Recent advancement of WIPO GREEN and the review of its activities in Africa
WIPO GREENの最新状況とアフリカにおける活動の経緯

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Green Technology Marketplace 2022

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History of WIPO GREEN
WIPO GREENのこれまでの経緯

1992 — UNFCCC adopted "Promotion of the transfer of EST".

2010 — COP3 Kyoto Protocol Emission of GHG -5% from 1990

COP13 Action Plan in Bali

COP16 Discussion for "Technology mechanism" started.

Green Technology Package Platform (GTPP) project started in JIPA.

Cooperation of JIPA and WIPO started.

2013 — Official Launch of WIPO GREEN and its database

At WIPO Headquarter in Geneve
Mr. Shinha, Indian UN Ambassador,
Mr. Gurry, General Director of WIPO
and Mr. Ueno, Chairman of JIPA

2015 — COP21 Paris Agreement
To keep the increase in global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the increase to 1.5°C
"Technology mechanism" was established.

"Sustainable Development Goals to 2030" (SDGs) was established.

Acceleration project started and annually held.

Matchmaking events
2015 in Manila
2016 in Nairobi
2017 in Geneve
2018 in Manila
2020 in Santiago

Success cases in WIPO GREEN reported.
2017 in Kenya
2018 in Cambodia

2016

2017

2018 — Experts database started.

2019 — "WIPO GREEN strategic plan 2019-2023" started.

JPO registered as Partners.

2020

2021 — New look and feel design of the database will be gradually integrated.
Acceleration Project 2021 will be held in Indonesia.

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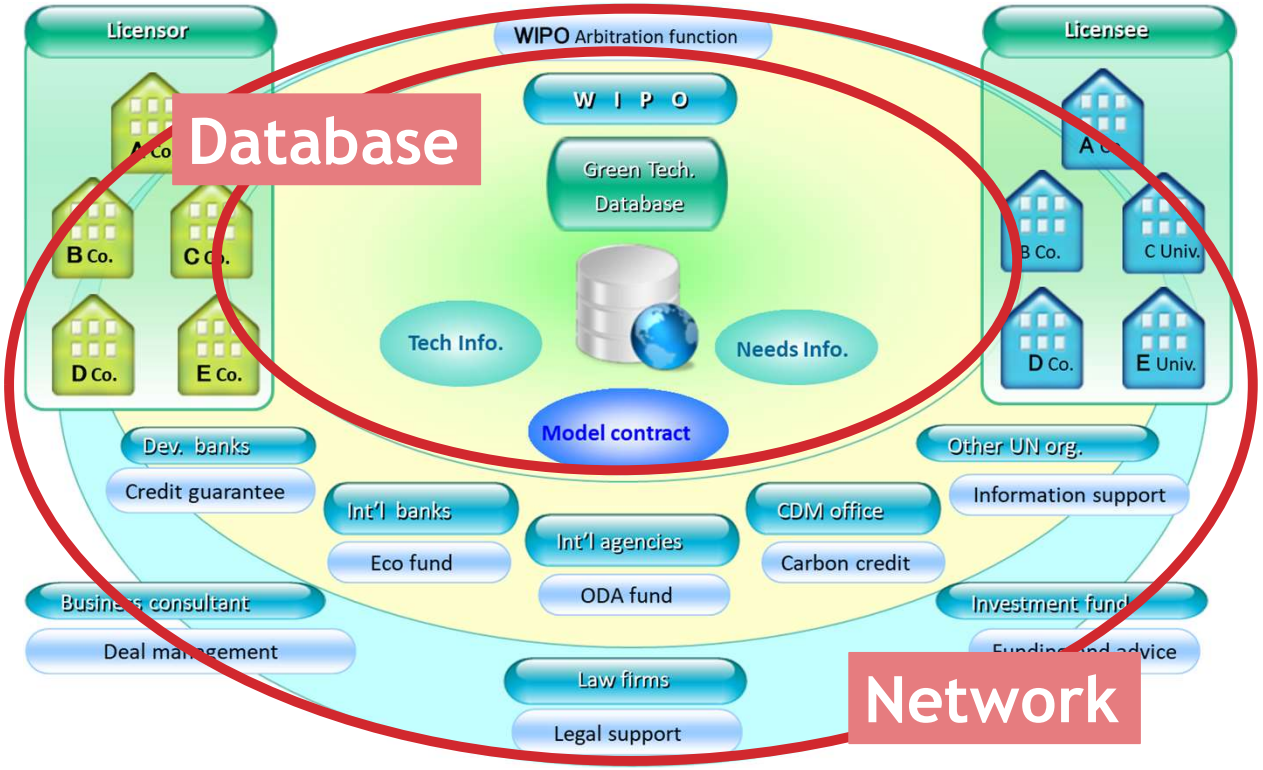
Basic Structure of WIPO GREEN
WIPO GREENの基本構造



