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## Financial Management for "eV-Station-Electric Vehicle Charging Station" in Indonesia

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### Abstrak

Latar Belakang - Tren perkembangan Electric Vehicle (EV) dari tahun 2011 hingga tahun 2019 meningkat secara signifikan. Perkiraan kebutuhan tenaga listrik untuk konsumsi EV pada tahun 2021 maksimal sebesar 4.743 Giga Watt Hour (GWh), pada tahun 2022 meningkat menjadi 11.873 GWh dan prediksi pada tahun 2024 mencapai 38.491 GWh. Berdasarkan data perbandingan supply & demand SPKLU sampai dengan Juni 2022, total kebutuhan SPKLU sebanyak 917 unit sedangkan SPKLU yang sudah terbentuk baru 164 unit sehingga masih terdapat kebutuhan sebanyak 753 unit atau 82 persen dari total kebutuhan SPKLU sampai Juni 2022. "eV-Station" atau stasiun kendaraan listrik hadir untuk menjawab tantangan tersebut, eV-Station fokus menyediakan layanan pengisian kendaraan listrik yang dilengkapi dengan ruang tunggu yang nyaman dengan penyewa kedai kopi. eV-station juga memfasilitasi pelanggan dengan co-working space, fasilitas ini diperuntukkan bagi pelanggan yang tidak ingin kehilangan waktu sedikitpun untuk melakukan aktivitas bisnis. Perkiraan kebutuhan tenaga listrik untuk konsumsi EV pada tahun 2021 maksimal sebesar 4.743 Giga Watt Hour (GWh), pada tahun 2022 meningkat menjadi 11.873 GWh dan prediksi pada tahun 2024 mencapai 38.491 GWh. Berdasarkan data perbandingan supply & demand SPKLU sampai dengan Juni 2022, total kebutuhan SPKLU sebanyak 917 unit sedangkan SPKLU yang sudah terbentuk baru 164 unit sehingga masih terdapat kebutuhan sebanyak 753 unit atau 82 persen dari total kebutuhan SPKLU sampai Juni 2022. "eV-Station" atau stasiun kendaraan listrik hadir untuk menjawab tantangan tersebut, eV-Station fokus menyediakan layanan pengisian kendaraan listrik yang dilengkapi dengan ruang tunggu yang nyaman dengan penyewa kedai kopi. eV-station juga memfasilitasi pelanggan dengan co-working space, fasilitas ini ditujukan bagi pelanggan yang tidak ingin kehilangan waktu sedikit pun untuk melakukan aktivitas bisnis.

Kata Kunci: *Tren Perkembangan Kendaraan Listrik (EV), Pengelolaan Keuangan eV-Station di Indonesia*

## Abstract

Background - The development trend of Electric Vehicle (EV) from 2011 to 2019 increased significantly. The estimated electric power demand for EV consumption in 2021 max amounted to 4,743 Giga Watt Hour (GWh), in 2022 it increased to 11,873 GWh and predictions in 2024 will reach 38,491 GWh. Based on SPKLU supply & demand comparison data until June 2022, the total SPKLU needs are 917 units while the SPKLU that has been established is only 164 units so there is still a need for 753 units or 82 percent of the total SPKLU needs until June 2022. "eV-Station" or electric vehicle station is here to answer this challenge, eV-Station focuses on providing electric vehicle charging services equipped with a comfortable waiting room with a coffee shop tenant. eV-station also facilitates customers with co-working space, this facility is intended for customers who do not want to lose a second of their time to do business activities. increased significantly. The estimated electric power demand for EV consumption in 2021 max amounted to 4,743 Giga Watt Hour (GWh), in 2022 it increased to 11,873 GWh and predictions in 2024 will reach 38,491 GWh. Based on SPKLU supply & demand comparison data until June 2022, the total SPKLU needs are 917 units while the SPKLU that has been established is only 164 units so there is still a need for 753 units or 82 percent of the total SPKLU needs until June 2022. "eV-Station" or electric vehicle station is here to answer this challenge, eV-Station focuses on providing electric vehicle charging services equipped with a comfortable waiting room with a coffee shop tenant. eV-station also facilitates customers with co-working space, this facility is intended for customers who do not want to lose a second of their time to do business activities.

