

**APPIA ENERGY CORP.**

**MANAGEMENT'S DISCUSSION AND ANALYSIS**

**For the year ended September 30, 2018**

# APIA ENERGY CORP.

## Management's Discussion and Analysis – September 30, 2018 As of January 24, 2019

The following management's discussion and analysis ("MD&A") of the financial condition and results of operations of Appia Energy Corp. ("Appia" or the "Company") constitutes management's review of the factors that affected the Company's financial and operating performance for the year ended September 30, 2018. The MD&A was prepared as of January 24, 2019 and should be read in conjunction with the audited financial statements ("Financial Statements") for the year ended September 30, 2018, including the notes thereto. Unless otherwise stated, all amounts discussed herein are denominated in Canadian dollars. These Financial Statements of the Company have been prepared in accordance with International Financial Reporting Standards ("IFRS") as described in Note 2 to the Financial Statements.

### Executive Summary

#### Corporate Summary

Appia is a Canadian mineral exploration company listed on the Canadian Securities Exchange under the trading symbol "API", and in the USA the shares trade on the OTCQB platform as OTCQB: APAAF. In Germany the shares trade under the symbols A01.F, A01.MU and A01.BE. Appia is focusing on the Rare Earth Element deposits ("**REE**") at Alces Lake, particularly high priced "critical REE's", and on finding high-grade, near-surface Uranium deposits in the Athabasca Basin area.

In December 2017 the Company acquired an additional 11,306 hectares (27,938 acres) of mineral claims located just outside the Athabasca Basin, 30 km northeast of Cameco's suspended Rabbit Lake uranium mill and Eagle Point mine operations, naming the property the "North Wollaston" Property.

In July 2018, the Company raised \$1,050,100 through the non-brokered private placement of 910,000 flow-through shares and 5,160,000 working capital units comprising shares and warrants, with the proceeds designated for exploration and working capital purposes, as well as the purchase of heavy exploration equipment and building a semi-permanent work camp at Alces Lake. On December 31, 2018 and January 16, 2019 the Company raised an additional \$1,426,271 through private placements, securing the financing of the proposed exploration program in calendar year 2019.

The exceptional geochemical assay results from the 2017 ground prospecting and radiometric program on the Alces Lake property included Rare Earth Oxides ("**REO**") as high as 49.64 weight % total REO\* reported from 5 zones on the Property. The current exploration work commenced in June 2018, building a semi-permanent camp on the Property and bringing an excavator, tractor and a drill to the Property. A total of seven separate zones have been uncovered at surface to date, with the excavator and high pressure hydraulic washing of outcrops to remove overburden sedimentary cover in order to take channel samples and prepare for drilling.

The channel samples in 2018 assayed "high-grade" REOs based on comparison with global REE deposit grades, and included high-priced "critical REE's", such as neodymium ("**Nd**"), praseodymium ("**Pr**") and dysprosium ("**Dy**"). The zones have proven to be continuous along strike.

Twelve of the 15 short drill holes this summer intersected mineralization, with ten intersecting high-grade TREO and critical REEs. Within 12 m true depth, three new sub-surface occurrences, without surface expression, were discovered in the Charles and Ivan zones.

In September 2018 the Company announced the acquisition of a group of contiguous claims at Alces Lake, expanding the project size to 14,334 hectares (31,669 acres) of which only a very small area has been tested.

In Ontario, Appia controls 13,008 hectares (32,143 acres) encompassing five mineralized zones in the Elliot Lake area of northern Ontario, including National Instrument 43-101 (“NI 43-101”) reported resources at Teasdale Lake and Banana Lake. The Elliot Lake area has produced over 300 M lbs. of U<sub>3</sub>O<sub>8</sub> between 1955 and 1996, and is the only mining camp in Canada with significant historical commercial REE production (yttrium). The outlook for uranium has improved and the prices of REEs are significantly higher since 2016.

## **Saskatchewan Properties**

### **Alces Lake**

Exploration efforts between 2011 and 2016 resulted in the confirmation of high-grade REE mineralization in multiple outcrops and boulders, with a maximum of up to 43.2% total REO\* by weight from the Ivan Zone. A helicopter-borne geophysical and radiometric survey outlined extensive radioactive anomalous areas similar to those with known areas of uranium and REE mineralization, providing input for geological interpretation of the property.

On October 31, 2017 the Company announced “exceptional geochemical assay results from the ground prospecting and radiometric program on the high-grade rare earth element (“REE”) plus uranium Alces Lake property.” Rare Earth Oxides (“REO”) as high as 49.64 weight % Total REO\* were reported from 5 zones on the property.

Mineralization in the zones were reported to have uniformly high concentrations of critical REEs which are in scarce supply and high demand. Nd and Pr account for 20% and 5% of the Total REEs respectively, with prices for these REEs significantly higher since 2016.

Based on the average grades of the samples, which are rich in the critical REEs, (Nd, Pr, Dy), Alces Lake appears to be a high-value prospect.

A mineralogical study completed in March, 2018, confirmed that monazite is the sole mineral host to the REEs, with recovery of REEs from monazite proven to be quite successful.

In June 2018, the field exploration crew mobilized to the Property to commence the summer exploration program. Phase I of the Program included work camp construction, a detailed ground radiometric survey covering 300 m by 150 m of the REE occurrences, stripping and trenching of the known outcrops with favourable results from previous programs, such as the Wilson and Ivan zones. A Kubota KX 121 excavator was brought to the site to expedite the surface stripping in Phase I.

The recognition of two new zones of high-grade REE mineralization was announced on June 26, 2018. The two new zones are known as the Charles and Bell Zones, featuring high levels of radioactivity and highly anomalous, visible concentrations of monazite.

Phase II of the Program consisted of channel sampling over seven broad surface showings that remain open in all directions, followed by shallow diamond drilling of 15 holes on selected high-priority targets before weather conditions cut-short the Program at the end of September.

