

# YGRENE GREEN USE OF PROCEEDS SECURITIZED BOND

FRAMEWORK OVERVIEW AND SECOND OPINION BY  
SUSTAINALYTICS

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**SUSTAINALYTICS**

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## 1. PREFACE

Ygrene Energy Fund Inc. (“Ygrene”), through its financing programs (“Programs”), finances energy efficiency, renewable energy and water conservation projects on private residential and commercial real property (“Qualified Improvements”). Ygrene intends to issue Green Bonds (also known as Green Use of Proceeds Securitized Bond). This financing is enabled by the issuance and sale of notes secured by limited obligation improvement bonds that are in turn secured by property tax liens on the improved properties (collectively called Property Assessed Clean Energy or “PACE” bonds). Ygrene has engaged Sustainalytics to provide an independent opinion on its framework and on the environmental credentials of the issuance. Sustainalytics reviewed several relevant documents, the planned use of proceeds and held conversations with various members of Ygrene’s management team to understand the sustainability impact of their business processes and planned use of proceeds. This document contains two sections: Framework Overview – summary of the Ygrene framework; and Sustainalytics’ Opinion – an opinion of the framework.

## 2. INTRODUCTION

Ygrene Energy Fund Inc. is a finance company providing clean energy funding for residential and commercial properties throughout the United States. Founded in 2010, Ygrene is headquartered in Santa Rosa, California, and currently operates in three states (California, Florida, and Georgia). Ygrene’s business model is based on providing financing for real property improvement projects involving Qualified Improvements. It does so by partnering with local and regional governmental entities to administer and fund their PACE programs. It is the PACE legislation that allows for the highly secure property tax liens that make PACE such a successful model.

### **The PACE Process**

PACE legislation lets cities, counties, joint powers authorities, interlocal districts and other governmental entities (“Jurisdictions”) raise capital through issuance of PACE bonds. Through the purchase of the PACE bonds, Ygrene provides the capital that enables property owners to carry out Qualified Improvements projects. The property owners, that meet eligibility criteria, apply to the Program directly or through a Certified Contractor and repay the financing via a special tax or assessment on their property tax bill. Following receipt of approval by the property owner, Ygrene directly pays the Certified Contractors for the installation of Qualified Improvements. Property owners can choose both the Certified Contractors and the Qualified Improvement, both of which must be pre-approved by Ygrene. By virtue of this financing structure, property owners do not incur upfront payments for their energy and water efficient improvements and are able to repay the financing over a much longer term than is customarily available for such projects. Municipalities service this repayment as a part of their annual tax collection process, and remit these tax payments via a trustee to the ultimate holder of the PACE bonds.

### **Securitization of PACE Bonds**

Ygrene provides collateral in the form of a PACE bond portfolio, and uses the liens and tax payments to back its securitizations. Hence, the PACE bonds held by Ygrene (or a closely held Ygrene SPE) become a securitized PACE bond portfolio that in turn is secured by the property tax liens and PACE assessments levied against the participating owners’ properties. Ygrene is directly responsible for originating these

assessments, 80-90% of which come through contractor referrals. A contractor certified through the Program (listed on the website or provided by Ygrene customer service representatives), “Certified Contractor” must be selected by the property owner to install the Qualifying Improvements. Fees charged through the Program reimburse Ygrene and its Jurisdiction partners for administrative and underwriting costs. Ygrene’s principal source of revenue accrues from the difference in interest rates between its sources of capital and coupons on its funding activities.

Currently, Ygrene operates Programs in three states (California, Florida, and Georgia). In California, Ygrene administers its YgreneWorks Clean Energy PACE funding program, established by a state wide joint powers authority (Golden State Finance Authority). Ygrene’s Clean Energy Green Corridor Program operates in Florida through the Green Corridor interlocal district, by which Ygrene is contracted to administer and fund its Florida PACE programs. In Georgia, Ygrene is partnering with Invest Atlanta, the City’s development authority, to develop the Clean Energy Atlanta PACE Program.