Keyword: *Electric Vehicle (EV) development trend, Financial management of eV-Station in Indonesia*

## INTRODUCTION

Financial planning helps determine whether a company idea is sustainable, and keeps a company on the path to financial health as the business matures. Financial planning is an integral part of the overall business plan. Financial Planning in this chapter consists of five main pillars namely: Financial Goals and Objectives, Financial Planning Elements, Financial Projections, Investment Feasibility Analysis, and Investment Performance Analysis.

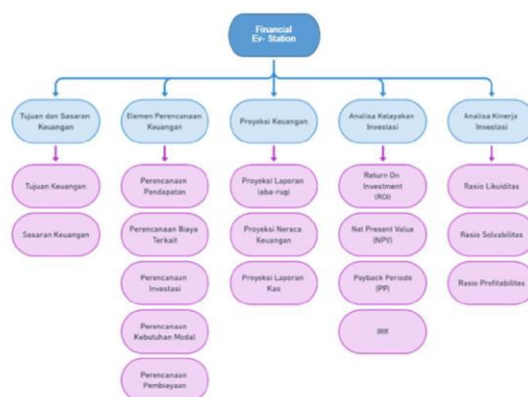


Figure 1. eV-Station Financial Plan Framework

## Financial Planning Goals and Objectives

eV-Station's Financial Objective is to manage the search for investment and capital funding sources, then maintain cash flow for operations and expansion and maintain cash flow for financial efficiency to achieve the company's vision.

The objectives of eV-Station determine the two alternative strategies that eV-Station will choose, namely service development strategies and offline and online market penetration strategies as shown in the table below.

Table 1. eV-Station Financial Goals and Objectives

| Waktu                        | Tujuan                                                     | Sasaran                                                                      |
|------------------------------|------------------------------------------------------------|------------------------------------------------------------------------------|
| Jangka Pendek<br>0-2 Tahun   | Memastikan ketersediaan modal awal pendirian perusahaan    | Menjalin kerjasama dengan investor atau bank untuk pemenuhan kebutuhan modal |
| Jangka Menengah<br>3-5 Tahun | Membuat perencanaan dan evaluasi setiap transaksi kegiatan | Mengevaluasi setiap transaksi kegiatan sesuai dengan perencanaan             |
| Jangka Panjang<br>> 5 Tahun  | Financial investment                                       | Persiapan pendanaan dalam rangka ekspansi bisnis                             |

## METHOD

### Elements of Financial Planning

#### 1) Revenue Planning

Ev-Station's revenue projection with estimated sales within 5 years where total sales amounted to IDR 37,229,468,375 billion.

#### 2) Related Cost Planning

The related cost planning referred to here basically includes the work plans of all company units, which include marketing planning, operational planning, HR planning and risk planning.

### Marketing Costs

Ev-Station marketing costs include all costs incurred for promotional and marketing activities.

### Operating Costs

Operating costs here include costs associated with business activities, operating tools, components, equipment, or other facilities. These costs need to be prepared by the company in order to operate.

### HR Costs

Ev-Station's HR costs consist of salaries, benefits, recruitment costs and training & development costs.

### Risk Management

Costs related to risk management include anticipating losses caused by work errors

and natural disasters such as floods, earthquakes and others as a form of maintenance of company assets.

#### Depreciation Expenses

Ev-Station's depreciation costs use the straight-line method which consists of Buildings, Vehicles, Machinery and Office Equipment.

#### Investment Planning

Investment activities are expected to provide benefits in terms of increasing profits, especially from the capital that has been spent on the investment in the future. Ev-Station accumulates assets as capital to prepare for future income.

#### Capital Requirements Planning

Capital needs planning includes all funding needs, namely the construction of service room buildings, purchase of machinery and other operational support equipment, because in the early stages of establishment requires funding for business development and introducing the company to potential customers. Funding uses initial capital from founders and investors.

#### Financing Planning

Ev-Station made a financing plan based on investment needs so that it was decided that its authorized capital was Rp. 7,000,000,000 billion consisting of owner capital participation, namely 5 founders of Rp. 6,250,000,000, and 750,000,000 from bank financing.