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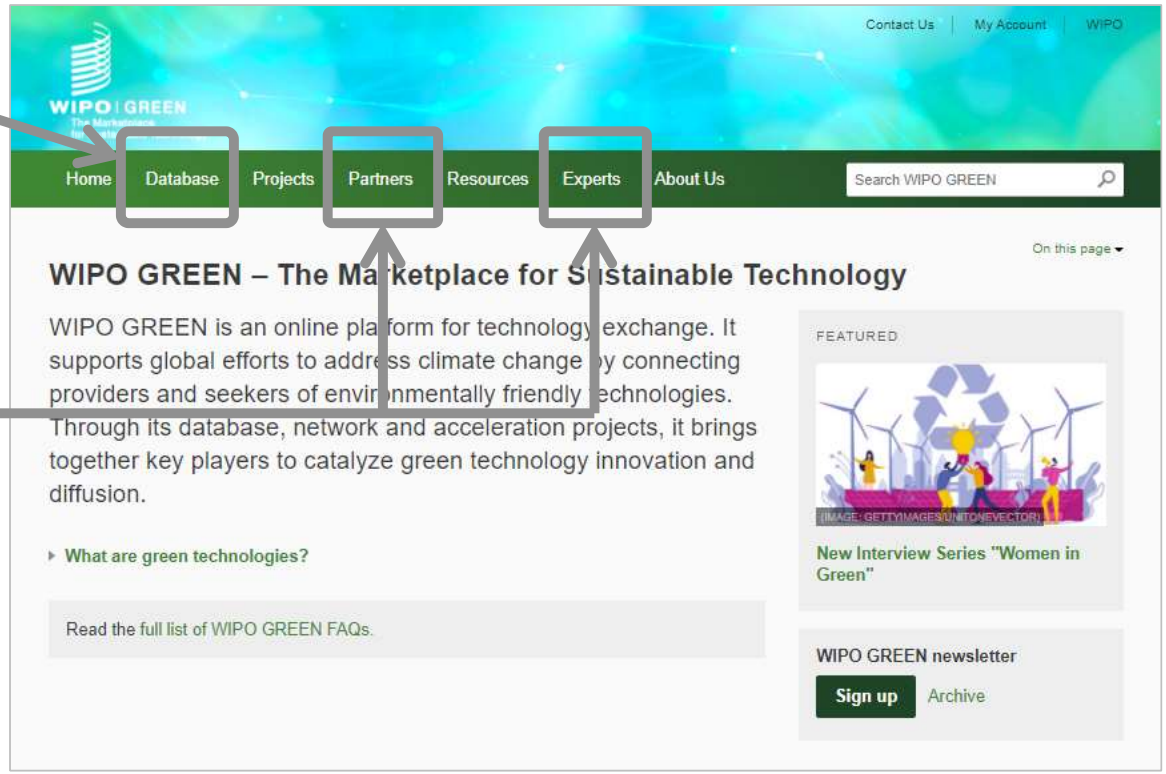
Website of WIPO GREEN https://www3.wipo.int/wipogreen/en/
WIPO GREEN ウエブサイトのトップページ

Database

- Technology seeds:
  Patentscope (117,143)
  User uploads (2,417)
  AUTM (818)
- Technology needs: 281
(as of September 2021)

Network

- Network is consisted of Partners and Users (Tech Providers, Tech Seekers, and Experts providing the professional support for technology transfer)
- 128 organizations register as Partners (as of September 2021).