## 3. FRAMEWORK OVERVIEW

Ygrene is planning to securitize PACE bonds to create “Green Bonds”. The proceeds finance Qualified Improvements on residential and commercial property of Program participants. The PACE bonds acquired from the issuers by Ygrene through its YgreneWorks Clean Energy PACE funding, Clean Energy Green Corridor, and Clean Energy Atlanta programs have been confirmed by an external auditor to be used exclusively for financing of Qualified Improvements. The following sections summarize Ygrene’s Green Bond Framework with respect to the use of proceeds, project selection, the management of proceeds, and reporting.

### 3.1 Use of Proceeds

The proceeds of Green Bonds issued by Ygrene will be used to finance Qualified Improvements consisting of products represented by the general categories outlined below.

#### 1. Energy Efficiency

- Envelope Sealing & Ventilation
- Cool Roofs & Wall Coatings
- Insulating Floor Coverings
- Building Insulation & Weather Stripping
- Radiant Barriers
- HVAC Systems
- Air Filtration & Exhaust Systems
- High Efficiency Water Heating
- High Efficiency Lighting
- High Efficiency Controls
- High Efficiency Pool Equipment
- Windows, Doors & Skylights
- Shading Structures & Blinds

#### 2. Renewable Energy (Photovoltaic, Solar Thermal & Wind Generation Equipment)

- Solar Inverters
- Solar Panels
- Solar Photovoltaic Systems
- Solar Pool Heating Systems
- Solar Water Heating Systems
- Advanced Energy Storage Systems
- Co-generation Systems
- Electric Vehicle Charging Stations
- Fuel Cell Power Systems
- Natural Gas Systems
- Wind Turbine Power Systems

#### 3. Water Management

- Water Saving Landscaping
- Water Saving Irrigation Systems
- Smart Irrigation Controllers
- High Efficiency Fixtures
- Cisterns & Gray-water Systems
- Demand Hot Water Heaters
- Hot Water Pipe Insulation
- Artificial Turf
- High Efficiency Pumps & Motors
- Deionization equipment
- Filter upgrades
- Foundation drain water
- Industrial-process water-use reduction
- Pre-rinse spray valves
- Recycled water sources
- Land Planning

#### **4. Emerging Technology & Innovative Solutions**

Ygrene can approve financing for Qualified Improvements that are not “off the shelf”. These Qualified Improvements may involve any measures that save energy or water, generate energy from renewable sources, measurably improve the property’s ability to resist wind and storm damage, or provide charging stations for electric vehicles. Examples include:

- Energy Management and Demand Reduction Systems
- HVAC Zoning Control Systems
- Industrial Equipment Controls
- Other fuel sources (emerging technologies)
- Co-generation (heat and energy)
- Agricultural Water Saving Systems

#### **3.1.1 Eligibility Criteria**

To be funded through the Green Bonds, the Qualified Improvements must meet the following eligibility criteria:

1. It must fall under one or more of the categories specified in the Use of Proceeds Section 3.1.
2. It must meet certain product-specific eligibility criteria as defined in the Eligible Measures List attached hereto as Annex 1.
3. Products are funded within the 24 months prior to the issuance of the bonds.

Ygrene’s product-specific eligibility criteria (as outlined in Annex 1) reference third-party efficiency program standards and certified product directories, when available, and rely on internal and external subject matter expertise to generate relevant standards and eligibility specifications. This third-party reference process ensures that products have met widely recognized standards of efficiency.

