



# **CERTIFICATION AND FINANCING PROPOSAL**

## **SUCROLIQ LIQUID SUGAR REFINING PROJECT IN MEXICALI, BAJA CALIFORNIA UNDER THE NADB COVID-19 RECOVERY PROGRAM**

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## EXECUTIVE SUMMARY

### SUCROLIQ LIQUID SUGAR REFINING PROJECT IN MEXICALI, BAJA CALIFORNIA UNDER THE NADB COVID-19 RECOVERY PROGRAM

**Project:** The proposed project consists of the design, construction and operation of an in-plant liquid sugar refinery with a production capacity of 80,000 metric tons/year (dry basis) of liquid sugar located in the municipality of Mexicali, Baja California (the “Project”).<sup>1</sup> The liquid sugar produced by the Project will be purchased by various companies in the food sector through purchase agreements. The Project will be implemented under the NADB COVID-19 Recovery Program (ProRec).<sup>2</sup>

**Project Objective:** The purpose of the Project is to supply liquid sugar to an existing food facility, as well as other food manufacturers located in Baja California, California and Arizona, through a more efficient plant that will use less water and energy in its processes compared to industry standards. In addition, by creating both direct and indirect jobs during the construction and operational phases, the Project will support the economic recovery of Mexicali from the slowdown caused by the COVID-19 pandemic.

**Expected Outcomes:** The estimated environmental benefits resulting from the Project are:<sup>3</sup>

- Displacement of 462,080 m<sup>3</sup>/year of water, which represents an 80% decrease in water consumption when compared to a typical sugar refinery.
- Displacement of 1,877 million British Thermal Units (MMBTU)/year of fuel, which represents a 29% decrease in fuel consumption when compared to a typical sugar refinery. This fuel displacement is equivalent to the displacement of 100 metric tons/year of carbon dioxide (CO<sub>2</sub>)<sup>4</sup>

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<sup>1</sup> An in-plant project refers to infrastructure built within an existing industrial facility.

<sup>2</sup> During its virtual meeting in May 2020, the NADB Board of Directors approved the program, which is intended to support border communities experiencing the economic, health and social impacts of the COVID-19 pandemic, while at the same time promoting continued environmental improvement in the U.S.-Mexico border region.

<sup>3</sup> Displacement refers to a reduction of resources such as water, electricity, and fuel due to the addition of a more efficient process.

<sup>4</sup> It is assumed that the typical sugar refinery uses natural gas as fuel.

- Displacement of 11,546 megawatt-hours (MWh)/year of electricity during the first year, which represents a 98% decrease in electricity consumption compared to a typical sugar refinery. This electricity displacement is equivalent to the displacement of the following emissions.
  - Approximately 3,721 metric tons/year of CO<sub>2</sub>,
  - 1,199 metric tons/year of nitrogen oxides (NO<sub>x</sub>),
  - 387 metric tons/year of sulfur dioxide (SO<sub>2</sub>); and
  - 125 metric tons/year of particulate matter with a diameter of 10 micrometers or less (PM<sub>10</sub>).<sup>5</sup>

**Population to benefit:** 5,182 residents.<sup>6</sup>

**Project Sponsor:** Sucroliq, S.A.P.I. de C.V. (Sucroliq).

**Borrower:** Sucroliq

**NADB Loan:** Up to US\$8.0 million, through the COVID-19 Recovery Program.

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<sup>5</sup> CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>2</sub> and PM<sub>10</sub> calculations are based on the potential emissions avoided as a result of reducing future demand on fossil fuel-based electricity equivalent to 11,546 MWh/year through the use of the patented sugar refining process and the emission factors for the state of Baja California. The emission factors are calculated by NADB based on the power generation portfolio of the state of Baja California and on the factors reported per technology in the 2018-2032 Mexican National Power System Development Program (PRODESEN). The resulting emission factors are: 0.32229 metric tons/megawatt-hour (MWh) for CO<sub>2</sub>; 0.00111 metric tons/MWh for NO<sub>x</sub>, 0.00048 metric tons/MWh for SO<sub>2</sub> and 0.00002 metric tons/MWh for PM<sub>10</sub>.