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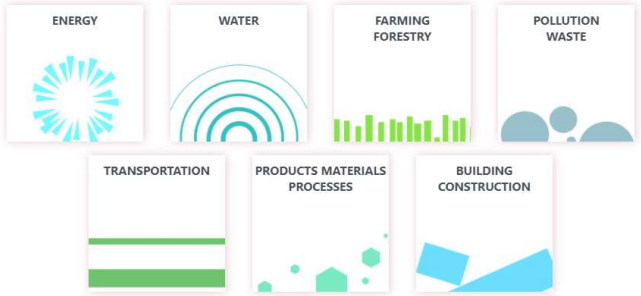
Database of WIPO GREEN
WIPO GREENデータベース

https://www3.wipo.int/wipogreen-database/

WIPO GREEN Database of Innovative Technologies and Needs

The WIPO GREEN database is a unique catalogue of sustainable solutions and needs across the world. It offers technologies from prototype to marketable products, available for license, collaboration, joint ventures, and sale. It also contains needs defined by companies, institutions, and non-governmental organizations looking for technologies to address specific environmental or climate change problems.



Number of registered technologies and needs (as of Sep 2021)

Technologies	2417	Needs	281
– Energy	876	– Energy	52
– Pollution and Waste	596	– Pollution and Waste	66
– Product, Materials & Processes	454	– Farming and Forestry	42
– Farming and Forestry	233	– Water	33
– Water	156	– Product, Materials & Processes	13
– Building and Construction	124	– Building and Construction	10
– Transportation	77		

POLLUTION & WASTE > CARBON CAPTURE & STORAGE

Meiji University Center for Polymer Science

Membrane Separation Technology 1: Carbon Dioxide Separation

This study investigated the polymer membranes used in carbon dioxide (CO_2) separation. Carbon dioxide capture and storage (CCS) is a process of separating and collecting CO_2 emitted from large-scale CO_2 sources, such as industrial plants, and storing it in the ground or ocean. CCS is a CO_2 reduction countermeasure. However, this process entails a high cost of CO_2 separation and recovery. The polymer membrane separation method for CO_2 separation and recovery is an alternative to CCS that has gen ...

Owner	Meiji University Center for Polymer Science
Uploaded by	SUWA Yorimasa
Type	Technology
Source	User uploads
Published	Jun 15, 2020
Readiness level (TRL)	Technology development / prototype (TRL 5-6)
Developed in	Japan

PRODUCT, MATERIALS AND PROCESSES > PACKAGING MATERIALS & FABRIC

Meiji University Center for Polymer Science

Green Materials 1: Gas barrier for food packaging and carbonated drink bottles

The production of beverage bottles must shift from using petroleum-based plastics to carbon-neutral plant-based plastics to reduce carbon dioxide (CO_2) emissions. Polylactic acid (PLA), a plant-based plastic, has received wide interest for this purpose. At present, huge amounts of polyethylene terephthalate (PET), a petroleum-based plastic, are utilized for manufacturing beverage bottles. Replacing PET with plant-based plastics can greatly reduce CO_2 emissions. Although PLA is a suitable materia ...

Owner	Meiji University Center for Polymer Science
Uploaded by	SUWA Yorimasa
Type	Technology
Source	User uploads
Published	Jun 12, 2020
Readiness level (TRL)	Technology development / prototype (TRL 5-6)
Developed in	Japan

ID 10763

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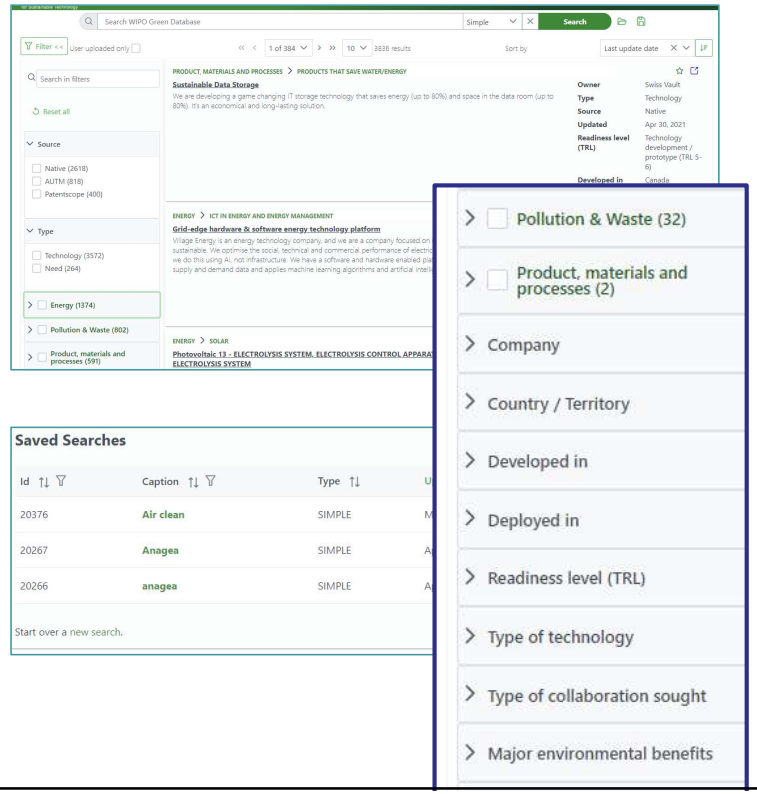
Browse, search & filter