The third-party sources used by Ygrene programs include the following:

- California Building Energy Efficiency Program (Title 24)
- American National Standards Institute (ANSI)
- A/C, Heating & Refrigeration Institute (AHRI)
- Building Performance Institute (BPI)
- California Energy Commission (CEC)
- California Plumbing Code
- National Plumbing Code
- National Electrical Code
- National Fuel Gas Code
- California Solar Initiative Program
- Energy Star Certification
- EPA Certified Wood Stoves
- Home Ventilation Institute
- National Electrical Code
- National Fuel Gas Code
- American Wind Energy Association
- Solar Rating and Certification Corporation
- WaterSense Qualification
- High Velocity Hurricane Zone (HVHZ)
- Florida Building Code 5<sup>th</sup> Edition
- Int’l Building Codes w/GA Amendments

#### **Eligible Projects**

Any project that meets the above eligibility criteria, including the new and ongoing developments of such projects, are eligible to be funded in whole or in part by an allocation of the green bond proceeds.

### 3.2 Project Evaluation and Selection Process

To be funded through the proceeds of the issuance and the underlying PACE bonds, the Qualified Improvements (a product or a bundle of products outlined in Annex 1) must meet the eligibility criteria specified above in section 3.1. Ygrene administers the YgreneWorks Clean Energy PACE funding, Clean Energy Green Corridor, and Clean Energy Atlanta programs. These programs have been confirmed by an external auditor to be used exclusively for financing of Qualified Improvements. Ygrene is directly responsible for originating the Qualified Improvement projects. In this process, Ygrene ensures that the Qualified Improvements meet Ygrene's product specific eligibility criteria.

### 3.3 Management of Proceeds

The proceeds of the green bonds issued by Ygrene will be immediately allocated towards refinancing the eligible projects. The Green Bonds are secured by the PACE bonds in the pool, an amount equal to or less than the amount of the bond authorization. Ygrene, or a Ygrene-controlled SPE, is the sole buyer of PACE bonds issued by the partnering Jurisdictions. Therefore, the net proceeds arising from the issuance of the Green Bonds are used to repay PACE bonds funding Qualified Improvements.

The process of Jurisdictions issuing PACE bonds and Ygrene or a Ygrene SPE purchasing the PACE bonds occurs simultaneously. Purchase of the PACE bonds is made using funds from various Ygrene credit facilities, resulting in full allocation of the proceeds to the PACE bonds that are backed by the assessment/tax lien pool.

### 3.4 Reporting

#### Allocation Reporting

Ygrene will disclose the allocation of the PACE bonds to the Green Bonds in an aggregated way. Ygrene has also confirmed that their external auditor will provide verification on allocation of bond proceeds to eligible projects. Given that all proceeds will be allocated immediately, verification on allocation of bond proceeds will be disclosed all at once at issuance of the Green Bonds.

#### Impact Reporting

Ygrene will report on estimated impact in an aggregated way in the following areas:

- Greenhouse Gas (GHG) emission reductions
- Energy savings
- Renewable energy generation
- Water savings

Ygrene imports data compiled from its administrative software system, the U.S. EPA eGRID Power Profiler and the GHG Equivalency Calculator into a private label virtual audit software tool. This proprietary system, developed by a California company and approved by Pacific Gas and Electric and the California Energy Commission, calculates energy savings and emission reductions for all Ygrene originated projects. Where applicable, Ygrene estimates both annual and lifetime metrics of the installed improvements. The reporting process and associated metrics are listed below.

## **Greenhouse Gas (GHG) Emission Reductions**

### **1. Methodology**

Aggregated GHG emission reductions will be reported for both energy efficiency and renewable energy projects.

### **2. Specific Impact Metrics**

- Aggregated Annual Emission Reduction (Tons GHG)
- Aggregated Lifetime Emission Reduction (Tons GHG)

## **Energy Savings**

### **1. Methodology**

Energy savings estimates are reported for each energy efficiency home improvement project and aggregated for all projects incorporated in the Green Bond at issuance. The impact model used to calculate home energy savings is Ygrene's proprietary virtual audit tool, derivative of a methodology developed for Pacific Gas and Electric and approved by the California Energy Commission, developed for Ygrene by a Novato, CA company.

