalls recorded during the quarter with the resulting lower hydro generation and due to lower non-recurring income, as a result of the insurance compensation for loss of profits due to the failure in Blanco Power Plant (60 MW) for US\$21.5 million recorded in 3Q15. These effects were partially offset by the contribution of EBITDA from Fenix Power.

In cumulative terms, EBITDA as of September 2016 (Sep16) reached US\$443.9 million compared with US\$410.0 million in Sep15. The increase is mainly explained by higher sales to regulated customers, lower thermal generation costs and the contribution of EBITDA from Fenix Power.

Non-operating income in 3Q16 recorded losses of US\$21.3 million (vs. losses of US\$18.4 million in 3Q15). The increase over the same quarter of the previous year is mainly explained by higher financial expenses due to the consolidation of Fenix Power's financial debt and the recognition as an expense of capitalized disbursements related to debt placement in Chile that was prepaid during the quarter. These effects were partially offset by: (1) the impact of the variation in exchange rate CLP/US\$ over temporary balance accounts in local currency; and (2) higher financial income resulting from accrued interests from favorable investment rates.

In cumulative terms, non-operating income as of Sep16 recorded losses of US\$72.1 million vs. losses of US\$61.0 million in Sep15. The higher loss is explained by the same reasons that explain the variations on quarterly basis.

3Q16 tax expenses amounted to **US\$15.8 million**, lower when compared to tax expenses of US\$37.9 million recorded in 3Q15. The lower tax expenses are mainly explained by the lower profit before taxes recorded on this quarter and because tax expenses in 3Q15 recorded the impact from variations in the exchange rate due to local currency tax accounting. It is worth mentioning that Colbún in Chile adopted tax accounting in US\$ since January 2016.

In cumulative terms, tax expenses amounted to US\$48.1 million as of Sep16, vs. expenses of US\$71.5 million as of Sep15. The decrease is explained by the same reasons that explain the variations for the 3Q16.

The Company recorded in 3Q16 a **net income of US\$28.4 million**, lower than the net income of US\$75.7 million of 3Q15. The decrease in net income over the same period last year is mainly explained by the lower EBITDA recorded in 3Q16.

In cumulative terms, the result shows a net income of US\$155.9 million, which positively compares with the net income of US\$132.8 million from the same period last year, mainly due to higher EBITDA.

On a quarterly basis, Fenix Power's **EBITDA** totalized **US\$16.1 million**, higher when compared with the EBITDA of US\$13.0 million recorded in 3Q15. In cumulative terms, EBITDA as of Sep16 reached US\$41.9 million vs. US\$44.3 million as of Sep15.

It is worth mentioning that Fenix Power was acquired in Dec15, the periods prior the acquisition of Fenix, are presented for comparative purposes only.

During this quarter, continuing with the financial structure optimization strategy, **Colbún prepaid debt for a total amount of US\$250.0 million**. The prepaid obligations correspond to a bank loan which had expiring date in 2018.

With the latter, average financial debt maturity reaches as of Sep16 5.2 years and its average interest rate is of 4.7%.



- At 3Q16 closing, **financial investments** amounted to **US\$620.2 million**, and **net debt** was **US\$1,120.3 million**.
- As of Sep16 La Mina Project (34 MW) accounts for a 90% progress, which is according to plan. As important milestones achieved during the quarter it is worth mentioning: the ending of: (1) the intake and fixed barrier; (2) the pipe mounting in pressure and in the powerhouse; and (3) the civil works for the assembly of the generation units. It is expected that the project begins commercial operations in early 2017.
- On June 28th 2016, the main transformer of the gas turbine from Nehuenco 2 (Unit 2) thermal-power plant was affected by a fire, activating immediately all internal emergency protocols and leaving no victims or injured personnel. Unit 2 was disconnected from the system, while Unit 1 continued operating normally.

With the purpose of resuming operations, Colbún acquired a provisional transformer, which is currently in a testing phase. On the other hand, Colbún entrusted the manufacturing of a new and definitive transformer, which is expected to be operational by the end of December 2016.

With the available information regarding estimated repair time, availability of the power plant and compromised insurance for this type of incidents, the impact of the failure on the Company's financial results is not material in the context of Colbún.

# **Operations Analysis in Chile**

Physical withdrawals from customers under contract during 3Q16 reached 2,781 GWh, 13% lower compared to the same period last year, mainly explained because the Company did not record sales on the spot market in this quarter. The latter reflects a lower generation which decreased by 26% compared to 3Q15, mainly given by a lower hydro generation (736 GWh Q/Q) which reflects very dry hydrological conditions. The lower generation is also explained by lower thermal gas-power generation (309 GWh Q/Q) which is partially offset by higher thermal coal-fired generation (92 GWh Q/Q) and diesel (94 GWh Q/Q).

Average marginal cost measured in Alto Jahuel during the quarter increased 18%, from US\$57/MWh in 3Q15 to US\$67/MWh in 3Q16. The increase over 3Q15 is mainly explained by a lower base load generation due to drier hydrological conditions already mentioned.



# **Operations Analysis in Peru**

The analysis presented below compares periods prior the acquisition of Fenix, thus Fenix results for the year 2015 are presented for comparative purposes only.

Physical withdrawals from customers under contract over 3Q16 reached 661 GWh, 16% lower when compared to 3Q15, mainly explained by the expiration of bilateral short-term contracts between July and September 2016.

On its part, power-generation in 3Q16 increased by 7%, mainly explained by higher availability of the power-plant.

**Table 1**: Summary (US\$ million)

| Accumulated Figures |         | S                                      | Quarterly Figures |         | Var % |       |
|---------------------|---------|--|-------------------|---------|-------|-------|
| Sep-15              | Sep-16  | Summary                                | 3Q15              | 3Q16    | Ac/Ac | Q/Q   |
| 1,012.5             | 1,067.0 | Revenues                               | 337.0             | 334.3   | 5%    | (1%)  |
| 410.0               | 443.9   | EBITDA                                 | 180.9             | 122.5   | 8%    | (32%) |
| 132.8               | 155.9   | Net Income                             | 75.7              | 28.4    | 17%   | (62%) |
| 1,174.2             | 1,120.3 | Net debt                               | 1,174.2           | 1,120.3 | (5%)  | (5%)  |
| 8,346               | 8,268   | Sales of contracted energy Chile (GWh) | 2,741             | 2,781   | (1%)  | 1%    |
| 2,227               | 2,274   | Sales of contracted energy Peru (GWh)  | 787               | 661     | 2%    | (16%) |
| 9,854               | 8,947   | Total generation Chile (GWh)           | 3,270             | 2,412   | (9%)  | (26%) |
| 3,017               | 2,375   | Total generation Peru (GWh)            | 856               | 912     | (21%) | 7%    |

# 2. PHYSICAL SALES AND GENERATION BALANCE



# 2.1 Physical Sales and Generation Balance Chile

Table 2 shows a comparison between physical energy sales and power generation in 3Q15, 3Q16, and cumulative as of Sep15 and Sep16.

Table 2: Physical Sales and Generation Chile

| Accumulated Figures |        | Sales                      | Quarterly Figures |       | Var % |       |
|---------------------|--------|----------------------------|-------------------|-------|-------|-------|
| Sep-15              | Sep-16 | Sales                      | 3Q15              | 3Q16  | Ac/Ac | Q/Q   |
| 9,613               | 9,184  | Total Physical Sales (GWh) | 3,197             | 2,781 | (4%)  | (13%) |
| 5,068               | 4,888  | Regulated Clients          | 1,636             | 1,621 | (4%)  | (1%)  |
| 3,278               | 3,381  | Unregulated Clients        | 1,106             | 1,160 | 3%    | 5%    |
| 1,267               | 916    | Sales to the Spot Market   | 456               | 0     | (28%) | -     |
| 1,587               | 1,571  | Capacity Sales (MW)        | 1,585             | 1,611 | (1%)  | 2%    |

| Accumulate | ed Figures | Conquetion                                 | Quarterly Figures |       | Var % |  |
|------------|------------|--|-------------------|-------|-------|--|
| Sep-15     | Sep-16     | Generation                                 | 3Q15              | 3Q16  | Ac/Ac | Q/Q                                    |
| 9,854      | 8,947      | Total Generation (GWh)                     | 3,270             | 2,412 | (9%)  | (26%)                                  |
| 4,179      | 3,614      | Hydraulic                                  | 1,724             | 988   | (14%) | (43%)                                  |
| 3,217      | 2,799      | Thermoelectric - Gas                       | 868               | 559   | (13%) | (36%)                                  |
| 244        | 302        | Thermoelectric - Diesel                    | 0                 | 94    | 24%   | 10000000000000000000000000000000000000 |
| 2,142      | 2,166      | Thermoelectric - Coal                      | 651               | 743   | 1%    | 14%                                    |
| 72         | 65         | Wind Farm - Punta Palmeras                 | 27                | 28    | (10%) | 3%                                     |
| 0          | 433        | Spot Market Purchases (GWh)                | 0                 | 433   | 196   | -                                      |
| 1,267      | 483        | Sales - Purchases to the Spot Market (GWh) | 456               | (433) | (62%) | 1251                                   |