<sup>6</sup> The estimation is based on the expected displacement of 11,546 MWh/year and 2,228.1 kilowatt-hours of electricity consumption per capita in 2018 according to the Mexican Energy Information System (<http://sie.energia.gob.mx/>). This figure also takes into account the number of residents based on the expected reduction in water consumption, as well as the 251 jobs that will be created during the construction and operational phases.

# CERTIFICATION AND FINANCING PROPOSAL

## SUCROLIQ LIQUID SUGAR REFINING PROJECT IN MEXICALI, BAJA CALIFORNIA.

### UNDER THE NADB COVID-19 RECOVERY PROGRAM

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## 1. PROJECT OBJECTIVE AND EXPECTED OUTCOMES

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The proposed project consists of the design, construction and operation of an in-plant sugar refining facility with a production capacity of 80,000 metric tons/year (dry basis) of liquid sugar located in the Municipality of Mexicali, Baja California (the "Project").<sup>7</sup> The Project will be implemented under the NADB COVID-19 Recovery Program (ProRec).<sup>8</sup> The purpose of the Project is to supply liquid sugar to an existing food facility, as well as other food manufactures located in Baja California, California and Arizona, through a more efficient plant that will use less water and fuel in its processes compared to industry standards, as well as consume less electricity from fossil fuel-powered generating plants in the grid. The liquid sugar produced by the Project will be purchased by various companies in the food sector through purchase agreements. In addition, by creating both direct and indirect jobs during the construction and operational phases, the Project will support the economic recovery of Mexicali, from slowdown caused by the COVID-19 pandemic.

The proposed plant will be significantly more efficient than typical existing refining plants, resulting in the following estimated outcomes:<sup>9</sup>

- (i) Displacement of 462,080 m<sup>3</sup>/year of water, which represents an 80% decrease in water consumption compared to a typical sugar refinery.
- (ii) Displacement of 1,877 million British Thermal Units (MMBTU) of fuel, which represents a 29% decrease in fuel consumption compared to a typical sugar refinery. This fuel displacement is equivalent to the displacement of 100 metric tons/year of carbon dioxide (CO<sub>2</sub>).<sup>10</sup>
- (iii) Displacement of 11,546 MWh/year of electricity during the first year, which represents a 98% decrease in electricity consumption compared to a typical sugar refinery. The electricity displacement is equivalent to the displacement of the following emissions:

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<sup>7</sup> An in-plant project refers to infrastructure built within an existing industrial facility.

<sup>8</sup> During its virtual meeting in May 2020, the NADB Board of Directors approved the program, which is intended to support border communities experiencing the economic, health and social impacts caused by the COVID-19 pandemic, while at the same time promoting continued environmental improvement in the U.S.-Mexico border region.

<sup>9</sup> Displacement refers to a reduction in the use of resources such as water, electricity and fuel deriving from a more efficient process.

<sup>10</sup> It is assumed that the typical sugar refinery uses natural gas as fuel.

approximately 3,721 metric tons/year of CO<sub>2</sub>, 1,199 metric tons/year of nitrogen oxides (NO<sub>x</sub>), 387 metric tons/year of sulfur dioxide (SO<sub>2</sub>); and 125 metric tons/year of particulate matter with a diameter of 10 micrometers or less (PM<sub>10</sub>).

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## 2. ELIGIBILITY

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### 2.1. Project Type

The Project complies with the ProRec requirements, as the sponsor is a private entity whose purpose is aligned with the ProRec objectives of supporting the development of projects with environmental benefits, providing economic benefits and creating or preserving jobs in border communities.

### 2.2. Project Location

The Project will be constructed within the facilities of a private food company in Mexicali, Baja California, located less than seven miles south of the U.S.-Mexico border. Mexicali is located at the following coordinates: latitude 32°38'22.90"N and longitude 115°26'41.05"W. Figure 1 illustrates the geographical location of the Project.

**Figure 1**  
**PROJECT LOCATION MAP**



### 2.3. Project Sponsor and Legal Authority

The private-sector project sponsor is Sucroliq, S.A.P.I. de C.V. (the “Sponsor”), who will implement the Project and contract the financing. Sucroliq® is a Mexico-based company comprised of a group of companies owned one hundred percent by Mexican shareholders. Its corporate office is located in Mexico City, and it has three plants for liquid sugar refining plants with a total production capacity of 350,000 metric tons per year. Sucroliq was incorporated on June 12, 2009 and has the legal authority to develop the Project. Its legal representative is Enrique Antonio Bojórquez Valenzuela.