### **2. Specific Impact Metrics**

- Aggregated annual and lifetime kWh Savings
- Aggregated annual and lifetime Therm Savings
- Aggregated Annual Energy Savings (kWh-e & bill savings)
- Aggregated Lifetime Energy Savings (kWh-e & bill savings)

## **Renewable Energy Generation**

### **1. Methodology**

Renewable energy generation estimates are reported for solar photovoltaic installation projects. The aggregated impact estimates derive from methodologies used by the National Renewable Energy Laboratory's PV Watts Calculator.

### **2. Specific Impact Metrics**

- Aggregated Solar System Size (W)
- Aggregated Annual Energy Savings (kWh & bill savings)
- Aggregated Lifetime Energy Savings (kWh & bill savings)

## **Water Savings**

### **1. Methodology**

Water savings estimates are reported for both indoor and outdoor water efficiency projects. This impact model derives primarily from methodologies used by the U.S. Environmental Protection Agency (EPA) WaterSense Program and the California Department of Water Resources.

### **2. Specific Impact Metrics**

- Aggregated Annual Water savings (gallons & bill savings)
- Aggregated Lifetime Water savings (gallons & bill savings)



## 4. SUSTAINALYTICS' OPINION

**Three innovative programs to promote home energy efficiency:** Ygrene's three financing programs: The YgreneWorks Clean Energy PACE funding program (California), The Clean Energy Green Corridor Program (Florida), and The Clean Energy Atlanta PACE Program (Georgia) are an effective way to promote the uptake of energy and water conservation products as well as renewable energy-generating products in these three US states. PACE incentivizes home owners to install green products by financing their installation through increased home property taxes, payable over an extended time frame. Hence, homeowners do not have to pay for these energy efficiency renovations upfront, and associated costs are often offset by energy savings. Ygrene, as a PACE administrator, offers homeowners financing for the green investments which are paid back through an increase in property taxes. Therefore, Ygrene, with its three financing programs, is promoting and helping home owners install green projects and improve home energy efficiency.

**Alignment with Green Bond Principles 2016:** Sustainalytics has determined that Ygrene's green bond Framework aligns to the four pillars of the Green Bond Principles 2016. For detailed information please see Appendix 2: Green Bond/Green Bond Programme External Review Form.

### Conclusion

Residential homes and commercial properties in the US are a significant source of the country's overall GHG emissions. In 2014, the United States Environmental Protection Agency (EPA) reported that commercial and residential homes contributed to 12% of total US greenhouse gas emissions. Additionally, the EPA reported that indirect emissions from electricity used by homes and businesses have increased by 27% since 1990, due to increasing electricity consumption for lighting, heating, air conditioning, and appliances.<sup>1</sup> Ygrene supports residential and commercial renewable energy, energy efficiency, and water efficiency by providing financing to eligible improvement projects in California, Florida, and Georgia. Given that total property tax assessments backing the PACE bonds will meet or exceed the proceeds of the green bond, the capital raised through the issuance of the bond will be allocated entirely for energy or water efficient home improvements, through the purchase of PACE bonds. Ygrene's Green Bond framework is aligned with the ICMA Green Bond Principles 2016. Sustainalytics is of the opinion that the green bond Framework is robust, credible and effective in supporting energy efficiency projects for residential and commercial properties in California, Florida, and Georgia.

Based on the above points, Sustainalytics considers Ygrene's Green Bond Framework to be robust, credible and transparent.

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<sup>1</sup> <https://www3.epa.gov/climatechange/ghgemissions/sources/commercialresidential.html>.

## APPENDICES

### Appendix 1: YgreneWorks - California Residential Project Guidelines

In order to qualify for Ygrene funding, all projects must:

- Meet or exceed applicable local, state, and federal codes and standards;
- In California, comply with Title 24, Part 6, Subchapters 1. (General Provisions); 2. (Mandatory Requirements for the Manufacture, Construction, and Installation of Systems, Equipment and Building Components); 7. (Mandatory Features and Devices); and 9. (Additions and Alterations in Existing Low-Rise Residential Buildings);
- Be installed by Ygrene-certified contractors or participating property owners; and
- Be installed in accordance with manufacturer recommendations.