- Category pages
- Searches
  - Simple and advanced
  - Full text search (AI-assisted search)
  - Saved searched + alerts
- Patent2solution (AI assisted search)
- Filter options

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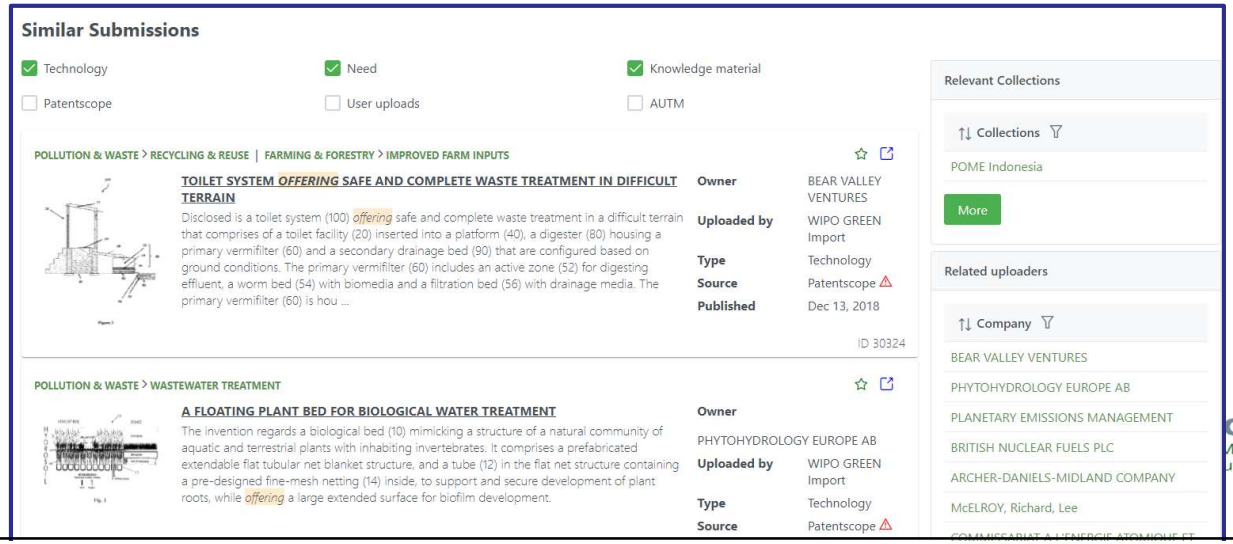
Connect

- Contact owner for user uploads
- User dashboard with your uploads, business intelligence analytics, connection requests
- Automatic matches with relevant needs and technologies
- Bookmarks



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Contributions from Japan: Acceleration projects
WIPO GREENへの日本からの貢献：現地ニーズ調査プロジェクト

- **Supported by JPO, IP office of Australia, French or Chile etc. each year from 2014 to current**
  2014年から現在まで、日本特許庁をはじめとした各国知財庁からの支援により、ほぼ毎年実施
- **Focused on some technology fields and specified to some countries in Asia, Africa or South America each year**
  各年ごとに、2,3の技術領域に焦点をあて、2,3の国々に特化する
- **Green technology needs are searched by reliable experts in the specified geographical region.**
  現地の信頼できるエキスパートによる環境技術ニーズの調査を行う
- **Identified needs are put into the WIPO GREEN DB and the matching event between the tech-seekers and providers is held.**
  特定されたニーズ情報はWIPO GREEN DBに入れられ、さらに、技術ニーズを持つ人たちとそれに対応する技術を持つ人たちとのマッチングイベントを行う。
- **If there is some possibility of the need/seed matching, both parties exchanged Letter of Intent (LOI) and move on to the more precise discussion toward the technology transfer.**
  もし、マッチングの可能性がある場合、両者の間でLOIを締結し、より詳細な検討に進んでもらう。