Physical withdrawals from customers under contract during 3Q16 reached 2,781 GWh, 13% lower compared to the same period last year, mainly explained since the Company did not record sales on the spot market. The latter reflects a lower generation, which decreased by 26% compared to 3Q15, mainly given by a lower hydro generation (736 GWh Q/Q) which reflects very dry hydrological conditions. The lower generation is also explained by lower thermal gas-power generation (309 GWh Q/Q) which is partially offset by higher thermal coal-fired generation (92 GWh Q/Q) and diesel (94 GWh Q/Q).

Spot market balance reached net purchases of 433 GWh, vs. net sales for 456 GWh recorded in 3Q15.

In cumulative terms, physical withdrawals from customers under contract reached 9,184 GWh as of Sep16, 4% lower compared to Sep15 mainly because of lower sales in the spot market and lower demand from regulated customers, partially offset by higher physical withdrawals from non-regulated customers.

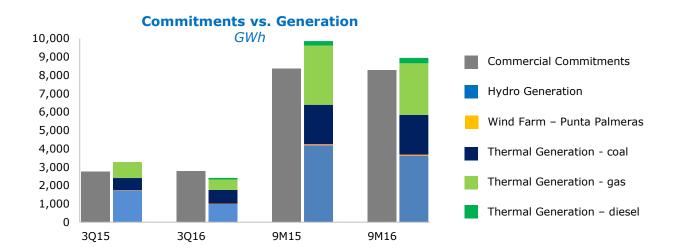
Colbún's total power generation reached 8,947 GWh as of Sep16, down by 9% compared to Sep15, mainly because of the lower hydroelectric generation (565 GWh ac/ac) and natural gas generation (418 GWh ac/ac). The lower power generation from the period was partially offset by higher diesel generation (58 GWh ac/ac), which translates in that 82% of the total commitments were met with own generation, plus net purchases made in the spot market.

Spot market balance recorded net sales for 483 GWh, compared with net sales for 1,267 GWh from the previous year.



Generation mix in Chile: The hydrological year (Apr16-Mar17) presented low rainfalls during the quarter compared to an average hydrological year, which began in late June, decreasing in the subsequent months. The hydrological condition has not been uniform throughout Chile, where the basins affected by lower rainfall are located in the southern part of the SIC (Central Interconnected System), improving conditions towards the center-north. As an example, the rainfall deficit by basin, compared to an average year in 3Q16 from north to south is: Armerillo-Maule: 48%; Abanico: 32%; Canutillar: 26%. On its part, Aconcagua basin presented a surplus of 45%.

During the 3Q16 the SIC recorded a decrease in hydroelectric generation (6,378 GWh in 3Q15 vs. 4,377 GWh in 3Q16) compared to the same period of 2015 given the drier hydrological conditions. The lower hydro generation was partially offset by an increase in thermal diesel generation (13 GWh in 3Q15 vs. 188 GWh in 3Q16) and gas-power generation (1,688 GWh in 3Q15 vs. 2,448 GWh in 3Q16), and an increase in NCRE generation (1,282 GWh in 3Q15 vs. 1,689 GWh in 3Q16). The average marginal cost measured in Alto Jahuel increased by 18% from US\$57/MWh in 3Q15 to US\$67/MWh in 3Q16.





# 2.2 Physical Sales and Generation Balance Peru

Table 3 presents a comparison of physical energy sales, and power generation in 3Q15, 3Q16, and cumulative as of Sep15 and Sep16 from Fenix Power.

This table includes periods prior to the acquisition of Fenix Power, thus Fenix results for the year 2015 are presented for comparative purposes only.

**Table 3**: Physical Sales and Generation Peru

| Accumulate | ed Figures | Sales                                      | Quarterly         | Figures | Var   | - %   |
|------------|------------|--|-------------------|---------|-------|-------|
| Sep-15     | Sep-16     | Sdies                                      | 3Q15              | 3Q16    | Ac/Ac | Q/Q   |
| 4,689      | 4,121      | Total Physical Sales (GWh)                 | 1,479             | 1,391   | (12%) | (6%)  |
| 2,227      | 2,274      | Costumers under Contract                   | 787               | 661     | 2%    | (16%) |
| 2,462      | 1,847      | Sales to the Spot Market                   | 692               | 730     | (25%) | 6%    |
| 581        | 562        | Capacity Sales (MW)                        | 558               | 563     | (3%)  | 1%    |
| ccumulat   | ed Figures | C-2-1-1                                    | Quarterly Figures |         | Var % |       |
| Sep-15     | Sep-16     | Generation                                 | 3Q15              | 3Q16    | Ac/Ac | Q/Q   |
| 3,017      | 2,375      | Total Generation (GWh)                     | 856               | 912     | (21%) | 7%    |
| 3,017      | 2,375      | Thermoelectric - Gas                       | 856               | 912     | (21%) | 7%    |
| 1,750      | 1,818      | Spot Market Purchases (GWh)                | 644               | 506     | 4%    | (21%) |
| 712        | 29         | Sales - Purchases to the Spot Market (GWh) | 47                | 224     | (96%) | 373%  |

On a quarterly basis, physical withdrawals from customers under contract on 3Q16 reached 661 GWh, 16% lower when compared to 3Q15, mainly explained by the end of bilateral short-term contracts between July and September 2016.

On its part, Fenix's thermal gas-power generation reached 912 GWh, increasing by 7% compared to 3Q15. The increase is mainly explained by the annual maintenance to the power-plant performed during Aug15.

Meanwhile, in 2016 a major annual maintenance was conducted between June and July. Due to the maintenance, the power-plant was disconnected from mid to late June, and operated on a 1x1 basis (using the steam turbine and only one gas turbine, instead of two) through most of July.

Spot market balance reached net sales of 224 GWh in 3Q16 vs. net sales of 47 GWh in 3Q15.

During 3Q16 a 100% of total commitments were met with own generation.

In cumulative terms, physical withdrawals to customers under contract as of Sep16 reached 2,274 GWh, slightly higher compared to the same period last year. Fenix Power thermal gas-power generation reached 2,375 GWh, 21% lower than Sep15, mainly given by the major annual maintenance of the power-plant made between June and July of this year and to unexpected unavailabilities.

Spot market balance reached net sales of 29 GWh in 3Q16 vs. net sales of 712 GWh from the previous period.

Generation mix in Peru: During 3Q16 the system presented drier hydrological conditions compared with the same period last year. Mantaro river basin, which supplies the main hydroelectric complex in Peru: CH Mantaro and CH Restitución (900 MW) recorded a hydrological condition with a probability of exceedance of 81% at the end of 3Q16 vs. 39% in 3Q15. Hydroelectric generation in the National Interconnected System (SEIN) increased by 1% compared to the same period of 2015, counting the entry of new hydro power-plants for 550 MW during the period September 2015 –September 2016. On its part, thermoelectric generation increased by 11% in 3Q16 compared with 3Q15, given the drier conditions presented in the system.

# 3. INCOME STATEMENT ANALYSIS



Table 4 presents a summary of the Consolidated Income Statement in 3Q15, 3Q16, and cumulative as of Sep15 and Sep16.