## Appendix 2: Eligible Measures List

### Alternative Energy Upgrades

PRODUCT TYPE	ELIGIBLE UPGRADE MEASURE	USEFUL LIFE (YEARS)
Alternative Energy	Alternative Energy Storage System	10
	Co-generation System	20
	Electric Vehicle Charging Station	20
	Fuel Cell Power System	20
	Hydrogen Fuel Power System	20
	Natural Gas System	20
	Wind Turbine Power System	20
	Emerging Energy or Water Saving Technologies	Call
	Custom Measures (with management approval). Written explanation and assertion of energy savings required.	varies

### Renewable Generation Upgrades

PRODUCT TYPE	ELIGIBLE UPGRADE MEASURE	USEFUL LIFE (YEARS)
Solar Photovoltaic	Solar Photovoltaic System	30
	Solar Inverter (free-standing)	10
	Emerging Energy Saving or Generating Technologies	call
	Custom Measures (with management approval). Written explanation and assertion of energy savings required.	varies
Solar Thermal	Solar Thermal Water Heating	20
	Solar Thermal Pool Heating	20
	Custom Measures (with management approval). Written explanation and assertion of energy savings required.	varies

### Energy Efficiency Upgrades

PRODUCT TYPE	ELIGIBLE UPGRADE MEASURE	USEFUL LIFE (YEARS)
High-Efficiency Lighting and Appliances	Energy Efficiency Refrigeration System (Appliances must be built in and permanently fixed)	25
	Indoor LED Lighting Fixture	20
	Lighting Control System	20+
	Outdoor LED Lighting Fixture	20
	Custom Measures (with management approval). Written explanation and assertion of energy savings required.	varies
High-Efficiency Pool Equipment	Automatic Pool Cover	10
	Electric Heat Pump Pool Heater	20
	Gas Pool Heater	20
	Pool Pump and Motor	20
	Custom Measures (with management approval). Written explanation and assertion of energy savings required.	varies

## Energy Efficiency Upgrades (cont'd)

PRODUCT TYPE	ELIGIBLE UPGRADE MEASURE	USEFUL LIFE (YEARS)
Building Envelope	Air Sealing	20
	Cool Wall Coating	20
	Insulation – Attic	50+
	Insulation – Exterior (walls only)	20
	Electrical Wiring Modernization (must be in conjunction with energy efficiency projects and support permit acquisition)	30
	Insulation – Hot Water Pipe	30
	Insulation – Under-floor	50+
	Insulation – Wall	50+
	Insulating Carpet and Padding (must show insulation rating)	10
	Patio Covers	20
	Radiant Barrier	20
	Reflective Paint	10
	Roofing - Cool (energy saving)	30
	Roofing – Insulated	30
	Roofing - Reflective (energy saving)	30
	Weather Stripping	20
	Custom Measures (with management approval). Written explanation and assertion of energy savings required.	varies
	Additional building openings to provide natural light	50+
	Heating, Venting & Air Conditioning (HVAC)	Air Conditioner – Central
Air Conditioner – Mini-Split		20
Air Filtration System		20
Biomass/Wood Stove		20
Boiler		20-40
Duct Replacement		20
Duct Sealing		20
Evaporative Cooler		20
Fan – Ceiling		20
Fan – Whole House		20
Furnace – Electric		20
Furnace – Gas		20
Heat Pump - Geothermal		20
Heat Pump - Mini-Split		20
HVAC Systems		20
Hydronic Radiant Heating System		20
Pellet Stove		20
Ventilation System		25
Ventilator - Exhaust Fixture		25
Ventilator - Heat/Energy Recovery		25
Custom Measures (with management approval). Written explanation and assertion of energy savings required.		varies