2015 Manila

2016 Nairobi


2018 Manila

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Contributions from Japan: Acceleration projects
WIPO GREENへの日本からの貢献：現地ニーズ調査プロジェクト

In the case of 2016,

- **Technology fields: Agriculture and energy**
  調査対象とした技術領域は農業、およびエネルギー分野
- **Geographical areas: Indonesia, Cambodia and the Philippines**
  調査地域はエチオピア、ケニア
- **84 new needs were identified and put into WIPO GREEN Database**
  84件の新たな環境技術ニーズが見いだされ、WIPO GREENデータベースに登録された。
- **Matchmaking event was held at Strathmore University in Nairobi. I introduced some Japanese Green technologies and also support the IP training as one of instructors.**
  マッチメイキングイベントがケニアのStrathmore Universityで開催された。
  日本からは私のみが参加し、日本の環境技術を紹介すると共に、併せて行われた現地エキスパート 達へのIPトレーニングに協力した。
- **Several Letter of Intent (LOI) were exchanged and one of them had become the first success case in WIPO GREEN.**
  数件のLOIが締結され、そのなかからWIPO GREENにおける最初の技術移転の成功事例が生み出された。

Ref. WIPO GREEN Year in Review 2017
https://www.wipo.int/edocs/pubdocs/en/wipo_pub_greenreport_2017.pdf

Piloting the AquaCAPTURE Smart Meters System

スマート・メーター・システム「AquaCAPTURE」を試験運用

SWISSQUEST WATER SUPPLIES COMPANY Ltd

A letter of intent signed between the parties at the 2016 East Africa water and agriculture matchmaking seminar in Nairobi allowed SwissQuest to undertake a pilot project with KWAWASCO as proof of concept. After a successful pilot, in the first phase the parties will scale up to 1,000 users in Ukunda, Kwale County, with the potential to reach 20,000+ customers served by KWAWASCO.

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Matchmaking and IP training event in Nairobi 2016
ナイロビにおけるマッチメイキング、及びIPトレーニングイベント2016

Edward Mungai氏、Ernest Chitani氏とともに

シンポジウム会場の
Strathmore Business School

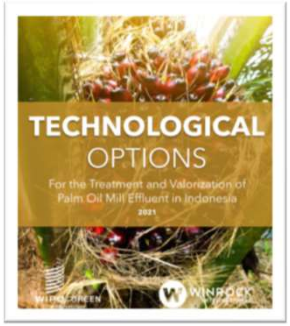
マッチメイキング・セッションのメイン会場

シンポジウム
メイン会場

IPトレーニング会場の
Strathmore University Law School

IPトレーニングでのレクチャーの様子

Acceleration projects



Indonesia

- Palm oil mill effluent (POME) in Indonesia identified 19 needs and 24 potential solutions.
- Catalogue on technological options for the treatment and valorization of POME, including biogas utilization, scum and sludge treatment, compost, biochar production, green hydrogen

Latin America

- Climate smart agriculture exploring local challenges and potential green solutions.
- Sustainable agriculture, forestry, soil-recarbonization, zero-till, wine sector.
- Around 200 stakeholders contacted, 10 needs, 81 technologies.

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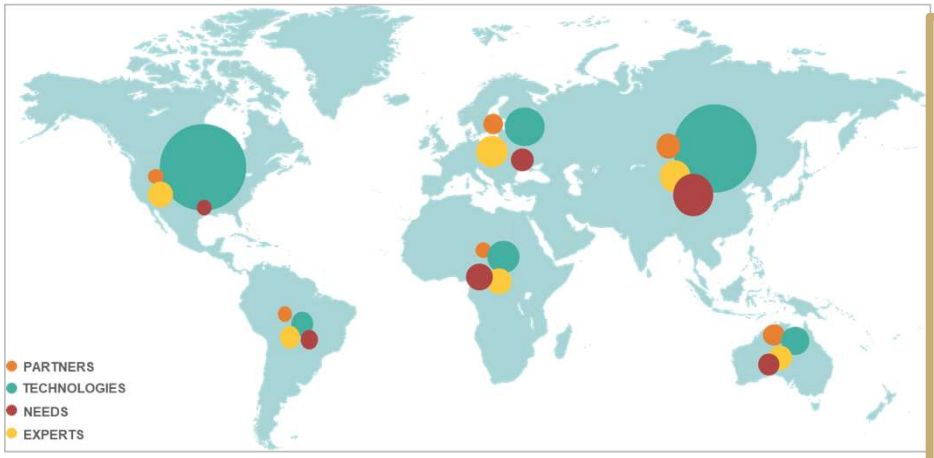
WIPO GREEN: Global marketplace for sustainable technology WIPO GREENはグローバルな環境技術市場である