Table 4: Income Statement (US\$ million)

| Accumulate |              |  | Quarterly | Figures  |        | %      |
|------------|--------------|--|-----------|----------|--------|--------|
| Sep-15     | Sep-16       |  | 3Q15      | 3Q16     | Ac/Ac  | Q/Q    |
| 10125      | 1.057.0      | ODEDATING INCOME   | 227.0     | 224.2    | E0/    | (40)   |
| 1,012.5    | 1,067.0      | OPERATING INCOME   | 337.0     | 334.3    | 5%     | (1%    |
| 480.6      | 578.1        | Regulated Customers Sales  | 144.3     | 186 1    | 20%    | 29%    |
| 256.2      | 267.0        | Nonregulated Customers Sales   | 96.8      | 87.8     | 4%     | (9%)   |
| 130.9      | 80.3         | Energy and Capacity Sales  | 31.3      | 13.9     | (39%)  | (56%   |
| 113.4      | 139.7        | Transmission Tolls   | 37.9      | 45.9     | 23%    | 21%    |
| 31.3       | 20           | Other Operating Income   | 26.7      | 0.7      | (94%)  | (97%   |
| (542.5)    | (542.5)      | RAW MATERIAL AND CONSUMABLES USED  | (136.0)   | (185.5)  | 0%     | 36%    |
| (108.3)    | (134.1)      | Transmission Tolls   | (34.5)    | (43.4)   | 24%    | 26%    |
| (24.1)     | (65, 6)      | Energy and Capacity Purchases  | (10.4)    | (41.9)   | 172%   | 304%   |
| (240.1)    | (188.0)      | Gas Consumption  | (48.8)    | (47.1)   | (22%)  | (3%)   |
| (42.1)     | (38.4)       | Diesel Consumption   | (1.5)     | (13.1)   | (9%)   | 762%   |
| (69.2)     | (54, 4)      | Coal Consumption   | (20.4)    | (18.8)   | (21%)  | (8%)   |
| (58.6)     | (62.0)       | Other Operating Expenses   | (20.4)    | (21.2)   | 6%     | 4%     |
| (30.0)     | (02.0)       | Other operating Expenses   | (204)     | (21,2)   | 070    | 470    |
| 470.0      | 524.5        | GROSS PROFIT   | 201.0     | 148.8    | 12%    | (26%   |
| (42.5)     | (49.6)       | Personnel Expenses   | (13.7)    | (17.5)   | 17%    | 27%    |
| (17.5)     | (31.0)       | Other Expenses, by Nature  | (63)      | (8.8)    | 78%    | 39%    |
| (144.7)    | (167.9)      | Depredation and Amortization Expenses  | (48.9)    | (57.0)   | 16%    | 17%    |
| 265.3      | 276.0        | OPERATING INCOME (LOSS)(*)   | 132.0     | 65.6     | 4%     | (50%   |
| 410.0      | 443.9        | EBITDA   | 180.9     | 122.5    | 8%     | (32%   |
| 3.5        | 7.6          | Financial Income   | 1.4       | 2.1      | 116%   | 49%    |
| (67.1)     | (83.0)       | Financial Expenses   | (22.2)    | (23.5)   | 24%    | 6%     |
| 2.1        | (0.1)        | Readjustment Profit (Loss)   | 0.9       | 0.0      | 2-7/0  | (1009) |
|            | 250,000,000  | Exchange rate Differences  | (11.4)    | 0.0      | 10,000 | (1009  |
| (10.9)     | 5.0          |  |           | 20000000 | (400() |        |
| 5.5        | 4.5<br>(6.1) | Profit (Loss) of Companies Accounted for Using the Equity Method Other Profit (Loss) | 23        | 1.4      | (18%)  | (38%   |
| 5.8        | (61)         | Other Profit (Loss)  | 10.5      | (1.4)    | -      | (1139) |
| (61.0)     | (72.1)       | NON-OPERATING INCOME   | (18.4)    | (21.3)   | 18%    | 16%    |
| 204.3      | 204.0        | PROFIT (LOSS) BEFORE TAXES   | 113.6     | 44.3     | (0%)   | (61%   |
| (71.5)     | (48, 1)      | Income Tax Expense   | (37.9)    | (15.8)   | (33%)  | (58%   |
| 132.8      | 155.9        | PROFIT (LOSS) AFTER TAX  | 75.7      | 28.4     | 17%    | (62%   |
|            |              |  | 10/11/21  |          |        |        |
| 132.8      | 153.1        | PROFIT (LOSS) OF CONTROLLER  | 75.7      | 29.4     | 15%    | (61%   |
| 20         | 2.8          | PROFIT (LOSS) ATTRIBUTABLE TO MINORITY INTEREST                                      | 1956      | (0.9)    | 5743   | 139    |

<sup>(\*):</sup> The subtotal for "OPERATING INCOME" presented herein, differs from "Profit (loss) from operating activities" line presented in the Financial Statements. This is explained by a change in taxonomy dictated by the SVS, by means of which the concept of "Other Profit (loss)", which in the case of Colbún are only non-operating items, was incorporated as an operating item in the Financial statements.

Table 5: Exchange Rates at Closing

| Exchange Rates     | Sep-15    | Dec-15    | Sep-16    |
|--------------------|-----------|-----------|-----------|
| Chile (CLP / US\$) | 698.72    | 710.16    | 658.02    |
| Chile UF (CLP/UF)  | 25,346.89 | 25,629.09 | 26,224.30 |
| Peru (Pen / US\$)  | 3.24      | 3.41      | 3.40      |



# 3.1. Operating Income Analysis Chile

Table 6 presents a summary of Operating Income and EBITDA in 3Q15, 3Q16, and cumulative as of Sep15 and Sep16. The major accounts and/or variations will be analyzed below.

**Table 6:** EBITDA Chile (US\$ million)

| Accumulate | d Figures |  | Quarterly | Figures | Var   | %     |
|------------|-----------|--|-----------|---------|-------|-------|
| Sep-15     | Sep-16    |  | 3Q15      | 3Q16    | Ac/Ac | Q/Q   |
| 1,012.5    | 907.4     | OPERATING INCOME                       | 337.0     | 285.3   | (10%) | (15%) |
| 480.6      | 475.1     | Regulated Customers Sales              | 144.3     | 156.9   | (1%)  | 9%    |
| 256.2      | 267.0     | Nonregulated Customers Sales           | 96.8      | 87.8    | 4%    | (9%)  |
| 130.9      | 54.2      | Energy and Capacity Sales              | 31.3      | 2.8     | (59%) | (91%) |
| 113.4      | 109.8     | Transmission Tolls                     | 37.9      | 37.4    | (3%)  | (1%)  |
| 31.3       | 1.3       | Other Operating Income                 | 26.7      | 0.4     | (96%) | (99%) |
| (542.5)    | (437.7)   | RAW MATERIAL AND CONSUMABLES USED      | (136.0)   | (154.8) | (19%) | 14%   |
| (108.3)    | (106.9)   | Transmission Tolls                     | (34.5)    | (35.8)  | (1%)  | 4%    |
| (24.1)     | (51.3)    | Energy and Capacity Purchases          | (10.4)    | (38.8)  | 113%  | 274%  |
| (240.1)    | (133.5)   | Gas Consumption                        | (48.8)    | (29.4)  | (44%) | (40%) |
| (42.1)     | (38.4)    | Diesel Consumption                     | (1.5)     | (13.1)  | (9%)  | 762%  |
| (69.2)     | (54.4)    | Coal Consumption                       | (20.4)    | (18.8)  | (21%) | (8%)  |
| (58.6)     | (53.2)    | Other Operating Expenses               | (20.4)    | (18.9)  | (9%)  | (8%)  |
| 470.0      | 469.7     | GROSS PROFIT                           | 201.0     | 130.5   | (0%)  | (35%) |
| (42.5)     | (45.3)    | Personnel Expenses                     | (13.7)    | (16.1)  | 7%    | 17%   |
| (17.5)     | (22.5)    | Other Expenses, by nature              | (6.3)     | (8.0)   | 29%   | 25%   |
| (144.7)    | (144.0)   | Depreciation and Amortization Expenses | (48.9)    | (49.0)  | (0%)  | 0%    |
| 265.3      | 258.0     | OPERATING INCOME (LOSS)(*)             | 132.0     | 57.4    | (3%)  | (57%) |
| 410.0      | 401.9     | EBITDA                                 | 180.9     | 106.5   | (2%)  | (41%) |

<sup>(\*):</sup> The subtotal for "OPERATING INCOME" presented herein, differs from "Profit (loss) from operating activities" line presented in the Financial Statements. This is explained by a change in taxonomy dictated by the SVS, by means of which the concept of "Other Profit (loss)", which in the case of Colbún are only non-operating items, was incorporated as an operating item in the Financial statements.