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## 3. CERTIFICATION CRITERIA

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### 3.1. Technical Criteria

#### 3.1.1. General Community Profile

The Project is expected to benefit the community of Mexicali, Baja California by creating employment opportunities and generating additional income during the construction and operation of the Project. The Project is expected to generate approximately 210 jobs during construction, 41 onsite jobs during operation and approximately 150 permanent indirect jobs.

According to the 2015 Mexican intercensal survey, the population of Baja California was 3,315,766, which represented 2.8% of the population of Mexico.<sup>11</sup> Between the years 2010 and 2015, the population of Baja California grew 5.1%.<sup>12</sup> The state of Baja California accounted for 3.3% of Mexico’s gross domestic product (GDP) in 2016.<sup>13</sup> According to the 2019 Economic Census, the main economic activities contributing to the total gross production of the state are: manufacturing (59.3%), retail trade (10.8%), wholesale trade (6.2%) and other sectors (23.7%).<sup>14</sup>

The total population of Mexicali was 988,417 in 2015.<sup>15</sup> According to the 2019 Economic Census, the main economic activities contributing to the total gross production of the municipality are: manufacturing (60.4%), retail trade (10.2%), wholesale trade (6.8%) and other sectors (22.6%).<sup>16</sup>

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<sup>11</sup> Source: Mexican statistical institute (INEGI), Encuesta Intercensal 2015 [2015 Intercensal Survey]

(<http://cuentame.inegi.org.mx/monografias/informacion/bc/poblacion/default.aspx?tema=me&e=02>).

<sup>12</sup> Source: INEGI, Censos y Conteos de Población y Vivienda [Censuses and Population and Housing Counts] (<https://www.inegi.org.mx/programas/ccpv/2010/default.html#Tabulados>).

<sup>13</sup> Source: INEGI, Mexico en cifras [Mexico by the Numbers],

(<http://cuentame.inegi.org.mx/monografias/informacion/bc/economia/pib.aspx?tema=me&e=02>).

<sup>14</sup> Source: INEGI, Censo económico 2019 [2019 Economic Census] (<https://www.inegi.org.mx/app/saic/>).

<sup>15</sup> Source: INEGI

(<http://cuentame.inegi.org.mx/monografias/informacion/BC/Poblacion/default.aspx?tema=ME&e=02>).

<sup>16</sup> Source: INEGI, 2019 Economic Census (<https://www.inegi.org.mx/app/saic/>).

### **Current COVID 19 Situation**

#### **Nationwide in Mexico**

Since the outbreak in March 2020, the virus has been spreading exponentially to all nations and throughout Mexico. According to the Mexican Ministry of Health (SSA), as of October 12, 2020, Mexico had reported 821,045 COVID-19 infections with a total death toll of 83,945. The state of Baja California recorded 22,341 total infections and 3,646 deaths for the same period.<sup>17</sup>

To assist in the recovery from the COVID-19 pandemic, the Mexican government has responded in several ways by issuing programs and actions to address the COVID-19 pandemic in a variety of areas, including providing financial support for small businesses and independent contractors, as well as extending deadlines for certain payments.<sup>18</sup>

To prevent and mitigate the spread of the coronavirus, the Mexican government has issued several guidelines for closed and open spaces,<sup>19</sup> as well as 49 agreements for different sectors, including tourism, education and health.<sup>20</sup> Additionally, training courses on preventing the spread of COVID-19 are available on-line for the general public.<sup>21</sup>

#### **Mexicali**

Mexicali is the municipality in the state of Baja California most affected by the COVID-19 pandemic. As of October 12, 2020, Mexicali had reported 9,175 infections and 1,594 deaths.<sup>22</sup>

In Mexicali, 70% of the companies have either been severely or moderately affected by the economic slowdown due to the pandemic. Half of the businesses located in the municipality expect more than a 40% reduction in revenue. Also, 42% have reduced their personnel and 80% have reduced working hours.<sup>23</sup> The sectors most affected are tourism, commerce and professional services. Overall, more than 10,700 workers were laid off during the March-May period.<sup>24</sup>

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<sup>17</sup> Source: Mexico Ministry of Health ([https://www.gob.mx/cms/uploads/attachment/file/584322/Comunicado\\_Tecnico\\_Diario\\_COVID-19\\_2020.10.12.pdf](https://www.gob.mx/cms/uploads/attachment/file/584322/Comunicado_Tecnico_Diario_COVID-19_2020.10.12.pdf)).