#### Financial Projections

##### Profit and Loss Statement Projection

The components of the profit and loss projection include revenue, operating costs, labor costs, and marketing costs so that net profit or loss is known in a certain period of time. The projection of net profit after tax calculated for 5 consecutive years shows that profit from year 1 to year 5 has increased continuously so that the company can expand its business.

Table 2. Profit and Loss

| Ev-Station Profit & Loss                          |                      |                      |                      |                      |                      |
|---------------------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|                                                   | Year 1               | Year 2               | Year 3               | Year 4               | Year 5               |
| <b>Pendapatan</b>                                 |                      |                      |                      |                      |                      |
| EV Charging                                       | 2.673.000.000        | 3.293.136.000        | 4.020.192.000        | 4.747.248.000        | 5.474.304.000        |
| Co-working Space                                  | 1.717.200.000        | 2.003.400.000        | 2.289.600.000        | 2.575.800.000        | 2.862.000.000        |
| Robotic Car Wash                                  | 648.000.000          | 756.000.000          | 864.000.000          | 972.000.000          | 1.080.000.000        |
| Rent Tenant                                       | 140.000.000          | 147.000.000          | 154.350.000          | 162.067.500          | 170.170.875          |
| Rent Outdoor Space                                | 48.000.000           | 72.000.000           | 96.000.000           | 120.000.000          | 144.000.000          |
| <b>Total Revenue</b>                              | <b>5.226.200.000</b> | <b>6.271.536.000</b> | <b>7.424.142.000</b> | <b>8.577.115.500</b> | <b>9.730.474.875</b> |
| <b>Behan Operasional</b>                          |                      |                      |                      |                      |                      |
| Charging                                          | 791.740.800          | 999.450.514          | 1.289.433.600        | 1.540.742.400        | 1.875.571.200        |
| Co Working Space                                  | 0                    | 0                    | 0                    | 0                    | 0                    |
| Private Co Working Space                          | 0                    | 0                    | 0                    | 0                    | 0                    |
| Ticket Event                                      | 0                    | 0                    | 0                    | 0                    | 0                    |
| Sewa Event Space (4%)                             | 0                    | 0                    | 0                    | 0                    | 0                    |
| Sewa Event Space In Outdoor                       | 0                    | 0                    | 0                    | 0                    | 0                    |
| <b>Total Cost</b>                                 | <b>791.740.800</b>   | <b>999.450.514</b>   | <b>1.289.433.600</b> | <b>1.540.742.400</b> | <b>1.875.571.200</b> |
| <b>Labu (Rugi) Kotar</b>                          | <b>4.434.459.200</b> | <b>5.272.085.486</b> | <b>6.134.708.400</b> | <b>7.036.373.100</b> | <b>7.854.903.675</b> |
| <b>Behan Umum dan Administrasi</b>                |                      |                      |                      |                      |                      |
| Biaya Salary & Allowance                          | 1.429.329.487        | 1.788.874.000        | 1.838.285.486        | 2.395.095.923        | 2.476.356.853        |
| Biaya Website                                     | 3.500.000            | 500.000              | 500.000              | 500.000              | 500.000              |
| Biaya Digital Adv                                 | 58.700.000           | 525.000              | 530.250              | 535.553              | 540.908              |
| Biaya Event & Gathering                           | 3.000.000            | 48.300.000           | 53.130.000           | 58.443.000           | 64.287.300           |
| Biaya Sewa Lahan                                  | 200.000.000          | 200.000.000          | 200.000.000          | 200.000.000          | 200.000.000          |
| Biaya Maintenance peralatan Charging station      | 24.000.000           | 25.200.000           | 26.460.000           | 27.783.000           | 29.172.150           |
| Biaya maintenance Aqandscape dan Co Working Space | 60.000.000           | 63.000.000           | 66.150.000           | 69.457.500           | 72.930.375           |
| Biaya Sertifikasi dan kalibrasi                   | 48.000.000           | 49.440.000           | 50.923.200           | 52.450.896           | 54.024.423           |
| Biaya Infrastruktur IT (hardware&software)        | 48.000.000           | 48.000.000           | 48.000.000           | 48.000.000           | 48.000.000           |