Operating income from ordinary activities for 3Q16 amounted to US\$285.3 million, down by 15% compared to 3Q15, mainly explained by: (1) lower sales to the spot market, partially offset by higher revenues from regulated customers; and (2) lower revenues in the other income account mainly explained because 3Q15 includes a non-recurring income of US\$21.5 million as a result of the insurance compensation for loss of profits due to the failure in Blanco power plant (60 MW) in Jan14.

In cumulative terms, operating income from ordinary activities reached US\$907.4 million at Sep16, down by 10% compared to Sep15, mainly explained by the same reasons exposed in the quarterly basis analysis.

Raw materials and consumables used increased by 14% compared to 3Q15, mainly explained by higher purchases to the spot market and to higher diesel consumption, partially offset by lower gas and coal consumption.



In cumulative terms, raw materials and consumables used totalized US\$437.7 million at Sep16, down by 19% compared to Sep15 mainly explained by the lower generation output recorded during the quarter.

On a quarterly basis, EBITDA decreased 41% reaching US\$106.5 million. The decrease is mainly explained by higher purchases in the spot market to compensate the lower hydro generation resulting from the adverse hydrological conditions and due to lower non-recurring income, as a result of the insurance compensation for loss of profits due to the failure in Blanco Power Plant (60 MW). The decrease over the same period last year is also explained by higher diesel consumption during the quarter.

In cumulative terms EBITDA slightly decreased by 2% reaching US\$401.9 million. The decrease is explained by the same reasons that explain the variations in a quarterly basis, partially offset by lower raw materials and consumables used.

# 3.2. Operating Income Analysis Peru

Table 7 contemplates periods prior to Colbún's acquisition of Fenix Power Peru, thus Fenix results for the year 2015 are presented only for comparative purposes.

**Table 7:** EBITDA Peru (US\$ million)

| Accumulate | d Figures |  | Quarterly | Figures | Var     | · %   |
|------------|-----------|--|-----------|---------|---------|-------|
| Sep-15     | Sep-16    |  | 3Q15      | 3Q16    | Acc/Acc | Q/Q   |
| 162.0      | 159.6     | OPERATING INCOME                       | 55.3      | 49.1    | (1%)    | (11%) |
| 122.3      | 103.0     | Regulated Customers Sales              | 40.6      | 29.2    | (16%)   | (28%) |
| 18.3       | 26.1      | Sales to Other Generators              | 4.9       | 11.1    | 42%     | 128%  |
| 21.4       | 29.9      | Transmission Tolls                     | 9.8       | 8.5     | 40%     | (14%) |
| -          | 0.7       | Other Operating Income                 | -         | 0.3     | -       | -     |
| (112.5)    | (104.9)   | RAW MATERIAL AND CONSUMABLES USED      | (40.6)    | (30.8)  | (7%)    | (24%) |
| (24.5)     | (27.2)    | Transmission Tolls                     | (11.0)    | (7.5)   | 11%     | (32%) |
| (4.7)      | (14.4)    | Energy and Capacity Purchases          | (3.1)     | (3.2)   | 206%    | 1%    |
| (67.3)     | (54.5)    | Gas Consumption                        | (19.6)    | (17.7)  | (19%)   | (10%) |
| (16.0)     | (8.8)     | Other Operating Expenses               | (6.9)     | (2.4)   | (45%)   | (66%) |
| 49.5       | 54.8      | GROSS PROFIT                           | 14.7      | 18.3    | 11%     | 25%   |
| (3.3)      | (4.2)     | Personnel Expenses                     | (1.3)     | (1.4)   | 28%     | 5%    |
| (1.9)      | (8.6)     | Other Expenses, by Nature              | (0.4)     | (0.8)   | 351%    | 113%  |
| (26.8)     | (23.9)    | Depreciation and Amortization Expenses | (8.9)     | (8.0)   | (11%)   | (11%) |
| 17.5       | 18.1      | OPERATING INCOME (LOSS)                | 4.0       | 8.1     | 3%      | 102%  |
| 44.3       | 41.9      | EBITDA                                 | 13.0      | 16.1    | (5%)    | 24%   |

Operating income from ordinary activities for 3Q16 reached US\$49.1 million, down by 11% compared to 3Q15, mainly explained by lower sales to regulated clients and by lower transmission tolls revenues. The former was partially offset by higher capacity sales to other generators. In cumulative terms, operating revenues at Sep16 were in line with respect to Sep15.

Raw materials and consumables used decreased by 24% in a quarterly basis and by 7% in cumulative terms. Both decreases are mainly explained by lower costs associated to the plant's operation.



**This quarter's EBITDA reached US\$16.1 million**, a 24% increase compared to 3Q15. The increase is mainly explained by the lower raw materials and consumables used during the quarter.

In cumulative terms, EBITDA amounted to US\$41.9 million as of Sep16, decreasing 5% compared to Sep15.

# 3.3. Consolidated Non-Operating Income Analysis

Table 8 shows a summary of the consolidated non-operational income in 3Q15, 3Q16, and cumulative as of Sep15 and Sep16. Below, the major accounts/variations will be analyzed.

**Table 8:** Consolidated Non-Operational Income (US\$ million)

| Accumulate | ed Figures |  | Quarterly | Figures | Var   | · %    |
|------------|------------|--|-----------|---------|-------|--------|
| Sep-15     | Sep-16     |  | 3Q15      | 3Q16    | Ac/Ac | Q/Q    |
| 3.5        | 7.6        | Financial Income   | 1.4       | 2.1     | 116%  | 49%    |
| (67.1)     | (83.0)     | Financial Expenses   | (22.2)    | (23.5)  | 24%   | 6%     |
| 2.1        | (0.1)      | Readjustment Profit (Loss)                                       | 0.9       | 0.0     | -     | (100%) |
| (10.9)     | 5.0        | Exchange rate Differences  | (11.4)    | 0.0     | -     | -      |
| 5.5        | 4.5        | Profit (Loss) of Companies Accounted for Using the Equity Method | 2.3       | 1.4     | (18%) | (38%)  |
| 5.8        | (6.1)      | Other Profit (Loss)  | 10.5      | (1.4)   | -     | -      |
| (61.0)     | (72.1)     | NON-OPERATING INCOME   | (18.4)    | (21.3)  | 18%   | 16%    |
| 204.3      | 204.0      | PROFIT (LOSS) BEFORE TAXES                                       | 113.6     | 44.3    | (0%)  | (61%)  |
| (71.5)     | (48.1)     | Income Tax Expense   | (37.9)    | (15.8)  | (33%) | (58%)  |
| 132.8      | 155.9      | PROFIT (LOSS) AFTER TAX  | 75.7      | 28.4    | 17%   | (62%)  |
| 132.8      | 153.1      | PROFIT (LOSS) OF CONTROLLER                                      | 75.7      | 29.4    | 15%   | (61%)  |
| 0.0        | 2.8        | PROFIT (LOSS) ATTRIBUTABLE TO MINORITY INTEREST                  | 0.0       | (0.9)   | -     | -      |

Non-operating income of 3Q16 recorded losses for US\$21.3 million, higher than the losses of US\$18.4 million in 3Q15. The increase over the same quarter of the previous year is mainly explained by higher financial expenses due to the consolidation of Fenix Power's financial debt; and the recognition as an expense of capitalized disbursements related to debt placement in Chile that was prepaid during the quarter. This effect was partially offset by: (1) the impact from variations of the exchange rate CLP/US\$ over temporary balance accounts in local currency; and (2) higher financial income resulting from accrued interests from favorable investment rates.

In **cumulative terms, non-operating income recorded losses of US\$72.1 million** vs. losses of US\$61.0 million as of Sep15. The higher loss is explained by the same reasons that explained the variations on a quarterly basis.

**In 3Q16, income tax expense amounted to US\$15.8 million,** lower than the tax expense of US\$37.9 million recorded in 3Q15. The lower tax expenses are mainly due to the lower profit before taxes recorded in 3Q16 and because tax expenses in 3Q15 recorded the impact from variations in the exchange rate due to local currency tax accounting. It is worth mentioning that Colbún Chile adopted tax accounting in US\$ since January 2016.

In cumulative terms, income tax expenses amounted to US\$48.1 million as of Sep16, vs. expenses of US\$71.5 million as of Sep15. The decrease is explained because tax expenses as of Sep15 recorded the impact from variations in the exchange rate due to local currency tax accounting.

# 4. CONSOLIDATED BALANCE SHEET ANALYSIS

Table 9 presents an analysis of the Balance Sheet's relevant accounts as of December 31, 2015 and September 30, 2016. Subsequently the main changes will be analyzed.