<sup>18</sup> Government of Mexico (<https://www.gob.mx/covid19medidaseconomicas>).

<sup>19</sup> Source Government of Mexico (<https://coronavirus.gob.mx/documentos-de-consulta/>).

<sup>20</sup> Source: Official Mexican gazette, *Diario Oficial de la Federación*, March 24, 2020 ([https://www.dof.gob.mx/nota\\_detalle.php?codigo=5590339&fecha=24/03/2020](https://www.dof.gob.mx/nota_detalle.php?codigo=5590339&fecha=24/03/2020)).

<sup>21</sup> Source: Government of Mexico (<https://coronavirus.gob.mx/capacitacion/>).

<sup>22</sup> Source: Baja California State Government (<https://www.bajacalifornia.gob.mx/coronavirus?id=1>).

<sup>23</sup> Source: Grupo Interinstitucional de Investigación (GIDI) [Interagency Research Group], Impactos de COVID-19 en las empresas de Mexicali [Impacts of COVID-19 on Mexicali businesses] (<http://www.covid19.inteliaxis.com/documentos/COMVIN%20Mxli%20COVID19%20MiPyMES.pdf>).

<sup>24</sup> Source: Border research institute, Colegio de la Frontera Norte (COLEF), *La pandemia y la contracción del mercado de trabajo en México y la frontera norte* [The pandemic and the concentration of the job market in Mexico and the northern border].



### **Sugar Market Profile**

Sweeteners are additives that provide a sweet flavor to food. Depending on their origin, they are classified as natural (or nutritive) and artificial (or nonnutritive). The former constitute an important source of calories for human beings. Among the most important natural sweeteners are sugar, high fructose corn syrup (HFCS), honey, molasses and *piloncillo*.<sup>25</sup> Artificial sweeteners include mainly dextrose and maltose.

One characteristic of sweeteners is that they can be interchanged, especially in the food and beverage industries. Even though the substitution is not perfect, for instance, the candy, chocolate and cake industries usually use solid sweeteners, while the dairy and beverage industries can use liquid sweeteners. Sugar is also an important product for human consumption due to its high energy content. On average, sugar provides 12% of carbohydrates, which are responsible for producing energy in the human body.

The sugar industry has evolved worldwide to become an important agroindustry that generates jobs and revenue for countries that produce and export this commodity. It is one of the most important industries in Mexico due to its economic and social impact on the agricultural sector. Around 50 sugar mills participated in the 2019-2020 sugar cane harvest in Mexico. During that period, sugar cane was cultivated on more than 780,000 hectares in the country, producing more than 49 million tons of sugar cane and more than five million tons of sugar. According to industry leaders, sugar cane growth and harvest took place in 287 rural counties in 15 Mexican states. In Mexico, the sugar industry represents 2.6% of the gross domestic product from manufacturing and employs almost half a million workers.

Refined liquid sugar can be obtained by either processing crystalized raw sugar at refineries (one-step process) or by mixing already refined sugar with water (two-step process). In Mexico, raw sugar is produced at all 50 sugar mills in the country. All sugar refineries in the country, except those operated by the project sponsor, produce crystalized refined sugar, but none of them produce liquid sugar. The Sponsor holds the only patent for refining raw sugar into liquid sugar in Mexico and other countries, such as United States, Canada, Germany, Great Britain, Holland, Argentina, France and Switzerland. Transforming raw sugar into liquid sugar in a one-step process is more efficient, resulting in the use of less electricity, fuel and water. Therefore, the proposed industrial process to be implemented by the Project presents a positive impact to the environment, while also reducing related production costs.