High-Efficiency Water Heating	Electric Heat Pump Storage Water Heater	20
	Electric Tankless Water Heater	20
	Gas Storage Water Heater	20
	Gas Tankless Water Heater	20
PRODUCT TYPE	Heating Water Circulating Pump	20
Indoor Water Efficiency	Heating Water Controller	20
	Recirculation Hot Water System	20
	Whole House Water Manifold System	20
	Custom Measures (with management approval). Written explanation and assertion of energy savings required.	varies
	High-efficiency Showerheads	20
	High-efficiency Toilets	50+
	High-efficiency Toilet Fixtures	50+
	Hot Water Delivery System	20
	Recirculation Hot Water System	20
	Waterless Urinals	20
	Custom Measures (with management approval). Written explanation and assertion of energy savings required.	varies
Outdoor Water Efficiency	Artificial Turf	15
	Drip Irrigation System	20
	Drought Tolerant Landscaping	20
	Gray Water System	20
	Gutters (only if part of water collections or part of eligible re-roof)	20
	Pavers (only if replacing grass or other watered features)	30
	Sewer Lateral	20
	Sewer Lateral Repair (must be repair of existing damaged and leaking pipes)	20+
	Trenchless Sewer Lateral Lines	30
	Septic to Sewer Conversion (must comply with local codes, permitting and fee requirements)	20+
	High-efficiency Sprinkler Nozzle	10
	High-efficiency Irrigation Pump	20
	High-efficiency Irrigation System	20
	Irrigation Control System	20+
	Rainwater Catchment System	20
	Weather-based Irrigation Controller	20+
Custom Measures (with management approval). Written explanation and assertion of energy savings required.	varies	

## Water Conservation Upgrades

PRODUCT TYPE	ELIGIBLE UPGRADE MEASURE	USEFUL LIFE (YEARS)
Control Systems	Building Energy Efficient Management Control Systems	20+
	Elevator Motors and Controls (energy efficient)	20-30
	HVAC Duct Zoning Control System (energy efficient)	20+
	HVAC Control System	20+
	Industrial Process Equipment Motors and Controls (energy efficient)	20+
	Irrigation Pumps and Controls (energy efficient)	20+
	Kitchen Exhaust Air Volume Control System (energy efficient)	20+
	Lighting Control System (energy efficient)	20+
	Custom Measures (with management approval). Written explanation and assertion of energy savings required.	varies
High-Efficiency Lighting	High-efficiency Lighting (classroom, office, industrial, etc.)	20
	Occupancy Sensor Lighting	20
	Lighting Control System	20+
	Refrigeration Case Lighting with Occupancy Sensors	20
	SMART Parking Lot Fixtures	20
	SMART Parking Garage Fixtures	20
	SMART Pathway Lighting	20
	SMART Wall Pack Fixtures	20
	Task Ambient Lighting	20
	Wireless Lighting Controls	20+
Custom Measures (with management approval). Written explanation and assertion of energy savings required.	varies	
Water Efficiency	Cooling Condensate Reuse	20
	Cooling Tower	25
	Cooling Tower Controllers	25
	Core Plumbing System (to replace/repair leaks)	20
	Deionization Equipment	20
	Industrial Process Water Reuse	20
	Pre-rinse Spray Valves	20
	Recycled Water Sources	20
	Custom Measures (with management approval). Written explanation and assertion of energy savings required.	varies

## Documents Reviewed

Sustainalytics reviewed the following documents for the purposes of writing this report

Number	Document Name
1	California Clean Energy PACE Program
2	California Clean Energy Program Hearing Report
3	Florida PACE Program 2010
4	Mello-Roos Amendment SB 555 2011
5	Ygrene Benefit to Cost Ratio Justification
6	Ygrene Clean Energy Corridor -Florida
7	Ygrene Contract for Homeowners 2015
8	Ygrene Finance Agreement for Homeowners 2014