By August 2, 2018, the Company had uncovered the surface REE mineralization showings at the Charles zone, and partially uncovered the Bell, Wilson and Ivan zones, as well as recognizing two additional high-grade monazite-rich surface zones; Dante and Dylan. A total of 223 channel cut samples from the Charles zone were processed in the SRC Geoanalytical Laboratories in Saskatoon, SK, for geochemical analysis. Assay results were announced on September 18 for the samples collected from 22 lines. The highest results were obtained along line 14 which returned 14.90 wt% TREO\* over 5.1 m. Eleven of the 18 lines with REO mineralization had grades considered to be “high-grade” REOs based on comparison with global REE deposit grades.

On October 29, 2018 the Company announced the assays of the surface channel sampling for the Wilson Zone. The highest results were along line 10 which returned 14.35 wt% TREO\* over 4.75 m, comparable to the highest reading on the Charles Zone. Twenty of the 35 lines demonstrate “high-grade” continuity over a 50 m strike length. The average of the “high-grade” material returned 9.08 wt% TREO\* after applying a 4 wt% TREO cut-off to the sample data.

On November 8, 2018 the Company announced the assay results from channel samples from the Bell, Dante, Dylan and Ivan zones. The highlight was on the Ivan zone with a grade of 22.35 wt% TREO\* over 6.21 m on line 6 and the highest grade to date on the Property, 53.01 wt% TREO\* over 1.23 m on line 4. These grades are some of the highest reported in the world. The high-grade REO zones have proven to be continuous along strike, which enhances the exploration potential of the Property.

On November 26, 2018 the Company released the results from 15 short diamond drill holes in three zones, with 12 holes intersecting REE mineralization and 10 intersecting high-grade TREO and critical REEs. Three new sub-surface occurrences, without surface expressions, were discovered within 12 m true depth below surface in the Charles and Ivan zones. The Charles sub-zone returned 10.12 wt% TREO\* over 3.55 m in drill hole CH-18-008 starting at 9.0 m drill hole depth.

With regard to the overall Alces Lake site, on September 6, 2018 the Company announced the acquisition of a group of 15 contiguous mineral claims by staking, expanding the Alces Lake Project area to 14,334 hectares (35,420 acres). This property, on the Oldman River hosts monazite occurrences in the form of outcrops similar to those worked in the summer 2018 exploration program at Alces Lake, some 6.6 km to the north-east.

The Oldman River monazite was never assayed for REEs but did return a partial analysis of 5.4 wt% Thorium ("Th") and 0.263 wt% U. As a proxy for REE concentration, the highest Th concentration from samples at Alces Lake returned 5.78 wt% Th\*\* and had 53.01 wt% TREO\*.

### **Athabasca Basin**

The Loranger group of mineral claims in the Athabasca Basin was acquired by staking in March 2016 and shares similar geological and geophysical signatures to known high-grade, high-tonnage uranium deposits in the Basin such as Fission Uranium Corp.'s Triple R deposit, NexGen Energy's Arrow deposits, and others.

In April 2017 the Company reported the completion of the first seven holes of the diamond drilling program on the Loranger property with the geochemical assay results reported in a news release May 24, 2017. Six of the seven holes returned intersected U<sub>3</sub>O<sub>8</sub> for up to 70+metres. Further drilling is planned for February 2019 on high-priority targets when winter ground conditions are favourable.

In June 2017 a 117 km ground prospecting and radiometric surveying program was completed, identifying far more radioactive occurrences than reported in historical records.

The Eastside property was acquired In June 2017 by staking. Historic prospecting identified three outcrop samples along a 1.7 km geological strike which returned 2,538 ppm, 6,650 ppm and 7,575 ppm uranium. Five boulders of similar lithological provenance to the outcrops, and located down-ice from the outcrops, returned greater than 1,000 ppm uranium. A detailed airborne radiometric, magnetic and VLF-EM survey of 1178 line-kilometres was flown over the property in September 2017 and identified new radiometric anomalies that were not reported in historic prospecting.

In December 2017 the North Wollaston property was acquired by staking. Historic ground exploration discovered four uranium bearing zones at surface in outcrops and boulders returning up to 0.495 wt % U<sub>3</sub>O<sub>8</sub>, and three of seven regional exploration drill holes intersecting elevated uranium values (> 100 ppm uranium) and/or radioactivity (> 200 cps).

Follow-up ground prospecting on the Eastside and North Wollaston properties will prioritize exploration on trend with high-uranium content outcrops and continue to explore the up-ice directions of uraniferous boulders in the search for other surface uranium showings. An airborne radiometric, EM and magnetic survey is planned for the North Wollaston property for the summer, 2019. Further ground work is also planned for the North Wollaston property during the summer 2019.

The claims on the Otherside property were allowed to lapse in June 2018 due to current depressed uranium market conditions and high exploration costs required to keep the Property in good-standing.

\* see Appendix on last page for individual REO grades supporting reported TREO results

\*\* see comment below Appendix table on last page regarding Th value

All exploration efforts during the summer exploration season in 2018 were focused on Alces Lake.

### **Ontario Properties**

The National Instrument 43-101 (“NI 43-101”) report on the Elliot Lake properties completed in 2013 incorporated a new concept of simultaneously mining a nine metre high underground zone, including the Upper Reef, the Rare Earth Elements in the Intermediate Quartzite Zone and the Lower Reef. With the REE content by weight being over six times the uranium content, the economic value of the mineralized zone has been greatly enhanced. A significant portion of the previously categorized Inferred Resources was upgraded to Indicated Resources, and additional resources were defined.

More work to expand the Resources at Teasdale and the preparation of a Preliminary Economic Analysis of the project will be contingent on an improved price for uranium and a clearer picture of supply and demand for REEs.