#### **3.1.2. Project Scope**

The Sponsor signed a five-year contract with a private company (the “Private Company”) to install and operate the Project. The contract can be renewed automatically for an additional five-year period. The proposed project consists of the design, construction, and operation of an in-plant liquid sugar refinery with a production capacity of 80,000 metric tons/year (dry basis) of liquid sugar. Approximately 10% of the liquid sugar produced by the Project will be provided to the Private Company, tailored to meet its needs. The remaining 90% of the production will be sold to

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<sup>25</sup> *Piloncillo* is a raw form of sugar that is sometimes referred to as Mexican brown sugar. This type of sugar has not been processed, leaving it with a golden-brown color and a flavor similar to molasses.

other food companies located in Baja California, California, and Arizona. The Project includes the following general processes:

- Dissolution: Raw sugar, as received from the sugar mills, is dissolved in hot water to obtain a syrup that serves as an input substance for sequential purification processes.
- Filtration: The syrup is filtrated to remove suspended particles. The resulting syrup contains lower turbidity levels and is free of impurities.
- Clarification and purification: Ion exchange columns are used to remove organic matter and minerals from the filtered syrup, resulting in an almost colorless product.
- Final filtration: Any remaining particles, turbidity and color are removed by filtering the syrup.
- Ultraviolet process: An ultraviolet ray system is used to disinfect the final product.

The proposed Project utilizes a process that allows for zero waste. The two filtration processes generate most of the organic matter, which is collected and can be used as a fertilizer. The ionic exchange columns are the second source of organic matter. A portion of the water resulting from cleaning the ionic exchange columns and filters is evaporated and later condensed to be reused in the refining process. The remaining pure water will be stored and used to rinse the different plant components. Finally, the wastewater generated by the Project will be mixed with the organic material to produce a fertilizer. The existing waste treatment plant of the Private Company will not be used. It is estimated that up to 104 cubic meters per year of organic waste will be produced, which can be reused as fertilizer by local farmers. If the organic waste is not used as fertilizer, the Private Company will dispose of it at the local landfill, in accordance with applicable environmental regulations.

The production process proposed by the Sponsor is more efficient compared to the industry standard, because the Project will refine and produce liquid sugar in a single integrated process, while the rest of the industry first has to refine the sugar and then create the liquid product. In addition, the refining process patented by the Sponsor is more efficient than the typical refining process in the industry.

All required services for the operation of the Project—such as electricity, water, and natural gas—will be provided by the Private Company. All necessary construction, environmental and other permits will also be obtained by the Private Company.

### **3.1.3. Technical Feasibility**

Since the Project Sponsor currently operates three liquid sugar refining plants in Mexico, the patented technology proposed for the Project is considered proven. Moreover, the technology uses water and energy efficiently, thus providing environmental benefits. Since 2009, Sucroliq has gained experience in producing liquid sugar tailored to the needs of its clients. Currently, the three plants produce a combined 350,000 metric tons/year of liquid sugar. Because of the demand for liquid sugar from Sucroliq and its successful in-plant model, the Sponsor is expanding its production capacity in Mexico by implementing its proven and patented technology.

### **3.1.4. Land Acquisition and Right-of-Way Requirements**

Since the Project will be installed within an existing industrial facility, no land acquisition and right of ways are required. The in-plant contract under which the Project will be installed provides right-of-way and leasing rights to build and operate the sugar refining plant inside the manufacturing facility of the Private Company. The Private Company has held the property rights since June 18, 2008.

### **3.1.5. Project Milestones**

Construction of the Project is scheduled to begin in December 2020, and the Commercial Operation Date (COD) is expected to be no later than June 2021. Financial closing is expected by December 2020.

### **3.1.6. Management and Operation**

Sucroliq was formed in 2009 by a group of companies owned one hundred percent by Mexican shareholders. Sucroliq is a leader in the Mexican liquid sugar sector and has been a pioneer in the sugar refining industry using its patented technological developments. Currently, Sucroliq is the only company in Mexico that refines and produces liquid sugar in a single process. The Sponsor operates three refining plants in Mexico.

The operation of the plant will be the responsibility of Sucroliq, which has proven experience in operating the in-plant model. The Sponsor designed this in-plant model for another customer in central Mexico in 2016, and that project continues to operate successfully.

According to the agreement between the Private Company and Sucroliq, the maintenance activities will be carried out by the Private Company in compliance with the agreed terms and conditions and under the supervision of Sucroliq. The maintenance activities include filter cleaning and preventive maintenance of the ion exchange columns.