**Table 9:** Consolidated Balance Sheet Main Accounts (US\$ million)

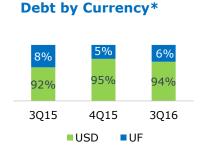
|                                  | Dec-15  | Sep-16  | Var     | Var %  |
|----------------------------------|---------|---------|---------|--------|
| Current assets                   | 1,383.5 | 959.9   | (423.6) | (31%)  |
| Non-current assets               | 5,774.1 | 5,770.5 | (3.5)   | (0.1%) |
| TOTAL ASSETS                     | 7,157.6 | 6,730.4 | (427.1) | (6%)   |
| Current liabilities              | 713.9   | 258.7   | (455.2) | (64%)  |
| Non-current liabilities          | 2,778.2 | 2,684.3 | (94.0)  | (3%)   |
| Total net equity                 | 3,665.4 | 3,787.5 | 122.0   | 3%     |
| TOTAL LIABILITIES AND NET EQUITY | 7,157.6 | 6,730.4 | (427.1) | (6%)   |

- **Current assets:** Reached US\$959.9 million, decreasing by US\$423.6 million compared to Dec15, mainly explained by a decrease in cash and cash equivalents due to debt prepayments made during the year for a total of US\$490.8 million, partially offset by inflows from operational activities.
- Non-current assets: Recorded US\$5,770.5 million at the end of Sep16, in line with the existing balance as of Dec15.
- **Current liabilities:** Amounted US\$258.7 million, down by US\$455.2 million compared to Dec15. This variation is mainly explained by the maturity of Fenix Power financial debt, which was refinanced to the long-term in February 2016, being reflected in non-current liabilities. The decrease is also explained by the portion of financial debt in Current Liabilities that was prepaid during the year.
- Debt analysis: Financial Debt reached US\$1,740.5 million, decreasing by US\$495.2 million compared to Dec15, due to debt prepayments of US\$240.8 million and US\$250.0 million during 2Q16 and 3Q16 respectively. On the other hand, Financial Investments decreased by US\$441.2 million mainly explained by financial debt prepayments and by the period's Capex. Given the above, Net Financial Debt decreased by 5%. As for LTM EBITDA (last 12 months), it increased 6%; consequently Net Debt/EBITDA LTM ratio decreased by 10% compared to Dec15, reaching 1.8 times.

The average maturity life of Colbún's long term financial debt is 5.2 years.

The average USD long-term financial debt interest rate is 4.7%.







## Long Term Debt Amortization Schedule (US\$ million)

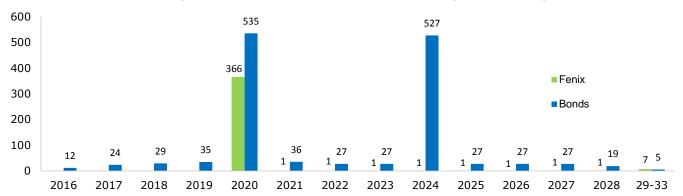


Table 10: Main Debt Items (US\$ million)

|                         | Dec-15  | Sep-16  | Var     | Var % |
|-------------------------|---------|---------|---------|-------|
| Gross Financial Debt*   | 2,235.6 | 1,740.5 | (495.2) | (22%) |
| Financial Investments** | 1,061.4 | 620.2   | (441.2) | (42%) |
| Net Debt                | 1,174.2 | 1,120.3 | (54.0)  | (5%)  |
| EBITDA LTM              | 583.3   | 617.2   | 33.9    | 6%    |
| Net Debt/EBITDA LTM     | 2.0     | 1.8     | (0.2)   | (10%) |

<sup>(\*)</sup> Includes bank debt for US\$365.7 million and financial leasing for US\$15.8 million, associated to Fenix Power without recourse to Colbún.

**Total net equity:** The Company posted a net worth of US\$3,787.5 million, 3% higher compared to Dec15. The increase is mainly explained by the retained earnings recorded during the period.

<sup>\*</sup>Includes financial derivatives

<sup>(\*\*)</sup>The account "Financial Investments" presented includes the amount associated to time deposits that, for having an investment term of more than 90 days, are recorded as "Other Current Financial Assets" in the Financial Statements





A comparative table of consolidated financial indicators is presented below. Balance Sheet financial indicators are calculated at the specified date and Income Statement ratios includes the cumulative result over the last 12 months as of the date indicated.

Table 11: Financial Ratios

| Ratio  | Sep-15 | Dec-15 | Sep-16 |
|--|--------|--------|--------|
| Current Liquidity:   |        |        |        |
| Current Assets in operation / Current Liabilities in operation   | 6.86   | 1.94   | 3.71   |
| Acid Ratio:<br>(Current Assets - Inventory - Advanced Payments) / Current Liabilities in operation                       | 6.41   | 1.80   | 3.19   |
| Debt Ratio: (Current Liabilities in Operation + Non-current Liabilities) / Total Net Equity                              | 0.86   | 0.95   | 0.78   |
| Short-term Debt (%): Current Liabilities in operation / (Current Liabilities in operation + Non-current Liabilities)     | 6.80%  | 20.44% | 8.79%  |
| Long-term Debt (%):  Non-current Liabilities in operation / (Current Liabilities in Operation + Non-current Liabilities) | 93.20% | 79.56% | 91.21% |
| Financial Expenses Coverage:  (Profit (Loss) Before Taxes + Financial Expenses) / Financial Expenses                     | 2.94   | 4.33   | 3.83   |
| Equity Profitability (%):  Profit (Loss) After Taxes. Continuing Activities / Average Net Equity                         | 2.05%  | 5.77%  | 6.21%  |
| Profitability of Assets (%): Profit (Loss) Controller / Total Average Assets   | 1.09%  | 2.99%  | 3.42%  |
| Performance of Operating Assets (%) Operating Income / Property, Plant and Equipment, Net (Average)                      | 7.64%  | 7.36%  | 7.66%  |

Flow indicators correspond to last 12 months values.

- Average equity: Equity of the current quarter plus equity a year ago divided by two.
- Total assets average: Current total assets plus total assets a year ago divided by two.
- Operational assets average: Current total property, plants and equipment plus total property, plants and equipment a year ago divided by two.

The Company's Cash Flow is presented in the table below:

Tabla 12: Cash Flow Summary (US\$ million)

| Accumulate | mulated Figures Quarterly Figures |   | Figures | s Var % |        |        |
|------------|-----------------------------------|---|---------|---------|--------|--------|
| Sep-15     | Sep-16                            |   | 3Q15    | 3Q16    | Ac/Ac  | Q/Q    |
| 832.8      | 1,080.8                           | Cash Equivalents, Beg. of Period*                             | 912.5   | 868.1   | 30%    | (5%)   |
| 469.6      | 367.7                             | Net cash flows provided by (used in) operating activities     | 235.1   | 108.8   | (22%)  | (54%)  |
| (137.8)    | (702.0)                           | Net cash flows provided by (used in) financing activities     | (29.0)  | (285.5) | 409%   | 883%   |
| (68.9)     | (135.8)                           | let cash flows provided by (used in) investing activities**   | (22.8)  | (71.6)  | 97%    | 214%   |
| 263.0      | (470.1)                           | Net Cash Flows for the Period                                 | 183.3   | (248.3) | (279%) | (236%) |
| (5.2)      | 9.5                               | Effects of exchange rate changes on cash and cash equivalents | (5.1)   | 0.4     | -      | -      |
| 1,090.6    | 620.2                             | Cash Equivalents, End of Period                               | 1,090.6 | 620.2   | (43%)  | (43%)  |

(\*)The account "Cash and Cash Equivalents" presented includes the amount associated to time deposits that, for having an investment term of more than 90 days, are recorded as "Other Current Financial Assets" in the Financial Statements. (\*\*) "Cash Flow from Investing Activities" differs from the Financial Statements because it does not incorporate the amount associated with deposits with maturity over 90 days.

During 3Q16, the Company had **net cash outflows of US\$248.3 million**, lower than the cash flow of the same period last year.

Operating Activities: During 3Q16 a net cash inflow of US\$108.8 million was generated, decreasing by 54% compared to 3Q15. The decrease is mainly explained by lower revenues associated to a lower generation during the quarter and by the cost increase due to higher purchases in the spot market. On the other hand, 3Q15 includes a non-recurring cash inflow of US\$21.5 million due to the insurance compensation payment for loss of earnings associated to the casualty in Blanco Power Plant (60 MW) that occurred in Jan14.