Appia holds over 13,008 hectares (32,143 acres) encompassing five mineralized zones in the Elliot Lake area of northern Ontario. The zones are called Teasdale, Banana Lake, Canuc, Bouck Lake and Buckles Lake. The Elliot Lake area produced some 360 M lbs. of U<sub>3</sub>O<sub>8</sub> from 13 underground mines between 1955 and 1996 and is the only mining camp in Canada that had significant historical commercial REE production (yttrium).

No work was carried out, or is planned, as the current market price for uranium oxide and REEs does not warrant additional work at this time.

### **Teasdale Lake Zone**

The following two tables set out the resources reported in the NI 43-101 report entitled “Update Report on the Appia Energy Corp. Uranium-Rare Earth Property, Elliot Lake District, North-Central Ontario, Canada,” by Watts Griffis and McQuat (“WGM”) dated July 30, 2013 which has been filed on SEDAR ([www.sedar.com](http://www.sedar.com)). It should be noted that the contents for the rare earth components are for rare earth metals, whereas it has become more common to report the contents as equivalent rare earth oxides, which results in an average increase of approximately 46% for the oxides versus the metallic form.

Table 1  
Summary of Teasdale Zone Uranium and Rare Earth Mineral Resource Estimate

Zone	Tonnes ('000)	Tons ('000)	TREE (lbs/ton)	U <sub>3</sub> O <sub>8</sub> (lbs/ton)	Average Thickness (m)	Contained TREE ('000 lbs)	Contained U <sub>3</sub> O <sub>8</sub> ('000 lbs)
INDICATED RESOURCES							
UR	6,733	7,422	4.20	0.484	4.61	31,199	3,593
IQ	3,006	3,314	1.98	0.259	2.27	6,578	0.857
LR	3,355	3,699	2.68	0.958	2.60	9,912	3,544
Total	13,095	14,435	3.30	0.554	9.48	47,689	7,995
INFERRED RESOURCES							
UR	18,326	20,201	3.87	0.421	4.33	78,080	8,498
IQ	10,209	11,254	1.64	0.184	2.78	18,464	2,070
LR	9,972	10,992	3.33	0.869	2.71	36,631	9,564
Total	38,507	42,447	3.14	0.474	9.82	133,175	20,115

- Note: 1. Mineral Resources effective 30 July, 2013
2. Mineral Resources are estimated at a cut-off value of \$100 per tonne, using a uranium price of US\$70/lb U<sub>3</sub>O<sub>8</sub>, a TREE price of \$78/kg, and a C\$:US\$ exchange rate of 1:0.9. TREE includes all the REE elements from lanthanum to lutetium plus yttrium.
3. Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues. There are no known specific problems at this date.
4. The quantity and grade of reported Inferred Resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred Resources as an Indicated or Measured Mineral Resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured Mineral Resource category.
5. The Mineral Resources were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council December 11, 2005.
6. Specific Gravity of 2.85 tonnes/m<sup>3</sup> (or 3.14 tons/m<sup>3</sup>) was used.
7. Indicated amounts may not precisely sum due to rounding.

Table 2  
Individual REE Resource Grade Composition Summary

Zone	Light REE (grams/tonne)						Heavy REE (grams/tonne)									
	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Y
INDICATED RESOURCES																
UR	540	951	93.9	313	51.7	1.9	32.8	3.9	17.2	2.7	7.0	0.9	5.5	0.8	6.8	72.9
IQ	256	452	44.9	148	24.4	1.0	14.7	1.8	7.7	1.2	3.1	0.4	2.5	0.4	3.6	30.6
LR	332	596	59.4	201	35.1	1.7	23.2	3.0	14.2	2.3	5.9	0.8	4.5	0.6	3.3	58.1
<b>Average</b>	<b>422</b>	<b>745</b>	<b>73.8</b>	<b>247</b>	<b>41.1</b>	<b>1.7</b>	<b>26.2</b>	<b>3.2</b>	<b>14.3</b>	<b>2.3</b>	<b>5.8</b>	<b>0.8</b>	<b>4.6</b>	<b>0.7</b>	<b>5.2</b>	<b>59.4</b>
INFERRED RESOURCES																
UR	498	876	85.9	285	47.2	1.8	29.3	3.5	15.9	2.5	6.5	0.9	5.3	0.8	6.8	67.9
IQ	213	374	37.0	122	20.0	0.8	12.3	1.4	6.4	1.0	2.6	0.4	2.2	0.3	3.3	26.5
LR	417	747	73.9	249	43.4	1.9	28.5	3.6	16.4	2.6	6.6	0.9	5.2	0.7	4.5	66.4
<b>Average</b>	<b>401</b>	<b>709</b>	<b>69.9</b>	<b>232</b>	<b>39.0</b>	<b>1.6</b>	<b>24.6</b>	<b>3.0</b>	<b>13.5</b>	<b>2.1</b>	<b>5.5</b>	<b>0.7</b>	<b>4.4</b>	<b>0.6</b>	<b>5.3</b>	<b>56.5</b>

### Historical Estimates

Table 3  
1979 Historical U<sub>3</sub>O<sub>8</sub> Estimates on Appia's Elliot Lake Properties

<u>Zone</u>	<u>Quantity</u> (tons)	<u>Grade</u> (lbs U <sub>3</sub> O <sub>8</sub> /ton)	<u>Contained U<sub>3</sub>O<sub>8</sub></u> (lbs)
Teasdale Lake Zone	17,458,200	1.206	20,787,200
Buckles Zone (Gemico Block #3)	42,800,000	0.38	16,264,000
Bouck Zone (Gemico Block #10)	20,700,000	0.75	15,525,000
Banana Lake Zone	175,800,000	0.76	133,608,000
Canuc Zone	<u>7,000,000</u>	<u>1.86</u>	<u>13,020,000</u>
<b>Total</b>	<b>263,758,200</b>	<b>0.76</b>	<b>199,204,200</b>

The foregoing historical resources were not estimated in accordance with definitions and practices established for the estimation of Mineral Resources and Mineral Reserves by the Canadian Institute of Mining and Metallurgy. As such, the historical resources are not compliant with Canada's security rule NI 43-101 and are unreliable for investment decisions. Neither Appia nor its Qualified Persons have done sufficient work to classify the historical resources as mineral resources under current mineral resource terminology and are not treating the historical

resources as current mineral resources. Nevertheless, most of the historical resources were estimated by mining companies active in the Elliot Lake camp using assumptions, methods and practices that were accepted at the time, and based on corroborative mining experience.