## Appendix 3: Green Bond/Green Bond Programme External Review Form

### Green Bond / Green Bond Programme External Review Form

#### Section 1. Basic Information

**Issuer name:** Ygrene Energy Fund Inc.

**Review provider's name:** Sustainalytics

**Completion date of this form:** 25 August 2016

#### Section 2. Review overview

##### SCOPE OF REVIEW

The review assessed the following elements and confirmed their alignment with the GBPs:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Use of Proceeds        | <input checked="" type="checkbox"/> Process for Project Evaluation and Selection |
| <input checked="" type="checkbox"/> Management of Proceeds | <input checked="" type="checkbox"/> Reporting                                    |

##### ROLE(S) OF REVIEW PROVIDER

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Consultancy (incl. 2 <sup>nd</sup> opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification   | <input type="checkbox"/> Rating        |
| <input type="checkbox"/> Other ( <i>please specify</i> ):                       |  |

##### EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW (*if applicable*)

Please refer to Green Bond Framework and Second Opinion Document above.



## Section 3. Detailed review

### 1. USE OF PROCEEDS

#### Overall comment on section:

The Use of Proceeds of this bond are clearly described in the legal documentation of the security. Energy efficiency, renewable energy, and water conservation are commonly accepted green project categories, as they contribute to climate change mitigation and the sustainable use of natural resources.

Based on the review of these project categories, Sustainalytics is confident regarding the green credentials of the use of proceeds.

#### Use of proceeds categories as per GBP:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Renewable energy   | <input checked="" type="checkbox"/> Energy efficiency                       |
| <input type="checkbox"/> Pollution prevention and control  | <input type="checkbox"/> Sustainable management of living natural resources |
| <input type="checkbox"/> Terrestrial and aquatic biodiversity conservation   | <input type="checkbox"/> Clean transportation                               |
| <input type="checkbox"/> Sustainable water management  | <input type="checkbox"/> Climate change adaptation                          |
| <input checked="" type="checkbox"/> Eco-efficient products, production technologies and processes  | <input type="checkbox"/> Other ( <i>please specify</i> ):                   |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs |   |

If applicable please specify the environmental taxonomy, if other than GBPs: N/A

## 2. PROCESS FOR PROJECT EVALUATION AND SELECTION

**Overall comment on section:**

The Ygrene green bond are backed by assets in the form of PACE bonds that funds projects and products managed through Ygrene’s three financing programs. For the eligible projects and products, eligibility is based on two sets of criteria— Ygrene program-specific criteria, and product specific criteria. Collectively, these criteria specify that the funded product contributes to energy and water savings and meets minimum local, state, and federal product codes and standards. The product-specific criteria are based on third-party efficiency standards and certified product directories. They use third-party standards from parties such as the California Energy Commission and the American National Standards Institute, providing assurance that eligible products have met nationally recognized standards of efficiency. Sustainalytics is of the opinion that the process to select eligible projects is credible.

**Evaluation and selection**

- Defined and transparent criteria for projects eligible for Green Bond proceeds
- Documented process to determine that projects fit within defined categories
- Summary criteria for project evaluation and selection publicly available
- Other (*please specify*):

**Information on Responsibilities and Accountability**

- Evaluation / Selection criteria subject to external advice or verification
- In-house assessment
- Other (*please specify*):

## 3. MANAGEMENT OF PROCEEDS

**Overall comment on section:**

The proceeds of the green bonds issued by Ygrene will be immediately allocated towards refinancing the eligible projects. The Green Bonds are secured by the PACE bonds in the pool, an amount equal to or less than the amount of the bond authorization. Ygrene, or a Ygrene-controlled SPE, is the sole buyer of PACE bonds issued by the partnering Jurisdictions. Therefore, the net proceeds arising from the issuance of the Green Bonds are used to repay PACE bonds funding Qualified Improvements. Because of this, the management of proceeds is a straightforward process and in line with industry norms.