In cumulative terms, a positive net cash flow of US\$367.7 million was generated as of Sep16, 22% lower than as of Sep15, mainly due to a lower operational result during the period.

Financing Activities: Generated a net cash outflow of US\$285.5 million during 3Q16, which compares with 3Q15's net outflow of US\$29.0 million. The higher cash outflow of this quarter is mainly associated with the financial debt prepayments in Chile for US\$250.0 million explained before.

In cumulative terms, a net outflow for US\$702.0 million was recorded as of Sep16, higher than the net outflow of US\$137.8 million as of Sep15, mainly due to the financial debt prepayments during 2Q16 and 3Q16, and due to the distribution of an additional dividend in May16.

Investing Activities: Generated a net cash outflow of US\$71.6 million during 3Q16, higher than the outflow of US\$22.8 million in 3Q15. The higher net cash outflow was mainly due to an increase in the disbursements of La Mina project, which began construction in Dec14. In cumulative terms, investing activities generated a net cash outflow of US\$135.8 million as of Sep16 compared to disbursements of US\$68.9 million as of Sep15.

# 7. ENVIRONMENT AND RISK ANALYSIS



Colbún S.A. is a generation Company with an installed capacity of 3,852 MW, comprised of 2,255 MW in thermal units and 1,589 MW in hydraulic units. The Company operates in Chile's Central Interconnected System (SIC for its acronym in Spanish), with a market share of about 21%. It also operates in Peru's National Interconnected System (SEIN for its acronym in Spanish), where it has a market share of approximately 7%. Both figures measured in terms of installed capacity.

Through its commercial policy, Colbún aims to be a provider of competitive, secure and sustainable energy, with a volume to commit through contracts that allow the Company to maximize the long-term profitability of its asset base, reducing the volatility of its results. These have a structural variability, because they depend on exogenous conditions such as hydrology and the price of fuels (oil, natural gas and coal). To mitigate the effect of these exogenous conditions, the Company seeks to contract its generation sources (own or purchased from third parties) with efficient costs with long-term agreements and eventually, if there is any deficit/surplus Colbún may turn to buy/sell energy the spot market at marginal cost.

#### 7.1 Medium-Term Outlook in Chile

The hydrological year that began in April 2016 has presented dry hydrological conditions in the major basins in the southern zone, showing less rainfalls compared to a normal year. Additionally, during the third quarter two melting forecast were published, both indicating the persistence of a dry hydrology. In particular, for the Maule's affluent a probability of exceedance of 96% was estimated in the second forecast. Given this, the energy matrix has continued its operation with higher thermal sources.

For this reason, regarding gas supply, the Company has supply agreements with ENAP and Metrogas for the period 2016-2019. With these contracts the Company has enough natural gas to operate two natural gas combined cycle units for the most part of 1H16, period of the year in which generally there is less availability of water resources. There is also the possibility of accessing additional natural gas via spot purchases, allowing the Company to have efficient backup in the case of unfavorable hydrological conditions in the second half of the year.

In relation with 2016's contract level, the Company has the same contracts as at the end of December 2015. The current contract level of the Company doesn't contemplate significant expirations until 2019.

The results of the Company for the coming months will be mainly determined by a balanced level between own efficient generation and contract level. Such efficient generation depends on the reliable operation that our plants may have and on hydrological conditions.



### 7.2 Medium-Term Outlook in Peru

The third quarter of 2016 has had a dry hydrological condition with high rates of demand growth, which are explained by the entry into operation and expansion of mining projects.

The future behavior of marginal costs is mainly subject to the demand increase in the remainder of the year, to the hydrology, to the changes in commodity prices and to the effective commissioning dates of new hydropower plants.

# 7.3 Growth Plan and Long-Term Actions

The Company is seeking for growth opportunities in Chile and in other countries in the region such as Colombia and Peru, in order to maintain a leading position in the power generation industry and to diversify its sources of income in terms of hydrologic conditions, generation technologies, fuel access and regulatory frameworks.

Colbún is seeking to increase its installed capacity, while maintaining a relevant participation in the hydroelectric generation industry, with a thermoelectric and renewable component that allows to count on a safe, competitive and sustainable generation matrix.

In Chile, Colbún currently has several projects under different stages of development, including hydro, thermal and NCRE projects and in a lower degree, transmission line projects.

# **Projects under Construction**

La Mina Hydroelectric Project (34 MW): La Mina is a NCRE project located in San Clemente, 110 km east of Talca. The project has an installed capacity of 34 MW and an expected annual average generation of 191 GWh. The energy will be injected to the SIC at the 220 kV Loma Alta substation, through a High Tension Line (HTL) of 66kV and 24 km long. The project utilizes the hydraulic potential of the Maule River and captures the water when it connects with the Puelche River, restoring the water to the same river 2 km downstream the capture point.

In Dec14, the Company started construction of the project, which by the end of 3Q16 had a 90% progress, according to plan. As important milestones achieved during the quarter it is worth mentioning: the ending of: (1) the intake and fixed barrier; (2) the pipe mounting in pressure and in the powerhouse; (3) the civil works for the assembly of the generation units.

Construction of the La Mina Loma Alta transmission line started in Nov15 and progress to September 2016 is 96%, according to plan.

It is expected that the project begins commercial operation during the first months of 2017. The investment amount, including the transmission line, will be approximately US\$130 million.



# **Projects under Development**

San Pedro Hydroelectric Project (170 MW): The project is located 25 km. northeast of Los Lagos, and considers using the water of the homonymous river through a power plant located between the outlet of the Riñihue Lake and the Malihue Bridge. Considering the adjustments included in the project, it will have an estimated flow design of 460 m3/s (+10% with openness) and an approximate installed capacity between 160 MW – 170 MW for an annual generation of 950 GWh under normal hydrological conditions. The operation of the power plant will be such that the level of the reservoir remains virtually constant, which means that the flow downstream of the power plant is not going to be altered by its operation.

In Jun15, the Environmental Impact Assessment (EIA) for the changes to the project was submitted, being initially accepted into process by the Environmental Assessment Service (SEA) of Los Rios Region. However, in Aug15, the Authority decided to early terminate the process due to lack of relevant and essential information. The decision was confirmed after the Company filed an administrative appeal with new information.

Notwithstanding the foregoing, the Company is analyzing the observations from all public services, in order to collect and prepare a timely response with technically founded information required by the authority. In parallel, we continue developing an explicative and clarifying meeting process plan with municipalities, communities, neighborhood, regional authorities, and indigenous communities, among other stakeholders, with the objective to identify the best way to insert this project in the area.

This project considers the San Pedro-Ciruelos transmission line project, which will allow evacuating the power of the San Pedro power plant to the SIC through a 220 kV line and 47 km. length, and will be connected to the Ciruelos substation, located about 40 km northeast of Valdivia.

- Other Hydroelectric Projects: The Company continues performing technical, economic and environmental prefeasibility and feasibility studies for hydroelectric projects, which would use water rights owned by Colbún mainly in the Maule Region (430 MW) and Biobío Region (170 MW).
- NCRE (Non-Conventional Renewable Energies) Projects: The electrical regulation requires that a portion of the contracted energy comes from non-conventional renewable generation means, establishing as goal that by 2025, 20% comes from this type of technology. In addition of this regulation, it's being observed an increase in the effectiveness of solar and wind power-generation. Because of the above, for Colbún it is relevant to grow in this sources of power-generation through different ways, properly complemented with other sources of power-generation given its intermittence and variability.



In this context, in 2013 Colbún signed a contract with Comasa for the purchase of renewable attributes and with Acciona Energía for the purchase of energy and attributes generated by the Punta Palmeras wind farm, of 45 MW, located in Canela, 70 km. from the city of Los Vilos, IV region.

During the first half of 2016 several initiatives were materialized, such as the purchase of part of SunEdison's assets in Chile, which involved the cession of assets from two solar PV solar farms under development for 202 MW, power purchase agreements with regulated customers for 350 GWh per year and in addition, a long-term energy supply contract was signed, by which SunEdison will supply 200 GWh per year of solar energy to Colbún, with the construction of a 90 MW solar farm.

Additionally, during this first half of 2016 Colbún awarded an energy supply contract for 15 years to Total and its affiliated SunPower for 500 GWh per year; and a purchase agreement for NCRE attributes with Los Cururos wind farm.