### *Banana Lake Zone*

Based on drilling by Appia during 2007, a subsequent Mineral Resource estimate for the Banana Lake Zone was prepared in 2011 by WGM in accordance with the provisions of NI 43-101. Some of Appia's drilling included holes that were wedged from historical drill holes that Appia re-entered. This resource, first reported in Workman and Breede (2011), is summarized in Table 4. A single hole drilled in 2012 to 1,647 metres did not encounter the typical geological formation with assays returning no significant values of U<sub>3</sub>O<sub>8</sub>, thorium or REEs. WGM, however, is of the belief that this hole did not materially impact the potential for additional resources in the Banana Lake Zone.

. Table 4  
Summary of Banana Lake Zone Mineral Resource Estimate

Category	Tons (‘000)	Specific Gravity (tons/m <sup>3</sup> )	lbs. U <sub>3</sub> O <sub>8</sub> /ton	Total lbs U <sub>3</sub> O <sub>8</sub> (‘000)
Inferred Resources	30,315	3.14	0.912	27,638

- Notes:
1. Effective, 1 April, 2011
  2. Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
  3. The quantity and grade of reported Inferred Resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred Resources as an Indicated or Measured Mineral Resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured Mineral Resource category.
  4. The Mineral Resources were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council December 11, 2005.
  5. A cut-off grade of 0.6 lb. U<sub>3</sub>O<sub>8</sub> was used
  6. Specific Gravity of 2.85 tonnes/m<sup>3</sup> (or 3.14 tons/m<sup>3</sup>) was used.
  7. Indicated amounts may not precisely sum due to rounding.

### *Ontario Summary:*

The Company is considering the next stage of the Teasdale exploration and evaluation. The longer-term outlook for uranium prices is positive and the successful recovery of the REEs, particularly the critical elements of the total rare earths encountered, is very encouraging. Factors favourable for the project include the following:

- new mine infrastructure development would be in brownfield areas already disturbed by industrial and mining activity;
- water, electrical, transportation and communications infrastructure is in place or close at hand;
- the recovery of uranium from Elliot Lake ore is well known. Based on Teasdale Lake test results, the recovery of REEs appears to face no significant technical uncertainties;
- Appia is not responsible in any manner for potential future environmental impacts arising out of historical mining operations or waste disposal; and,
- The Cameco uranium refinery is located approximately 60 km away, near Blind River.

## Overall Outlook

The progress at Alces Lake in the past year has been very exciting, with the TREO grades of the channel sampling ranking among the highest in the world. Drilling in September resulted in 12 of 15 holes intersecting REE mineralization, with ten reporting high-grade TREO and critical REEs, as well as intersecting sub-surface occurrences where no surface showing existed, speaks highly of prospects for the next round of drilling. The results of exploration to date and a better understanding of the value of the mineralization assisted in raising \$2.5 million since July, 2018, securing the financing for the exploration program in calendar 2019 and working capital

A drill program on the Loranger property is planned for February 2019, assuming the ice road across the lake will be usable by that time. The expansion of the mineralization at the Alces Lake property is being planned for the summer of 2019. An airborne VTEM/radiometric survey is planned for North Wollaston, to be followed-up with ground prospecting.

The 2012 drilling at the Teasdale Zone of Elliot Lake and the change in the proposed mine plan resulted in very significant quantities of REEs being reported, with a large increase in the Indicated category and an overall increase in the Indicated and Inferred Resources. The preliminary metallurgical test recovery of 90% for uranium and 80% to 90% for most REEs is very encouraging. There have been significant developments in the separation of individual REEs from the composite ore which suggests that these test results can be improved upon.

More work to expand the Resources at Teasdale and the preparation of a Preliminary Economic Analysis of the project will be contingent on an improved price for uranium and a clearer picture of supply and demand for REEs. Critical REEs, such as Nd, Pr, and Dy are currently experiencing strong price increases.

The tsunami in Japan resulted in the shut-down of all of its 54 nuclear reactors, resulting in a severe drop in uranium prices. Thirty-six reactors in all are expected to be restarted, but progress is slow. Nine reactors are currently operating, with an additional three expected to restart shortly. Projections indicate that perhaps 20 will be operating by the end of 2019.

There are currently 64 reactors reported to be under construction around the world. A reactor start-up requires twice as much uranium in its first year of operation, and normal industry practice is to build up a stockpile to ensure a seven year supply, but with the current low spot price of uranium, operators have adopted a wait-and-see attitude on pricing, are not rebuilding their stockpiles to "normal" levels, and are not actively seeking to sign long-term delivery contracts.

China has 42 operating nuclear reactors, 16 reactors under construction and a further 43 planned as part of the plan to reduce the use of coal for generating electricity. Thermal coal in Asia is currently selling at US\$110 per tonne, an added incentive to move to nuclear power. The production of REEs requires a lot of electric power.

Kazatomprom, Kazakhstan's largest uranium producer (25% of global output), cut production by 7% in 2018. Along with production cuts by Cameco, now including an indefinite shutdown of the McArthur River mine, some 30 million pounds of annual supply has been taken off the market over the past year.

Cameco is expected to be purchasing up to 30 million pounds annually on the spot market in order to satisfy its contractual delivery requirements. As it would likely take an estimated 12 to 18 months to restart the McArthur River mine, Cameco will need to continue to purchase up to 30 million pounds annually until a restart proceeds. This is expected to have an effect on spot prices, which recently rose to approximately \$30 per pound.