At COP22 in Marrakech 2016

With Dr. Edward Mungai of KCIC in Tokyo 2019

Principles of WIPO GREEN 憲章における原則（抜粋）

- **Transparency** in the marketplace leads to greater efficiency.
  マーケットプレースの**透明性**がより一層の効率をもたらす。
- **Partnerships** are critical to achieving synergies and fostering the transfer of technologies, and, as appropriate, associated know-how.
  パートナーシップは、必要に応じて、技術及び技術に関連するノウハウの相乗効果を実現し、技術の移転を促進するうえで決定的に重要である。
- A comprehensive **understanding of needs** is essential for effective deployment of green technology.
  統合的な**ニーズの理解**は、グリーン・テクノロジーの効果的な展開のために不可欠である。
- IP rights are an important policy tool to **encourage innovation**.
  知的財産権は、**イノベーションの促進**のための重要な政策的ツールである。
- The sustained deployment and uptake of technologies occurs when **parties freely enter into a contract** on mutually agreed terms.
  技術の持続可能な展開と採用は、相互に合意された条件に基づいて**当事者が自由に契約を結ぶ**ときに可能となる。

Ref. WIPO GREEN Charter 2013

IP management clinic for green technologies

- Project with colleagues from IP for Business Division
- Expert advice for eight selected green tech SMEs: Brazil, Japan, Spain, Sweden, Switzerland and Ukraine
- June 2021 and again in 2022
- An IP Management toolkit has been produced from this to help businesses navigate the IP issues throughout their product development cycle.

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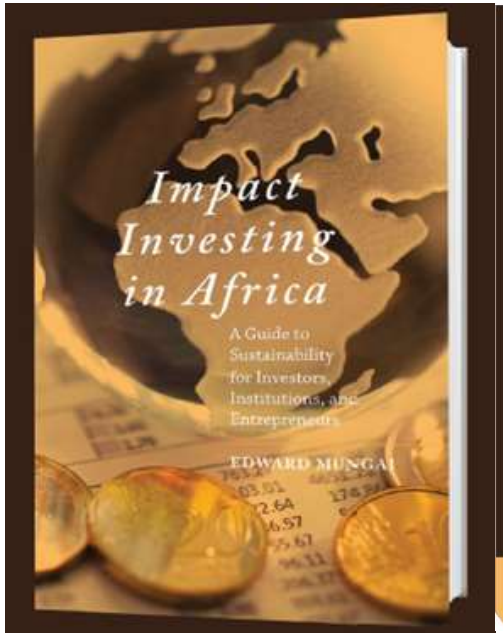
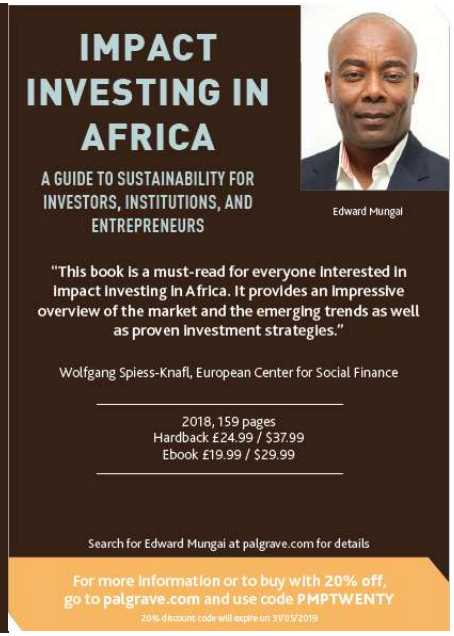
What is the best possible solution for Africa? - Investment, Not Aid

Edward Mungai, Impact Investing in Africa 2018





2019年3月　東京にて

Thank you for your attention.

ご静聴ありがとうございました。

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