**Unit II of the Santa María Complex Project (350 MW):** The project is located in Coronel, Biobío Region and considers an installed capacity of 350 MW. Currently, Colbún has the environmental permit approved to develop this second unit of the complex.

During 2014-2015 the design of the project was improved, incorporating new technology to meet the demanding regulations on emissions in force since January 1st, 2012. Also, the social, economic and commercial dimensions of the project are being analyzed, in order to timely define the beginning of its construction.

**HidroAysén:** Colbún participates in a 49% ownership of HidroAysén S.A.

Despite the natural uncertainty on the timing and content of the court's resolutions to which HidroAysén has appealed, as well as guidelines, conditions or any reformulations that those processes being conducted by the government regarding the long term energy agenda and basin territorial planning determine in relation to the development of the hydroelectric potential in Aysén.

Colbún restates its belief that the existing water rights, the additional water rights requested, the environmental permits (RCA – Environmental Qualification Resolution), the field studies, the engineering approvals and project properties are assets acquired and developed by the Company for the past eight years under the current institutional framework and in accordance with international technical and environmental standards.

Colbún maintains the conviction that the development of this hydroelectric potential presents benefits for the country's growth and represents a source of potential long-term value.



# 7.4 Risk Management

# A. Risk Management Policy

The risk management strategy is oriented to safeguard the Company's stability and sustainability, identifying and managing the uncertainty sources that affect or might affect it.

Risk management assumes the identification, measurement, analysis, mitigation and control of the different risks arising from the Company's different management departments, as well as estimating the impact on its consolidated position, follow up and control throughout time. This process involves the intervention of the Company's senior management and risk taking areas.

Tolerable risk limits, metrics for risk measurement and periodicity of risk analysis are policies established by the Company's Board of Directors.

The risk management function is the CEO's responsibility as well as of each division and department, and has the support of the Corporate Risk Management and supervision, monitoring and coordination of the Risk Committee.

#### **B. Risk Factors**

The activities of the Company are exposed to various risks, which have been classified into electrical business risks and financial risks.

### **B.1. Electrical Business Risks**

#### **B.1.1.** Hydrological risk

In Chile, 48% of Colbún's power plants are hydro facilities, which are exposed to hydrology conditions. To comply with its commitments in dry hydrologic conditions, Colbún must operate its combined thermal cycle plants mainly with natural gas purchases or with diesel, or by default operating its back-up thermal plants or even buying energy on the spot market.

This situation raises Colbún's costs, increasing earnings variability depending on the hydrological conditions. The Company's exposure to hydrological risk is reasonably mitigated by a commercial policy that aims to maintain a balance between competitive base generation (hydro generation in a medium to dry year and thermal coal generation, cost efficient natural gas generation, other renewables cost efficient generation, all properly complemented by other sources of generation given their intermittency and volatility) and commercial commitments. Under conditions of extreme and recurrent drought, a potential shortage of water for refrigeration could affect the generation capacity of the combined cycles, whose impact could be mitigated by the purchase of water from third parties and/or by operating these units in an open cycle, as well as implementing technical solutions in the medium and long term that are being analyzed for the aforementioned combined cycle complex.



In Peru, Colbún owns a combined-cycle power plant and has a commercial policy oriented towards committing such base energy through medium and long-term contracts. The exposure to dry seasons is restricted, since Colbún's operations would only be impacted in the event of potential operational failures that would require the Company to resort to the spot market. Additionally, the Peruvian electrical market presents an efficient thermal supply and availability of natural gas from local sources that backs it up.

#### **B.1.2. Fuel price risk**

In Chile, in situations of low water availability in its hydro power plants, Colbún should use its thermal plants or purchase energy in the spot market at marginal cost. In these scenarios, there is a risk associated to potential variations in international fuel prices. Part of this risk is mitigated incorporating fuel price indexation on our selling energy contracts. Additionally, in order to reduce fuel price risks there is a hedge program in place with different derivative instruments such as call options and put options to hedge the remaining exposure, if necessary. Otherwise, in case of abundant hydrology, the Company may be in a selling position in the spot market, where the price would be partially determined by the fuel price.

In Peru, the cost of natural gas has a lower dependence to international prices, due to an important domestic production of this hydrocarbon, limiting its exposure to this risk. Like in Chile, the proportion exposed to variations in international prices is mitigated by indexed formulas in energy sales contracts.

Due to the above, exposure to the risk of changes in fuel prices is largely mitigated.

#### **B.1.3. Fuel supply risks**

Regarding liquid fuel supply in Chile, the Company has agreements with suppliers and own storage capacity to ensure adequate reliability in respect to the availability of this type of fuel.

Regarding natural gas supply, in Chile Colbún has medium-term contracts with ENAP and Metrogas and in Peru the Fenix Power plant has long-term contracts with the ECL88 Consortium (Pluspetrol, Pluspetrol Camisea, Hunt, SK, Sonatrach, Tecpetrol and Repsol) and gas transportation agreements with TGP.

Regarding coal purchases for Santa María unit I power plant, new tenders have been undertaken, inviting important international suppliers to bid, awarding the supply contract to well supported and competitive companies. The above is in line with an early purchasing policy and a stock management policy in order to substantially mitigate any risk of not having this fuel available.

### **B.1.4.** Equipment failure and maintenance risks

The availability and reliability of Colbún's generating units and transmission facilities are essential to the Company's business. This is why Colbún has a policy to conduct regular maintenances on its equipment according to the recommendations of its suppliers, and maintains a policy to cover such risks through insurances for its physical assets, including coverage for physical damage and for loss of profit.



Despite of the performed maintenance and daily operational management, occasionally failures occur. On June 28 a fire affected the main transformer of the gas turbine of Nehuenco 2 ("Unit 2") thermoelectric plant, triggering immediate internal emergency protocols with no casualties or injuries of any consideration. Unit 2 was disconnected from the system while Unit 1 continued its normal operation.

With the purpose of resuming operations as soon as possible, Colbún acquired a provisional transformer, which is currently in a testing phase. On the other hand, Colbún entrusted the manufacturing of a new and definitive transformer, which is expected to be operational by the end of December 2016.

With the available information about estimated repair time, availability of the plant and insurance coverage for this type of casualty, the impact of the failure on the financial results of the Company is not material in Colbún's context.

### **B.1.5. Project construction risks**

The development of new generation and transmission projects can be affected by factors such as: delays in obtaining environmental approvals, regulatory framework changes, prosecutions, increase in equipment price, opposition from local and international stakeholders, adverse geographical conditions, natural disasters, accidents or other unforeseen events.

The Company's exposure to such risks is managed through a commercial policy that considers the effects of potential project delays. Alternatively, clearance levels with respect to time and costs of construction estimates are incorporated. Additionally, the Company's exposure to this risk is partially covered with the "All Construction Risk" insurance policies covering both physical damage and loss of profit as a result of delay in service resulting from a casualty, both with standard deductibles for this type of insurances.

The companies in the sector face a very challenging electricity market, with lots of activity from different interest groups, mainly from local communities and NGOs, which are legitimately looking for more participation and prominence. As part of this complexity, the environmental processing times have become more uncertain, which occasionally are also followed by long prosecuting processes. This has resulted in less construction of significant size projects.

Colbún has also the policy to integrate with excellence the social and environmental dimensions to the development of its projects. The Company has developed a model of social link that allows it to work with neighboring communities and with the society in general, starting a transparent process of public participation and confidence building in the early stages of projects and throughout their entire life cycle.

#### **B.1.6. Regulatory risks**

Regulatory stability is fundamental for the generation sector, due to the long-term nature of the development, execution and return on investment of its projects. Colbún believes that regulatory changes must be made taking into consideration the complexities of the electrical system and keeping adequate investment incentives. It is important to dispose of a regulation that gives clear and transparent rules that consolidates the trust of the agents in the sector.



In Chile, the energy agenda promoted by the government considers different regulatory changes, which, depending on the form in which they get be implemented, could represent an opportunity or risk for the Company. Changes that are currently being discussed in the Congress regarding (i) the amendment to the Water Code, (ii) the law related to strengthening the regionalization of the country, (iii) the bill that creates the Ministry of Indigenous Peoples, (iv) the bill that creates the National Council and the Councils of Indigenous Peoples and (v) the Law on Biodiversity and Protected Areas. There are also important initiatives in the sector such as: (i) definition of the regulations necessary for the proper implementation of the recently enacted Law on Electricity Transmission, (ii) the definition of the long-term Energy Policy for the country (2050) which is already in its diffusion stage, and (iii) Technical Standard for planning and scheduling the operation of units using natural gas (LNG), among others.