Proposed sanctions against Russia will benefit non-Russian producers, but it is too soon to predict the effect on market prices.

The uranium demand forecast shows an increase from China, and by 2021 known supply sources are projected to be unable to match demand. Industry opinion is that a contract price of US\$60 per pound is needed before any new mining project advances. The World Nuclear Association recently projected an annual shortfall of 50 million pounds in the near future.



The US Government Accountability Office, (“GAO”) released a report in 2016 indicating that the Department of Defense has not addressed defining which of the REEs are critical regarding supply, although at various times 15 REEs have been identified as critical for weapon-related applications by the military. The Department of Defense has agreed to work toward a department-wide strategy for securing its critical REE supply chain.

China has controlled most of the world supply of REEs but is expected to be unable to supply its own requirements in the foreseeable future. Known current mine production is less than consumption. Demand is expected to increase by 58% by 2020, with known supply sources not able to meet this demand.

The political stability of countries supplying the uranium and REE market has caused concern in the United States, as very little uranium for reactors is sourced domestically, with a similar situation for the supply of REEs required by the defence industry, for electronics and high strength magnets needed in the electric vehicle and wind farm applications. A proposal is under consideration in the US to ban the acquisition of sensitive REE materials, such as neodymium-iron boron magnets from non-allied foreign nations.

## **Results of Operations**

Exploration expenses incurred during the year ended September 30, 2018 were \$687,139, mostly on the Alces Lake REE project north of the Athabasca Basin Area of Saskatchewan, compared to \$955,797 for the same period in 2017, largely on drilling on the Loranger Property. The refund of \$17,029 from Saskatchewan received in 2017 was for 2016 exploration costs. In addition to exploration costs, \$84,388 was spent acquiring a remaining minority interest in the Alces Lake claims, as well as staking an additional group of claims in Saskatchewan in 2018 (2017 - \$5,162).

The Company spent \$346,678 on exploration equipment and the construction of a semi-permanent camp at Alces Lake. Major expenditures were incurred on a drill and related equipment, the acquisition of an excavator and mobile equipment for use at Alces Lake. These costs have been capitalized and are being amortized over their useful lives.

Total general and administrative expenses for the year were \$520,721 compared to \$839,625 in 2017. The decrease was largely in non-cash, share-based compensation to \$104,588 from \$399,389 in 2017 and in shareholder communication and investor relations to \$173,182 (2017 - \$226,202). Increased exploration activity and the financings completed during the year incurred management time and professional fees. The Company continues to cut administrative costs where possible.

The Company's net loss and comprehensive loss for the year ended September 30, 2018 (including all exploration costs) was \$1,374,191 compared with \$1,792,459 in 2017.

## **Fourth Quarter**

The Company's net loss and comprehensive loss for the three months ended September 30, 2018 was \$722,974 compared to \$242,544 in the prior year. The change in the fourth quarter of 2018 compared to 2017 was due to the increase in exploration expenditures to \$442,227 (2017 - \$103,987), and depreciation charged on the exploration camp and equipment of \$104,003.

## Selected Quarterly Information

2017 - 2018	Sep 30, 2018	Jun 30, 2018	Mar 31, 2018	Dec 31, 2017
	\$	\$	\$	\$
Net loss and comprehensive loss	(722,974)	(270,178)	(167,679)	(213,360)
Net loss per share – basic and diluted	(0.01)	(0.00)	(0.00)	(0.00)
Total assets	2,018,637	1,730,441	1,866,897	2,009,164
2016 - 2017	Sep 30, 2017	Jun 30, 2017	Mar 31, 2017	Dec 31, 2016
	\$	\$	\$	\$
Net loss and comprehensive loss	(242,544)	(342,766)	(950,473)	(256,676)
Net loss per share – basic and diluted	(0.01)	(0.01)	(0.02)	(0.01)
Total assets	2,167,541	2,330,792	2,812,152	1,701,108

## Capital Resources and Liquidity

At September 30, 2018, the Company had working capital of \$188,213 (after providing \$687,733 owing to related parties) compared to working capital of \$691,850 as at September 30, 2017 and \$1,238,615 at January 24, 2019 (after providing for \$701,230 owing to related parties).

On July 24, 2018, the Company closed a non-brokered private placement with the sale of 910,000 flow-through units (“FT Units”) at \$0.19 per FT Unit and 5,160,000 working capital units (“WC Units”) at \$0.17 per WC Unit for aggregate proceeds of \$1,050,100.

On December 31, 2018 the Company closed a non-brokered private placement of 2,189,500 flow-through units (the “FT Units”) for gross proceeds of \$602,112.50 and the first tranche of a non-brokered private placement of up to 4,000,000 working capital units (“WC Units”) (collectively the “Offering”) with the sale of 1,425,000 WC Units for gross proceeds of \$342,000 on December 31, 2018.

Each FT Unit was priced at \$0.275 and consists of one (1) common share and one-half (0.5) of a share purchase warrant. Each full warrant (“Warrant”) entitles the holder to purchase one (1) common share (a “FT Warrant Share”) at a price of \$0.40 per FT Warrant Share until twelve (12) months from closing. Broker warrants exercisable at \$0.275 for 12 months from closing for 175,160 common shares were issued to finders.

Each WC Unit is priced at \$0.24 and consists of one (1) common share and one (1) common share purchase warrant (a “WC Warrant”). Each WC Warrant entitles the holder to purchase one (1) common share (a “WC Warrant Share”) at a price of \$0.35 per WC Warrant Share until twenty-four (24) months from closing.

On January 16, 2019 the Company closed the final tranche of the non-brokered private placement of 1,884,121 WC Units for aggregate gross proceeds of \$482,159.

Proceeds from the Offering are expected to be used for drilling and exploration on the Company’s Loranger and Alces Lake Properties, and for working capital purposes.