| Biaya Listrik office dll ( non direct)            | 48.000.000           | 50.400.000           | 52.920.000           | 55.566.000           | 58.344.300           |
| Biaya Maintenance Automatic Car Wash              | 30.000.000           | 31.500.000           | 33.075.000           | 34.728.750           | 36.465.188           |
| Biaya Maintenance eV-Station Smart App            | 30.000.000           | 31.500.000           | 33.075.000           | 34.728.750           | 36.465.188           |
| Biaya Maintenance AC                              | 18.000.000           | 18.900.000           | 19.845.000           | 20.837.250           | 21.879.113           |
| Biaya Internet & telepon                          | 15.000.000           | 16.500.000           | 18.150.000           | 19.965.000           | 21.961.500           |
| Biaya Perizinan                                   | 15.000.000           | 15.750.000           | 16.537.500           | 17.364.375           | 18.232.594           |
| Biaya Operasional lain                            | 12.000.000           | 12.600.000           | 13.230.000           | 13.891.500           | 14.586.075           |
| Biaya Maintenance website                         | 10.000.000           | 10.500.000           | 11.025.000           | 11.576.250           | 12.155.063           |
| Biaya Maintenance GENSET                          | 7.650.000            | 8.032.500            | 8.434.125            | 8.855.831            | 9.298.623            |
| Biaya PDAM                                        | 6.000.000            | 6.300.000            | 6.615.000            | 6.945.750            | 7.293.038            |
| Biaya Maintenance APAR                            | 5.550.000            | 5.827.500            | 6.118.875            | 6.424.819            | 6.746.060            |
| Biaya ATK                                         | 4.800.000            | 5.040.000            | 5.292.000            | 5.556.600            | 5.834.430            |
| Biaya Ramah Tamga Kotar                           | 3.000.000            | 10.000.000           | 10.000.000           | 10.000.000           | 10.000.000           |
| Biaya Maintenance CCTV                            | 3.000.000            | 3.150.000            | 3.307.500            | 3.472.875            | 3.646.519            |
| Biaya Asuransi Charging Station                   | 94.056.600           | 89.361.270           | 84.665.940           | 79.970.610           | 75.275.280           |
| Biaya Asuransi Automatic Carwash                  | 9.048.225            | 7.936.210            | 6.823.894            | 5.711.578            | 4.599.263            |
| Biaya Asuransi Bangunan Utama eV-Station          | 30.150.000           | 28.650.000           | 27.150.000           | 25.650.000           | 24.150.000           |
| Biaya Asuransi Mobil Operasional                  | 3.900.000            | 3.431.250            | 2.962.500            | 2.493.750            | 2.025.000            |
| <b>Total Behan Umum dan Administrasi</b>          | <b>2.219.684.642</b> | <b>2.579.217.738</b> | <b>2.643.206.279</b> | <b>3.216.005.569</b> | <b>3.314.769.339</b> |
| <b>Labu (Rugi) Operasional</b>                    | <b>2.214.774.588</b> | <b>2.892.867.748</b> | <b>3.491.582.139</b> | <b>3.820.367.549</b> | <b>4.540.134.336</b> |
| <b>Other income / Expenses</b>                    |                      |                      |                      |                      |                      |
| Biaya bunga                                       | 81.750.000           | 63.750.000           | 45.750.000           | 27.750.000           | 9.750.000            |
| <b>Total Other income / Expenses</b>              | <b>81.750.000</b>    | <b>63.750.000</b>    | <b>45.750.000</b>    | <b>27.750.000</b>    | <b>9.750.000</b>     |
| <b>Labu (Rugi) Usaha</b>                          | <b>2.133.024.588</b> | <b>2.629.117.748</b> | <b>3.445.752.139</b> | <b>3.792.617.549</b> | <b>4.530.384.336</b> |
| <b>Amortisasi &amp; Depresiasi</b>                |                      |                      |                      |                      |                      |
| Ged 1                                             | 213.635.925          | 213.635.925          | 213.635.925          | 213.635.925          | 0                    |
| Ged 2                                             | 63.242.627           | 63.242.627           | 63.242.627           | 63.242.627           | 63.242.627           |
| Ged 3                                             | 247.813.200          | 247.813.200          | 247.813.200          | 247.813.200          | 247.813.200          |
| <b>Total Depresiasi &amp; Amortisasi</b>          | <b>524.691.752</b>   | <b>524.691.752</b>   | <b>524.691.752</b>   | <b>524.691.752</b>   | <b>311.855.827</b>   |
| <b>Labu (Rugi) sebelum Pajak</b>                  | <b>1.608.332.836</b> | <b>2.104.425.996</b> | <b>2.921.860.378</b> | <b>3.267.925.788</b> | <b>4.219.328.569</b> |
| Pajak                                             | 402.083.209          | 526.106.499          | 730.265.095          | 816.981.447          | 1.054.832.127        |
| <b>Labu (Rugi) setelah Pajak</b>                  | <b>1.206.249.627</b> | <b>1.578.319.497</b> | <b>2.191.595.283</b> | <b>2.450.944.341</b> | <b>3.164.496.442</b> |