**Tracking of proceeds:**

- Green Bond proceeds segregated or tracked by the issuer in a systematic manner
- Disclosure of intended types of temporary investment instruments for unallocated proceeds
- Other (*please specify*):

**Additional disclosure:**

- Allocations to future investments only
- Allocation to individual disbursements
- Disclosure of portfolio balance of unallocated proceeds
- Allocations to both existing and future investments
- Allocation to a portfolio of disbursements
- Other (*please specify*):

**4. REPORTING**

**Overall comment on section:**

Ygrene's reporting on the impact of its green bond proceeds is very detailed and rigorous. Ygrene reports aggregated estimates on both annual and lifetime metrics of the installed improvements for the categories of greenhouse gas (GHG) emission reductions, energy savings, renewable energy generation, and water savings.

**Use of proceeds reporting:**

- Project-by-project
- On a project portfolio basis
- Linkage to individual bond(s)
- Other (*please specify*):

**Information reported:**

- Allocated amounts
- GB financed share of total investment
- Other (*please specify*):

**Frequency:**

- Annual  Semi-annual
- Other (*please specify*): Since all proceeds will be immediately allocated, impact reporting will take place all at once at issuance.

**Impact reporting:**

- Project-by-project  On a project portfolio basis
- Linkage to individual bond(s)  Other (*please specify*):

**Frequency:**

- Annual  Semi-annual
- Other (*please specify*): Since all proceeds will be immediately allocated, impact reporting will take place all at once at issuance.

**Information reported (expected or ex-post):**

- GHG Emissions / Savings  Energy Savings
- Other ESG indicators (*please specify*):

**Means of Disclosure**

- Information published in financial report  Information published in sustainability report
- Information published in ad hoc documents  Other (*please specify*):
- Reporting reviewed (*if yes, please specify which parts of the reporting are subject to external review*):

**USEFUL LINKS** (*e.g. to review provider methodology or credentials, to issuer's documentation, etc.*)

**SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE**

**Type(s) of Review provided:**

- Consultancy (incl. 2<sup>nd</sup> opinion)  Certification
- Verification / Audit  Rating
- Other (*please specify*):

**Review provider(s):**

Sustainalytics

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- (i) **Consultant Review:** An issuer can seek advice from consultants and/or institutions with recognized expertise in environmental sustainability or other aspects of the issuance of a Green Bond, such as the establishment/review of an issuer's Green Bond framework. "Second opinions" may fall into this category.
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Sustainalytics is the largest independent provider of sustainability research, analysis, and services to investors. We serve over 250 institutional investors which include some of the world's largest asset owners and asset managers. Through over 20 years of experience serving the responsible investment (RI) market, we have gained a reputation for providing high-quality ESG research solutions and excellent client service.

Sustainalytics is headed by seasoned professionals in the field of business, finance, and sustainability, with a wealth of experience in the Responsible Investment area. After more than 20 years of local experience and expertise in the Responsible Investment (RI) market Sustainalytics has developed a comprehensive understanding of trends and best practices and a solid process to assist organisations in integrating ESG considerations into their policies and strategies. We have worked with some of the world's financial institutions including pension plans, investment managers and banks providing customised support to help them achieve their RI objectives. Clients include ABN AMRO, APG, BBVA, BNP Paribas, Deutsche Bank, ING Bank, Lombard Odier, Lloyds Bank, Triodos Bank, UBS and over 250 other financial institutions and organisations.

Sustainalytics now has a staff of 250 employees globally, including over 120 analysts, with operations in Amsterdam, Boston, Bucharest, Frankfurt, New York, Paris, London, Singapore, Sydney, Timisoara, and Toronto, and representation in Brussels and Washington DC.

In 2015, Sustainalytics was named the Best SRI or Green Bond Research Firm by GlobalCapital. In December 2014, for the third year in a row, Sustainalytics was named best sustainable and responsible investment research firm in the Independent Research in Responsible Investment (IRRI) Survey, conducted by Thomson Reuters and SRI-CONNECT.



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4,000 Issuers
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40,000 Issuers
- Controversial Weapons Radar  
40,000 Issuers
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42 Peer Groups

**Our Team**

Michael Jantzi, CEO

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