The Company has no operating revenue and has historically been funded with equity based private placements. The Company’s future exploration plans are contingent on raising capital resources. The Company has sufficient financial resources to continue operations through the next twelve months. Cash operating costs, excluding exploration costs or amounts due to related parties, are currently approximately \$20,000 per month.

The Company's ability to meet its obligations and continue as a going concern continues to be dependent on the ability to identify and complete future financings. While the Company has been successful in raising financings to date, there can be no assurance that it will be able to do so in the future.

## Common Share Data

The Company is authorized to issue an unlimited number of no par value common shares. The following table provides the details of changes in the number of issued common shares.

	<i>Number</i>	<i>Amount</i>
	#	\$
Balance, September 30, 2016	43,791,078	8,150,029
Flow-through shares private placement December 30, 2016	1,301,000	234,180
Working capital units private placement January 23, 2017	5,000,000	1,000,000
Working capital units private placement January 27, 2017	405,000	81,000
Working capital units private placement March 23, 2017	1,442,071	504,725
Working capital units private placement April 5, 2017	392,858	137,500
Less: Value associated with broker warrants issued	-	(10,158)
Less: Value associated with warrants issued	-	(360,702)
Share issue costs	-	(113,019)
Balance, September 30, 2017	52,332,007	9,623,555
Flow-through units private placement July 24, 2018	910,000	172,900
Working capital units private placement July 24, 2018	5,160,000	877,200
Less: Value associated with warrants issued	-	(137,422)
Share issue costs	-	(27,878)
Balance, September 30, 2018	58,402,007	10,508,355
Flow-through units private placement December 31, 2018	2,189,500	602,112
Working capital units private placement December 31, 2018	1,425,000	342,000
Less: Value associated with warrants issued	-	(50,264)
Brokers warrants exercised	97,840	17,611
Share issue costs	-	(88,848)
Balance, December 31, 2018	62,114,347	11,330,966
Working capital units private placement January 15, 2019	1,884,121	452,189
Less: Value associated with warrants issued	-	(53,757)
Share issue costs	-	(5,959)
Balance, January 24, 2019	63,998,468	11,723,439

## Common share purchase stock options

The Company has a stock option plan for the benefit of directors, officers and consultants. The total number of shares which may be reserved and set aside for issuance to eligible persons may not exceed 10% of the issued and outstanding common shares.

As at September 30, 2018 and January 24, 2019, 3,750,000 common shares were reserved for the exercise of stock options granted under the Company's stock option plan (the "Plan").

The following table provides the details of changes in the number of issued common share purchase options during the period:

	Options #	Weighted-average exercise price \$
Outstanding and exercisable at September 30, 2016	2,100,000	0.80
Surrendered	(1,200,000)	1.25
Granted	2,950,000	0.30
Outstanding at September 30, 2017	3,850,000	0.28
Expired	(300,000)	0.30
Granted	200,000	0.30
Outstanding at September 30, 2018 and January 24, 2019	3,750,000	0.27

On December 16, 2016 directors surrendered 1,200,000 options.

On February 1, 2017 the Company granted 2,950,000 options to purchase common shares exercisable at \$0.30 per share for five years to six directors and three consultants.

On June 30, 2018 300,000 options at \$0.30 expired unexercised.

On August 1, 2018 the Company granted 200,000 options to purchase common shares exercisable at \$0.30 per share for five years to one consultant.

A summary of the outstanding stock options as at September 30, 2018 is as follows:

Number of stock options	Number exercisable	Remaining contractual life	Exercise price per share	Expiry date
500,000	500,000	30.5 months	\$0.10	April 14, 2021
100,000	100,000	34.7 months	\$0.30	August 22, 2021
2,950,000	2,950,000	40 months	\$0.30	February 1, 2022
200,000	100,000	58 months	\$0.30	August 1, 2023
3,750,000	3,650,000			

## Warrants

On certain issuances of common shares, the units include warrants entitling the holder to acquire additional common shares of the Company, and the Company also grants warrants as consideration for services associated with the private placement of such issues.

The following table provides the details of changes in the number of outstanding common share purchase warrants:

	<b>Number</b> #	\$
Balance September 30, 2016	1,800,000	107,688
Broker warrants issued	100,080	10,158
Private placement warrants issued	7,239,929	360,702
Balance September 30, 2017	9,140,009	478,548
Expired, unexercised broker warrants	(35,000)	(3,393)
Expired, unexercised	(375,000)	(11,187)
Private placement warrants issued	5,615,000	137,422
Balance September 30, 2018	14,345,009	601,390
Expired, unexercised	(2,240)	(227)
Exercised	(97,840)	(9,931)
Private placement warrants issued	2,519,750	46,606
Broker warrants issued	175,160	3,658
Balance December 31, 2018	16,939,839	641,496

Private placement warrants issued	1,884,121	47,798
Broker warrants issued	133,333	5,959
Balance January 24, 2019	18,957,293	695,253

A summary of the outstanding warrants as at September 30, 2018 is as follows:

	Number exercisable	Remaining contractual life	Exercise price per share	Expiry date
Warrants	100,080	3 months	\$0.18	December 30, 2018
Warrants	1,442,071	5.8 months	\$0.50	March 24, 2019
Warrants	392,858	6.2 months	\$0.50	April 5, 2019
Warrants	1,315,000	11.9 months	\$0.30	June 27, 2019
Warrants	75,000	11.3 months	\$0.30	September 8, 2019
Warrants	5,615,000	15.8 months	\$0.30	January 24, 2020
Warrants	5,000,000	39.7 months	\$0.30	January 20, 2022
Warrants	405,000	40 months	\$0.30	January 30, 2022
Balance, September 30, 2018	14,345,009			

The number of common shares outstanding on January 24, 2019 was 63,998,468. Taking into account outstanding share purchase options and warrants, the fully diluted number of common shares that could have been outstanding on January 24, 2019 was 86,705,761.