## Projected Balance Sheet

The projected Ev-Station Balance Sheet shows an increase in assets from year 1 to year 5. The Ev-Station balance sheet for the next 5 years can be seen in the following table:

Table 3. Neraca

| Ev-Station Balance Sheet   |                      |                      |                       |                       |                       |
|----------------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|
|                            | Year 1               | Year 2               | Year 3                | Year 4                | Year 5                |
| <b>Aktiva</b>              |                      |                      |                       |                       |                       |
| <b>Aktiva Lancar</b>       |                      |                      |                       |                       |                       |
| Kas & Setara Kas           | 2.264.192.664        | 4.217.203.913        | 6.782.690.948         | 9.608.327.041         | 12.933.879.250        |
| <b>Total Aktiva Lancar</b> | <b>2.264.192.664</b> | <b>4.217.203.913</b> | <b>6.782.690.948</b>  | <b>9.608.327.041</b>  | <b>12.933.879.250</b> |
| <b>Aktiva Tetap</b>        |                      |                      |                       |                       |                       |
| Asst Gol 1                 | 854.543.700          | 854.543.700          | 854.543.700           | 854.543.700           | 854.543.700           |
| Asst Gol 2                 | 905.941.015          | 905.941.015          | 905.941.015           | 905.941.015           | 905.941.015           |
| Asst Gol 4                 | 4.956.264.000        | 4.956.264.000        | 4.956.264.000         | 4.956.264.000         | 4.956.264.000         |
| Akumulasi Penyusutan Gol 1 | -213.635.925         | -427.271.850         | -640.907.775          | -854.543.700          | -854.543.700          |
| Akumulasi Penyusutan Gol 2 | -63.242.627          | -126.485.254         | -189.727.881          | -252.970.508          | -316.213.134          |
| Akumulasi Penyusutan Gol 4 | -247.813.200         | -495.626.400         | -743.439.600          | -991.252.800          | -1.239.066.000        |
| <b>Total Aktiva Tetap</b>  | <b>5.792.056.963</b> | <b>5.267.365.211</b> | <b>4.742.673.459</b>  | <b>4.217.981.708</b>  | <b>3.906.925.881</b>  |
| <b>Total Aktiva</b>        | <b>8.056.249.627</b> | <b>9.484.569.124</b> | <b>11.525.364.408</b> | <b>13.826.308.749</b> | <b>16.840.805.131</b> |
| <b>Passiva</b>             |                      |                      |                       |                       |                       |
| <b>Hutang Lancar</b>       |                      |                      |                       |                       |                       |
| Hutang Bank                | 600.000.000          | 450.000.000          | 300.000.000           | 150.000.000           | 0                     |
| <b>Total Hutang</b>        | <b>600.000.000</b>   | <b>450.000.000</b>   | <b>300.000.000</b>    | <b>150.000.000</b>    | <b>0</b>              |
| <b>Modal</b>               |                      |                      |                       |                       |                       |
| Modal Awal                 | 6.250.000.000        | 6.250.000.000        | 6.250.000.000         | 6.250.000.000         | 6.250.000.000         |
| Labu (Rugi) ditahan        | 0                    | 1.206.249.627        | 2.784.569.124         | 4.975.364.408         | 7.426.308.749         |
| Labu (Rugi) Tahun Berjalan | 1.206.249.627        | 1.578.319.497        | 2.190.795.284         | 2.450.944.341         | 3.164.496.382         |
| <b>Total Modal</b>         | <b>7.456.249.627</b> | <b>9.034.569.124</b> | <b>11.225.364.408</b> | <b>13.676.308.749</b> | <b>16.840.805.131</b> |
| <b>Total Passiva</b>       | <b>8.056.249.627</b> | <b>9.484.569.124</b> | <b>11.525.364.408</b> | <b>13.826.308.749</b> | <b>16.840.805.131</b> |

Perencanaan Ev-Station's balance sheet plan shows an increase in assets from year 4 to year 5.