## **3.2. Environmental Criteria**

### **3.2.1. Environmental and Health Effects/Impacts**

#### **A. Existing Conditions**

The city of Mexicali has experienced negative economic effects due to the COVID-19 pandemic. Nevertheless, there is high market demand for liquid sugar because it can be readily used in the production processes of the food industry. Compared to regular refineries, the Project requires less energy and consumes less water, reducing its carbon footprint, as well as the related production costs.

## B. Project Impacts

Project implementation is expected to provide environmental benefits by reducing the consumption of resources and preventing emissions when compared to existing, business-as-usual sugar refineries. The benefits include:

- i) Displacement of 462,080 m<sup>3</sup>/year of water, which represents an 80% decrease in water consumption when compared to a typical sugar refinery.
- ii) Displacement of 1,877 MMBTU of fuel, which represents a 29% decrease in fuel consumption when compared to a typical sugar refinery. This fuel displacement is equivalent to the displacement of 100 metric tons/year of CO<sub>2</sub>.<sup>26</sup>
- iii) Displacement of 11,546 MWh/year of electricity during the first year, which represents a 98% decrease in electricity consumption when compared to a typical sugar refinery. The electricity displacement is equivalent to the displacement of the following emissions: 3,721 metric tons/year of CO<sub>2</sub>; 1,199 metric tons/year of NO<sub>x</sub>; 387 metric tons/year of SO<sub>2</sub>; and 125 metric tons/year of PM<sub>10</sub>.<sup>27</sup>

Moreover, given the negative effects of the COVID-19 pandemic on the economy of the state of Baja California, Project implementation will support the economic recovery of Mexicali by providing job opportunities in the community. As previously mentioned, the Project will generate 210 jobs during construction, 41 during operation and approximately 150 permanent indirect jobs.

Finally, the Sponsor will also support local farmers by distributing 104 cubic meters per year of fertilizer resulting from refining process free of charge. If the organic waste is not used as fertilizer, the Private Company will dispose of it at the local landfill, in accordance with applicable environmental regulations.

## C. Transboundary Impacts

No transboundary impacts are anticipated as a result of the implementation of the Project.

### 3.2.2. Compliance with Applicable Environmental Laws and Regulations

#### A. Environmental Clearance

The Project will be built within an existing industrial facility owned by the Private Company, which obtained an environmental clearance from the Baja California state environmental agency for the

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<sup>26</sup> It is assumed that the typical sugar refinery uses natural gas as fuel.

<sup>27</sup> CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>2</sub> and PM<sub>10</sub> calculations are based on the potential emissions avoided as a result of reducing future demand on fossil fuel-based electricity equivalent to 11,546 MWh/year through the use of the patented sugar refining process and the emission factors for the state of Baja California. The emission factors are calculated by NADB based on the power generation portfolio of the state of Baja California and on the factors reported per technology in the 2018-2032 Mexican National Power System Development Program (PRODESEN). The resulting emission factors are: 0.32229 metric tons/MWh for CO<sub>2</sub>; 0.00111 metric tons/MWh for NO<sub>x</sub>, 0.00048 metric tons/MWh for SO<sub>2</sub> and 0.00002 metric tons/MWh for PM<sub>10</sub>.

construction and operation of that facility. Under the provisions of the Baja California environmental law, any modification to the process originally submitted must be reported to and approved by the state environmental authority.<sup>28</sup> Since the Project entails incorporating additional processes into the current industrial facility, the Private Company will need to obtain environmental clearance for the Project prior to construction. As part of its due diligence process, NADB will not disburse the loan until this requirement has been met.

Likewise, prior to construction, the Private Company will have to obtain the Municipal Environmental License issued by the Municipality of Mexicali. As part of its due diligence process, NADB will not disburse the loan until this requirement has been met.

In addition, in accordance with the Baja California Environmental Protection Law and its regulations regarding the registration of pollutant emissions and transfer, every state-regulated industrial facility must submit general information on an annual basis that includes its production processes and pollutant emissions in compliance with its Annual Operating License.<sup>29</sup> Industrial facilities are also required to renew their Operating License annually. Once in operation, the Private Company is responsible for obtaining all necessary authorizations including these two licenses.

## **B. Mitigation Measures**

Mitigation measures for the Project will be determined by the state environmental agency once the corresponding authorization is issued. Nevertheless, such measures are expected to be typical for this type of project, taking into account that the waste generated by the Project can be reused in the agricultural sector as fertilizer and that no water will be discharged by the Project into the local sewer system.