## Related Party Transactions

During the year ended September 30, 2018, the Company incurred related party expenses totaling \$238,109 (2017 – \$178,965). These expenses related to management fees paid or payable to key management personnel; Tom Drivas, Chief Executive Officer, Frank van de Water, Secretary and Chief Financial Officer, Vice-President, Exploration and Development, James Sykes, from March 2, 2017, and office administration services paid to Romios Gold Resources Inc., a company with a number of common directors and officers. The amount charged for office administration services is included under office and general expenses. As at September 30, 2018 \$10,251 (2017 - \$3,617) was due and payable to these related parties.

At September 30, 2018, \$596,730 (2017 - \$577,426) of accumulated related party expenditures was payable to Tom Drivas. Canada Enerco Corp., a company controlled by Tom Drivas was owed \$29,658, which was paid in April 2017.

Share-based compensation to key management and directors for the year ended September 30, 2018 was \$76,589 (2017 - \$378,198).

Key management personnel were not paid post-retirement benefits, termination benefits, or other long-term benefits during the year ended September 30, 2018 and 2017.

During the year ended September 30, 2018, the Company incurred expenses of \$17,500 (2017 – \$18,000) related to directors' fees to independent directors. At September 30, 2018, \$80,500 (2017 - \$63,000) was of accrued director's fees outstanding.

During the year ended September 30, 2018, the Company incurred expenses of \$28,827 (2017 - \$48,072) for legal fees to a law firm related to a director of the Company, William R. Johnstone. At September 30, 2018 \$811 (2017 – \$nil) was payable to this related party.

As disclosed in Note 5 to the financial statements, the Company's major exploration property in Ontario was acquired from a related party.

## **Carrying value of exploration and evaluation assets**

The Company regularly reviews the carrying value of its exploration and evaluation assets for impairment to determine whether the acquisition cost of these properties will be recoverable from future cash flows or from their disposition. Assumptions underlying the cash flow estimates include the forecasted prices for uranium and rare earth elements, production levels, and operating, capital, exploration and reclamation costs, which are subject to risks and uncertainties. Management has determined that as at September 30, 2018 and January 24, 2019 there was no impairment of the carrying value of its Ontario and Saskatchewan properties.

## **Off-Balance Sheet Arrangements**

The Company does not have any off-balance sheet arrangements.

## **Financial Instruments and Other Instruments**

The Company is required to disclose information about the fair value of its financial assets and liabilities. Fair value estimates are made at the balance sheet dates, based on relevant market information and information about the financial instrument. These estimates are subjective in nature and involve uncertainties in significant matters of judgment and therefore cannot be determined with precision. Changes in assumptions could significantly affect these estimates.

The Company's financial instruments recognized in the balance sheet consist of cash and cash equivalents, HST/GST receivable and current liabilities. The fair value of these financial instruments approximates their carrying value due to the short maturity or current market rate associated with these instruments.

## **Risk Factors**

There are a number of risks that could affect Appia's business prospects. They include the speculative nature and the ability to finance the exploration and development of the Company's mineral properties, operating hazards, environmental and other government regulations, competition in the marketplace, markets for the Company's securities and the demand for uranium and rare earth elements. The Company's viability will depend on defining recoverable and economic resources and establishing positive comprehensive feasibility studies leading to production decisions. After completion of positive feasibility studies, the Company's success is dependent on maintaining the title and beneficial interest in the properties, obtaining the necessary governmental approvals and the successful financing, construction and operation of a facility to profitably extract the contained metals.

### *Financial Capability and Additional Financing*

The Company had a cash position of \$1,881,860 and working capital of \$1,238,615 at January 24, 2019, (after providing \$701,230 owing to related parties), has no source of operating income and has no assurance that additional funding will be available to it for further exploration and development of its projects. Although the Company has been successful in the past in financing its activities through the sale of equity securities, there can be no assurance that it will be able to obtain sufficient financing in the future to continue as a going concern

### *Land access*

As of April 1, 2013, under the modified Mining Act (Ontario), the Company is required to obtain permits to conduct exploration and evaluation activities on its Ontario properties. The Ontario Government is required to consult with the First Nations in order to reach agreement to permit activity in areas considered to have been historically inhabited. The impact of any possible delays on the Company's intended activity is unknown.

## Special Note Regarding Forward-Looking Statements

Certain statements in this MD&A may constitute “forward-looking” statements which involve known and unknown risks, uncertainties and other factors which may cause the actual results to differ materially from the statements made. When used in this report, the words “estimate”, “believe”, “anticipate”, “intend”, “expect”, “plan”, “may”, “should”, and “will”, are intended to identify forward-looking statements, and reflect the current expectations of the management of the Company with respect to future events, and are subject to risks and uncertainties, such as reduced funding and general economic and market factors. New risk factors may arise from time to time and it is not possible for management of the Company to predict all of those risk factors or the extent to which any factor or combination of factors may cause actual results, performance or achievements of the Company to be materially different from those expressed or implied in such forward-looking statements. Investors should not place undue reliance on forward-looking statements as a prediction of actual results. The Company does not undertake or assume any obligation to update these forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events, except as required by law.

## Additional Information

- (1) Additional information may be found on the Company’s website at [www.appiaenergy.ca](http://www.appiaenergy.ca) and on SEDAR.
- (2) The technical information included in this MD&A regarding Saskatchewan was reviewed and approved by Thomas Skimming, P.Eng, a Director of Appia, a Qualified Person as defined by National Instrument 43-101, and the technical information regarding the Elliot Lake properties has been reviewed and approved by Al Workman, P.Geo. Senior Geologist, Watts, Griffis and McOuat Ltd., a Qualified Person in accordance with the Canadian regulatory requirements as set out in NI 43-101.