## Projected Cash Flow Statement

Ev-Station's cash flow report shows that the ending balance of year 1 to year 5 is always surplus and increasing every year, this indicates that Ev-Station's cash flow is very good and always makes improvements to the financial structure every year.

Table 4. Cash Flow

| Ev-Station<br>Cash Flow |                                     |                |               |                |                |                |
|-------------------------|-------------------------------------|----------------|---------------|----------------|----------------|----------------|
|                         |                                     | Year 1         | Year 2        | Year 3         | Year 4         | Year 5         |
| OPERATIONAL             |                                     |                |               |                |                |                |
| Collection              | Beginning Balance (Modal Disetor)   | 6.250.000.000  | 2.264.192.664 | 4.217.203.913  | 6.782.690.948  | 9.608.327.041  |
|                         | Revenue                             | 5.226.200.000  | 6.271.536.000 | 7.424.142.000  | 8.577.115.500  | 9.730.474.875  |
|                         | Total Collection                    | 11.476.200.000 | 8.535.728.664 | 11.641.345.913 | 15.359.806.448 | 19.338.801.916 |
| Payment Capex           | Asset                               | 6.316.748.715  | 0             | 0              | 0              | 0              |
|                         | Total Payment                       | 6.316.748.715  | 0             | 0              | 0              | 0              |
| Payment CoS             | Cost of Services                    | 791.740.800    | 999.450.514   | 1.289.433.600  | 1.540.742.400  | 1.875.571.200  |
|                         | Total Payment                       | 791.740.800    | 999.450.514   | 1.289.433.600  | 1.540.742.400  | 1.875.571.200  |
| Payment Opex            | Salary & Allowance Expenses         | 1.429.329.487  | 1.788.874.008 | 1.838.285.486  | 2.395.095.923  | 2.476.356.953  |
|                         | Sales Expenses                      | 65.200.000     | 49.325.000    | 54.160.250     | 59.478.553     | 65.328.208     |
|                         | Operational Expenses                | 588.000.000    | 611.640.000   | 629.158.200    | 647.605.146    | 667.034.635    |
|                         | Insurance Expenses                  | 137.155.125    | 129.378.730   | 121.602.334    | 113.825.938    | 106.049.543    |
|                         | Tax Expenses                        | 402.083.209    | 526.106.499   | 730.265.095    | 886.981.447    | 1.054.832.127  |
|                         | Total Operating Expense             | 2.621.767.821  | 3.105.324.237 | 3.373.471.364  | 4.032.987.007  | 4.369.801.466  |
|                         | Increase (Decrease) in Operating    | 1.745.942.664  | 4.430.553.913 | 6.978.440.948  | 9.786.077.041  | 13.093.629.250 |
| FINANCING               |                                     |                |               |                |                |                |
| Loan                    | Received                            | 750.000.000    | 0             | 0              | 0              | 0              |
|                         | Installment                         | 150.000.000    | 150.000.000   | 150.000.000    | 150.000.000    | 150.000.000    |
|                         | Interest                            | 81.750.000     | 63.750.000    | 45.750.000     | 27.750.000     | 9.750.000      |
|                         | Total Loan                          | 518.250.000    | -213.750.000  | -195.750.000   | -177.750.000   | -159.750.000   |
| Non Loan                | Received                            | 0              | 0             | 0              | 0              | 0              |
|                         | Total Non Loan                      | 0              | 0             | 0              | 0              | 0              |
|                         | Increase (Decrease) in Financing    | 518.250.000    | -213.750.000  | -195.750.000   | -177.750.000   | -159.750.000   |
|                         | Net Cash Flow - Increase (Decrease) | 2.264.192.664  | 4.217.203.913 | 6.782.690.948  | 9.608.327.041  | 12.933.879.250 |

## RESULTS AND DISCUSSION

### Investment Feasibility Analysis

Investment feasibility analysis can be understood as an action taken to determine the prospects of an investment project that underlies the decision to accept or reject the investment. Before making an investment decision, it is important to conduct a feasibility analysis in order to avoid investing in unprofitable projects or activities. To assess the feasibility of an investment, there are at least four methods conducted by Ev-Station, namely ROI, NPV, PP and IRR.