## **C. Pending Environmental Tasks and Authorizations**

Environmental clearance from the state environmental agency and from the Municipality of Mexicali must be obtained prior to Project construction.

## **3.3 Financial Criteria**

The Project Sponsor has requested a loan from NADB to complete the financing of the Project. The proposed payment mechanism is consistent with collateralized financial structures seen in the U.S. and Mexico. The source of payment will be the revenue generated by the Project, in conjunction with the revenue obtained by Sucroliq from other plants, generated by selling sugar products to its customers, mostly food industry manufacturers, located in the Mexican or U.S. market.

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<sup>28</sup> In 2014 the Private Company submitted a request to the state environmental agency to authorize a modification to its industrial process. The state environmental agency reviewed the request and authorized the change through the corresponding environmental resolution dated April 23, 2014.

<sup>29</sup> The information reported corresponds to the facility's operations for the year immediately preceding.

A preliminary analysis conducted by NADB verified that Sucroliq, S.A.P.I. de C.V. has the legal authority to contract the financing and pledge its revenue for the payment of financial obligations. It also has the legal and financial capacity to operate and maintain the Project given the experience of its team, the structure of the Project and the expected revenue stream. During its due-diligence process, NADB will perform a detailed review of the technical, financial and legal aspects of the Project, as well as verify that the projected operation and maintenance (O&M) costs are financially sustainable.

The revenue from the sale of sugar generated by the Project is estimated to be sufficient to: a) cover the scheduled O&M expenses, b) pay the debt service, c) fund the debt service reserve and d) comply with debt service coverage requirements. In addition, NADB is reviewing the overall creditworthiness of the company.

Considering the Project's characteristics and based on the preliminary financial and risk analyses performed, the proposed Project has the potential to be financially feasible and to present an acceptable level of risk for NADB. Therefore, NADB has begun processing the loan request for up to US\$8.0 million, which would be contracted by Sucroliq, S.A.P.I. de C.V., for the construction of the Project.

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## 4. PUBLIC ACCESS TO INFORMATION

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### 4.1. Public Consultation

NADB published the draft certification and financing proposal for a 30-day public comment period beginning October 13, 2020.

### 4.2. Outreach Activities

NADB also conducted a media search to identify potential public opinion about the Project. No specific articles or references to the Project were found. However, references to the Sponsor were found on the websites listed below:

- *Expansión* (December 24, 2015) – “La empresa mexicana que patentó el azúcar líquida” [The Mexican company that patented liquid sugar]. (<https://expansion.mx/emprendedores/2015/12/21/la-empresa-mexicana-que-patento-el-azucar-liquida>).
- *El Financiero* (May 5, 2018) – “Toda una planta monitoreada desde un celular” [An entire plant monitored from a cellular phone] (<https://www.elfinanciero.com.mx/mexico-en-hannover/toda-una-planta-monitoreada-desde-un-celular>).

- *El Financiero* (September 19, 2018) – “Esta planta mexicana de azúcar es la única en su tipo en automatizar todos sus procesos” [This Mexican sugar plant is the only one of its kind to automate all its processes]  
(<https://www.elfinanciero.com.mx/empresas/esta-planta-mexicana-de-azucar-es-la-unica-en-su-tipo-en-automatizar-todos-sus-procesos>).
- *Milenio* (September 19, 2018) – “Planta mexicana de azúcar, la primera en automatizar todos sus procesos” [Mexican sugar plant, the first to automate all its processes].  
(<https://www.milenio.com/negocios/planta-mexicana-de-azucar-la-primera-en-automatizar-todos-sus-procesos>).
- *Manufactura* (September 20, 2018) – “Sucroliq produce azúcar líquida en una planta 100% automatizada” [Sucroliq produces liquid sugar in a fully automated plant].  
(<https://manufactura.mx/industria/2018/09/20/sucroliq-produce-azucar-liquida-en-una-planta-100-automatizada>).

In summary, these publications highlight the ability of the Sponsor to build and operate a facility similar to the one proposed under the Project. No public opposition to the Project has been detected. The Sponsor has followed all public consultation requirements to comply with applicable environmental clearance and permitting processes.