**Appendix – Individual REO grades supporting reported TREO grades**

Program Year	Sample Source	La <sub>2</sub> O <sub>3</sub> (wt%)	CeO <sub>2</sub> (wt%)	Pr <sub>6</sub> O <sub>11</sub> (wt%)	Nd <sub>2</sub> O <sub>3</sub> (wt%)	Sm <sub>2</sub> O <sub>3</sub> (wt%)	Eu <sub>2</sub> O <sub>3</sub> (wt%)	Gd <sub>2</sub> O <sub>3</sub> (wt%)	Tb <sub>4</sub> O <sub>7</sub> (wt%)	Dy <sub>2</sub> O <sub>3</sub> (wt%)	Ho <sub>2</sub> O <sub>3</sub> (wt%)	Er <sub>2</sub> O <sub>3</sub> (wt%)	Yb <sub>2</sub> O <sub>3</sub> (wt%)	Lu <sub>2</sub> O <sub>3</sub> (wt%)	Y <sub>2</sub> O <sub>3</sub> (wt%)	ThO <sub>2</sub> (wt%)	U <sub>3</sub> O <sub>8</sub> (wt%)	TREO (wt%)	CREO (wt%)
Reference - pages 1 and 2																			
2017	Outcrop (cut)	10.731	23.708	3.008	9.506	1.426	0.016	0.662	0.056	0.124	0.011	0.091	0.003	0.001	0.292	5.505	0.199	49.638	12.711
Reference - page 2																			
2018	Charles-L14	3.599	7.285	0.840	2.502	0.323	0.004	0.198	0.009	0.031	0.004	0.010	0.001	0.000	0.090	1.827	0.061	14.895	3.386
2018	Wilson-L10	3.513	7.140	0.768	2.293	0.310	0.004	0.179	0.009	0.031	0.004	0.010	0.001	0.000	0.090	1.513	0.055	14.351	3.104
2018	Wilson-Avg	2.181	4.518	0.479	1.481	0.203	0.003	0.117	0.006	0.021	0.002	0.007	0.001	0.000	0.057	1.134	0.033	9.076	1.989
2018	Ivan-L6	5.147	11.099	1.204	3.886	0.502	0.007	0.286	0.015	0.048	0.006	0.015	0.001	0.000	0.131	2.739	0.070	22.349	5.160
2018	Ivan-L4	12.343	26.186	2.875	9.260	1.171	0.016	0.663	0.033	0.110	0.013	0.035	0.002	0.000	0.302	6.179	0.143	53.007	12.293
Reference - page 3																			
2018	Charles-sub	2.400	4.886	0.545	1.685	0.240	0.003	0.137	0.007	0.025	0.003	0.008	0.001	0.000	0.076	1.274	0.038	10.016	2.265
2018	Ivan-L4**	12.343	26.186	2.875	9.260	1.171	0.016	0.663	0.033	0.110	0.013	0.035	0.002	0.000	0.302	6.179	0.143	53.007	12.293
<b>The following reported grades were converted from REE (as originally reported) to REO using the conversion factors noted in the last row of the table</b>																			
Reference - page 2																			
2013	Outcrop (grab)	9.195	21.13	2.368	8.293	1.153	0.014	0.538	0.06	0.084	0.013	0.096	0.005	0.001	0.246	3.934	0.059	43.194	10.819
Element to Oxide conversion factors		1.1728	1.2284	1.2082	1.1664	1.1596	1.1579	1.1526	1.1762	1.1477	1.1455	1.1435	1.1387	1.1371	1.2699	1.0690	1.1792	n/a	n/a

The REEs Thulium (Tm) and Promethium (Pm) are not reported because they are both extremely scarce in nature, and Pm forms as a product of spontaneous fission of U-238

TREO = Total Rare Earth Oxide = sum of La<sub>2</sub>O<sub>3</sub>+CeO<sub>2</sub>+Pr<sub>6</sub>O<sub>11</sub>+Nd<sub>2</sub>O<sub>3</sub>+Sm<sub>2</sub>O<sub>3</sub>+Eu<sub>2</sub>O<sub>3</sub>+Gd<sub>2</sub>O<sub>3</sub>+Tb<sub>4</sub>O<sub>7</sub>+Dy<sub>2</sub>O<sub>3</sub>+Ho<sub>2</sub>O<sub>3</sub>+Er<sub>2</sub>O<sub>3</sub>+Yb<sub>2</sub>O<sub>3</sub>+Lu<sub>2</sub>O<sub>3</sub>+Y<sub>2</sub>O<sub>3</sub>

CREO = Critical Rare Earth Oxide = sum of Pr<sub>6</sub>O<sub>11</sub>+Nd<sub>2</sub>O<sub>3</sub>+Eu<sub>2</sub>O<sub>3</sub>+Tb<sub>4</sub>O<sub>7</sub>+Dy<sub>2</sub>O<sub>3</sub>

- Highlighting Nd grades associated with high-grade TREO
- Highlighting Pr grades associated with high-grade TREO
- Highlighting "high-grade" TREO and CREO (i.e. >1.897 wt% TREO)
- Indicates light rare earth elements (LREEs)
- Indicates heavy rare earth elements (HREEs)
- Indicates radioactive elements (not a rare earth element)

n/a = not applicable

**Conditions Used for Reporting Composite Results**

- a cut-off grade of 4.0 wt% TREO was applied to all individual samples used in composite grade calculations
- maximum internal dilution along channel lines and/or drill holes does not exceed 2.0 m
- true thicknesses have not been determined

\*\*NOTE on Th: the Th value mentioned on page 3 is calculated using the ThO<sub>2</sub> value associated with Ivan-L4 (6.179 wt% ThO<sub>2</sub>) divided by the conversion factor (1.0690) noted in the last row of the table

[Note: >1.897 wt% TREO represents >75th percentile for global REO deposit grades of advanced stage-projects \(excluding Gakara, Steenkampskraal and Mount Weld CLD deposits\). The global REO deposit information was derived from publicly available information as of January 31, 2018, from individual company websites, SEDAR technical report filings, and the Technology Metals Research Advanced Rare Earth Projects Index \(<http://www.techmetalsresearch.com/metrics-indices/tmr-advanced-rare-earth-projects-index/>\)](#)