### Return On Investment (ROI)

ROI is used in companies as a measure of management efficiency. This ratio is measured as a percentage. If ROI is negative, investors can reconsider the investment they are making because the investment is worth a loss. If ROI is positive, which means it provides a profit. Based on the results of the calculation of ROI Ev-Station from year to year always shows a positive percentage, this means that the company has made a profit.

Table 5. ROI

| Tahun      | 1             | 2             | 3              | 4              | 5              |
|------------|---------------|---------------|----------------|----------------|----------------|
| EAT        | 1.206.249.627 | 1.578.319.497 | 2.190.795.284  | 2.450.944.341  | 3.164.496.382  |
| Total Aset | 8.056.249.627 | 9.484.569.124 | 11.525.364.408 | 13.826.308.749 | 16.840.805.131 |
| ROI        | 15%           | 17%           | 19%            | 18%            | 19%            |

### Net Present Value (NPV)

Ev-Station conducts an investment feasibility assessment using the NPV approach, which is calculated from the difference between the present value of the investment and the net cash flow expected from the project or investment in the future or at a certain period.

Table 6. NPV

| Tahun        | Ct             | r = 12% | NPV                   |
|--------------|----------------|---------|-----------------------|
| 0            | 7.000.000.000  |         |                       |
| 1            | 2.264.192.664  | 12%     | 2.021.600.593         |
| 2            | 4.217.203.913  | 12%     | 3.765.360.636         |
| 3            | 6.782.690.948  | 12%     | 6.055.974.061         |
| 4            | 9.608.327.041  | 12%     | 8.578.863.429         |
| 5            | 12.933.879.250 | 12%     | 11.548.106.473        |
| <b>Total</b> |                |         | <b>31.969.905.193</b> |
| <b>CO</b>    |                |         | <b>7.000.000.000</b>  |
| <b>NPV</b>   |                |         | <b>24.969.905.193</b> |

From the calculation results, the NPV of Ev-Station for 5 years is Rp. 24,969,905,193 the result of  $NPV > 0$  this means that the investment made provides benefits to the company so the project can be run.

#### Payback Period (PP)

Payback Period measures the speed of return on investment. The resulting unit of measure is in the form of time.

Table 7. Payback Period

| Tahun                 | EAT           | Akumulasi            |
|-----------------------|---------------|----------------------|
| 1                     | 1.206.249.627 | 1.206.249.627        |
| 2                     | 1.578.319.497 | 2.784.569.124        |
| 3                     | 2.190.795.284 | 4.975.364.408        |
| 4                     | 2.450.944.341 | 7.426.308.749        |
| 5                     | 3.164.496.382 | 10.590.805.131       |
| <b>Investasi Awal</b> |               | <b>7.000.000.000</b> |
| <b>Payback Period</b> |               | <b>3,70</b>          |

Based on calculations made by Ev-Station, the pay back period or investment return period is 3 years 7 months and 21 days.

#### Internal Rate of Return (IRR)

The calculation of IRR can be the basis of whether an investment is feasible or not. If the IRR calculation is greater than the interest rate, then the investment plan can be continued. From the results of Ev-Station's IRR calculation, the IRR value is higher than the interest rate set, so the investment to be made is considered to be a return on investment.

Table 8. IRR

| Tahun      | Ct             |
|------------|----------------|
| 0          | -7.000.000.000 |
| 1          | 2.264.192.664  |
| 2          | 4.217.203.913  |
| 3          | 6.782.690.948  |
| 4          | 9.608.327.041  |
| 5          | 12.933.879.250 |
| <b>IRR</b> | <b>63%</b>     |

The results of the IRR calculation carried out by Ev-Station resulted in an IRR value of 63%, meaning that the IRR value is greater than the interest rate set, so this investment can be continued.