In Peru, the authority is conducting studies of regulatory changes for the electricity sector. Some of the issues that are being considered are related to: (i) Governance (powers of the regulatory agency OSINERGMIN), (ii) Structure of the industry (effective vertical separation, greater private participation in distribution), (iii) Generation/wholesale market (improving the short-term market with real price signals), (iv) Regulation of networks (review the discount rates used for transmission compensation), (v) Transmission (reform regarding planning, incorporating international exchanges) and (vi) Retail/retail market (to implement a full competition in the retail market).

The necessary and balanced development of the electricity market during the next few years depends greatly on the quality of these new regulations and on the signals provided by the authorities with them, both in Chile and Peru.

### B.1.7. Risk of change in demand supply and selling price of electricity

The projection of future electricity consumption is very relevant information for the determination of its market price.

In Chile, during the past months, a lower-than-projected growth in demand has occurred, causing an imbalance between supply and demand and affecting energy prices. On the other hand, this imbalance may further increase due to development of cost efficient NCRE projects.

In Peru, there is also a scenario of a temporary imbalance between supply and demand, mainly due to the increase of efficient supply (hydroelectric and natural gas plants), involving a decrease of energy prices in recent months.

The growth that has been observed in the Chilean (and potentially in the Peruvian) market of non-conventional renewable sources of generation such as solar and wind may generate integration costs and therefore affect the operating conditions of the rest of the electrical system especially in the absence of a market for complementary services that adequately remunerate the services necessary to manage the variability of such generation sources.



#### **B.2 Financial risks**

Are those risks associated with the inability to perform transactions or the breach of obligations from the activities due to lack of funds, as well as variations in interest rates, exchanges rates, counterparty financial stress or other financial market variables that may materially affect Colbún.

#### **B.2.1 Exchange rate risk**

The exchange rate risk is mainly caused by currency fluctuations that come from two sources. The first source of exposure comes from cash flows corresponding to revenues, costs and disbursements of investments denominated in currencies other than the functional currency (U.S. dollar). The second source of risk corresponds to the accounting mismatch between assets and liabilities of the Statement of Financial Position denominated in currencies other than the functional currency.

Exposure to cash flows in currencies other than USD is limited because virtually all sales of the Company are denominated directly in or indexed to USD. Similarly, the main costs are related to diesel, natural gas and coal purchases, which incorporate pricing formulas based on international prices denominated in USD. Regarding investment projects disbursements, the Company incorporates indexers in its contracts with suppliers and resorts to the use of derivatives to fix the expenses in currencies other than USD.

Exposure to the mismatching of accounts is mitigated by applying a policy of maximum mismatch between assets and liabilities for those structural items denominated in currencies other than USD. For purposes of the above, Colbún maintains a significant proportion of its cash surpluses in dollars and additionally resorts to the use of derivatives, mainly using currency swaps and forwards.

#### **B.2.2 Interest rate risk**

Is related to changes in interest rates that affect the value of future cash flows tied to a floating interest rate, and changes in the fair value of assets and liabilities linked to fixed interest rate that are measured at fair value. In order to mitigate these risks, interest rate swaps are used.

The Company's financial debt, including the effect of the contracted interest rate derivatives, has the following profile:

Table 13: Financial Debt Profile

| Interest Rate | Sep-15 | Dec-15 | Sep-16 |
|---------------|--------|--------|--------|
| Fixed         | 100%   | 100%   | 96%    |
| Variable      | 0%     | 0%     | 4%     |
| Total         | 100%   | 100%   | 100%   |



#### **B.2.3 Credit risk**

The Company is exposed to the risk arising from the possibility that a counterpart fails to meet its contractual obligations, producing an economic or financial loss. Historically, all of Colbún's counterparties with which it has maintained energy supply contracts have made the corresponding payments correctly.

With respect to cash and derivatives statements, Colbún has entered into these transactions with financial institutions with high credit ratings. Additionally, the Company has established limits by counterparty, which are approved by the Board of Directors and periodically reviewed.

As of September 30, 2016, cash surpluses are invested in mutual funds (of subsidiaries of banks) and in fixed-time deposits in local and international banks. The former correspond to short-term mutual funds with maturities of less than 90 days, which are known as "money market".

## **B.2.4 Liquidity risk**

This risk results from different funding requirements to meet investment commitments and business expenses, debt payments, among others. The funds needed to meet these cash flow outputs are obtained from our own resources generated by Colbún's ordinary activity and by contracting credit lines to ensure sufficient funds to cover projected needs for a given period.

As of September 30, 2016, Colbún has cash in excess for approximately US\$ 600 million, invested in time deposits with an average maturity of 60 days and in short-term mutual funds with a maturity of less than 90 days. The Company also has as additional liquidity sources available to date: (i) two bonds lines registered in the local market for a total amount of UF 7 million, (ii) a line of trade notes in the local market for UF 2.5 million and (iii) uncommitted bank lines of approximately US\$ 150 million.

In the next 12 months, the Company must disburse approximately US\$87 million in interests and principal amortization. This remaining interest and minor amortization is expected to be covered with the Company's own cash flow generation.

As of September 30, 2016, Colbún has a local credit rating of A+ by Fitch Ratings and AA- by Humphreys, both with stable perspectives. At the international level, the Company's rating is BBB by Fitch Ratings and BBB- by Standard & Poor's (S&P), both with stable perspectives.

Considering the foregoing, it is believed that the Company's liquidity risk is currently limited.

# **B.2.5** Risk measurement

The Company periodically analyzes and measures its exposure to the different risk variables, in accordance with the previous paragraphs. Risk management is performed by a Risk Committee with the support of the Corporate Risk Management and in coordination with other divisions of the Company.



Regarding business risks, specifically those related to changes in commodity prices, Colbún has implemented mitigation measures consistent of indexers in energy sale contracts and of hedges with derivative instruments to cover any possible remaining exposure. It is for this reason that a sensitivity analysis is not presented.

To mitigate the risk of failures in equipment or in the projects construction, the Company has insurance coverage for damage to its physical property, business interruption damages and loss of profit for the delay in the commissioning of a project. This risk is considered fairly limited.

With regard to financial risks, for purposes of measuring exposure, Colbún prepares a sensitivity analysis and value at risk in order to monitor potential losses assumed by the Company in the event that the exposure exists.

The exchange rate risk is considered to be limited, since the Company's main flows (revenues, costs and projects disbursements) are denominated directly in or indexed to USD. Exposure to the mismatching of accounts is mitigated by applying a policy of maximum mismatch between assets and liabilities for those structural items denominated in currencies other than USD. Given the above, as of September 30, 2016, the Company's exposure to this risk is limited, resulting in a potential impact due to exchange differences of approximately US\$3.0 million, on a quarterly basis, based on a sensitivity analysis with 95% confidence.

The risk of interest rate variation is partially mitigated, given that 96% of the Company's financial debt is contracted at a fixed rate (in a direct way and using derivatives). Therefore, as of September 30, 2016, the exposure of the Company to variable interest rates is limited, which results in a potential impact of approximately US\$3.9 million in quarterly terms, based on a sensitivity analysis with 95% confidence.

Credit risk is limited because Colbún operates only with local and international banking counterparties with high credit ratings and has established policies of maximum exposure per counterparty that limits the specific concentration with these institutions. In the case of banks, local institutions have a local risk rating equal to or greater than BBB+ and foreign entities have an international risk rating investment grade. At the end of the period, the financial institution that has the largest share of cash surplus reached 20%. Regarding existing derivatives, the Company's international counterparts have a credit rating equivalent to BBB+ or higher and national counterparts have local credit rating of AA+ or higher. It should be noted that no counterpart concentrates more than 21% in national terms.

Liquidity risk is considered low because of the relevant cash position of the Company, the amount of financial obligations over the next twelve months and the access to additional sources of funding, including committed and uncommitted financial lines.

# DISCLAIMER



This document provides Information about Colbún S.A. In no case this document constitutes a comprehensive analysis of the financial, production and sales situation of the Company.

This document may contain forward-looking statements concerning Colbún's future performance and should be considered as good faith estimates by Colbún S.A.

In compliance with the applicable laws, Colbún S.A. publishes on its website (www.colbun.cl) and sends the financial statements and its corresponding notes to the Superintendencia de Valores y Seguros, those documents should be read as a complement to this report.