#### Financial Performance Analysis

Financial performance analysis is made to measure the company's financial performance in order to see the condition of the company and its level of success in carrying out its operational activities.

#### Liquidity Ratio

Liquidity ratios provide an overview of the company's ability to cover its short-term obligations (Purwaningsih, 2008). The following are the results of the calculation of Ev-Station's liquidity ratio.

Table 9. Liquidity Ratio

| Rasio Likuiditas | Tahun 1 | Tahun 2 | Tahun 3 | Tahun 4 | Tahun 5 |
|------------------|---------|---------|---------|---------|---------|
| Current Ratio    | 3,77    | 9,37    | 22,61   | 64,06   |         |
| Cash Ratio       | 3,77    | 9,37    | 22,61   | 64,06   |         |
| Quick Ratio      | 3,77    | 9,37    | 22,61   | 64,06   |         |

From the calculation results, it is known that the analysis of Current Ratio, Quick Ratio, Cash Ratio and Cash Turn Over indicates that Ev-Station from year 1 to year 5 has the ability to pay off its short-term debt..

#### Solvency Ratio

The solvency ratio serves to measure the extent to which the company's assets are financed by debt. This ratio also measures the company's ability to pay its obligations for short or long term (Kasmir, 2012).

The following are the results of the calculation of Ev-Station's Debt to Asset Ratio and Debt to Equity Ratio analysis

Table 10. Solvency Ratio

| Rasio Solvabilitas   | Tahun 1 | Tahun 2 | Tahun 3 | Tahun 4 | Tahun 5 |
|----------------------|---------|---------|---------|---------|---------|
| Debt to equity ratio | 8%      | 5%      | 3%      | 1%      | 0%      |
| Debt to asset ratio  | 7%      | 5%      | 3%      | 1%      | 0%      |



The smaller the DAR value, the less debt the company uses to acquire assets. A healthy and good DAR ratio is generally smaller than one time or less than 100%. The higher the DER value, the more the company uses debt compared to its capital. A healthy and safe DER ratio should be less than one time or less than 100%. The smaller the DER, the better. The results of Ev-Station's DAR and DER calculations show less than 100%, meaning its assets and equity are safe.

### Profitability Ratio

Profitability can provide an overview of how management performs in managing the company. The ROA value represents the amount of profit obtained after tax from asset management. This means that the higher the value of the level of problems faced by the company the lower and the greater the level of profit obtained (Irfani, 2020).

Table 11. Profitability Ratio

| Rasio Profitabilitas | Tahun 1 | Tahun 2 | Tahun 3 | Tahun 4 | Tahun 5 |
|----------------------|---------|---------|---------|---------|---------|
| Net profit margin    | 23%     | 25%     | 30%     | 29%     | 33%     |
| Return of investment | 17%     | 23%     | 31%     | 35%     | 45%     |
| Return on asset      | 15%     | 17%     | 19%     | 18%     | 19%     |

Based on the calculation of Ev-Station's NPM from year 1 to year 5, the net profit margin for year 1 was 23%, year 2 was 25%, year 3 was 30%, year 4 was 29% and year 5 was 33%. GPM shows the percentage of sales profit after deducting the cost of goods sold, the higher the GPM value, the smaller the production costs incurred, which means that Ev-Station is more efficient in reducing production costs.

OPM shows information that the higher the OPM value, the more capable the company is in minimizing production costs and operating expenses. From year 1 to year 5 Ev-Station's OPM value is increasing.

### CONCLUSION

To ensure the operational cost of the eV-Station business does not exceed the planned budget, a financial strategy is required:

1. Effective and efficient work and operational processes, both internal and external cooperation.
2. Keeping up with technological advances to improve services in the company and maintaining the quality of the use of technology that has been applied so that it can extend its service life.
3. Carry out effective and efficient cooperation with suppliers or vendors that assist in ensuring the optimization of existing services and facilities so as to improve the quality of

company services.

4. Conduct quality management to improve the company's reputation.
5. Implementation of Standard Operating Procedures and Work Instructions in work operations in the company and ensure it works optimally in all aspects of the company.

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