

JPO's Initiatives for Diffusion and Promotion of Carbon Neutral Technologies

Nov. 2022

JPO



1

GXTI

(Green Transformation Technologies Inventory)

2

WIPO GREEN

Structure of GXTI

Technical Classification Table for GX

+

Patent search formula for each small category

| A | B | C | D | E | F |
|----------------|---------------|-------------------------------------|-------------------------------------|----------------|---|
| GXTI | | | | | |
| Level 1 | | Level 2 | | Level 3 | |
| gxA | Energy Supply | | | | |
| | 01 | Solar Photovoltaic Power Generation | | | |
| | | a | Solar Photovoltaic Power Generation | | |
| | 02 | Solar Thermal Energy Utilization | | | |

| K |
|--|
| J-PlatPat Format |
| H01L(31/04+51/42)/ip+H02S/ip+H02J7/35/ip |

GXTI (inc. Patent Search Formula, Excel version)

Background of GXTI

Main Points

Backgrounds:

- To increase their economic and social value, companies need to illustrate how the value of their products and services can contribute to solving climate change issues.
- They are also required to disclose climate change-related risks and opportunities on their business activities based on the TCFD* recommendations.

* TCFD: Task Force on Climate-related Financial Disclosures.

Issues:

- ◆ Lack of data for analyzing the relationship between business activities and climate change issues.

Solution:

- Analyzing green transformation (GX) related technologies based on patent information would be one of the solutions. GXTI helps companies objectively explain GX efforts.
- With the GXTI, companies can objectively analyze their strength and competitiveness in the fields of GX technologies by searching patent documents with applicant names.

Three excellent features of GXTI



(1) 5 GX technologies and 4 Perspectives for Cross Tabulation
- Capable of overviewing GX technology -



(2) The same published patent search formulae
- Capable of searching under the same conditions for everyone -



(3) Patent Search Formulae based on the International Patent Classification (IPC)
- Capable of retrieving literature from around the world -

(1)5 GX Technologies and 4 Perspectives for Cross Tabulation

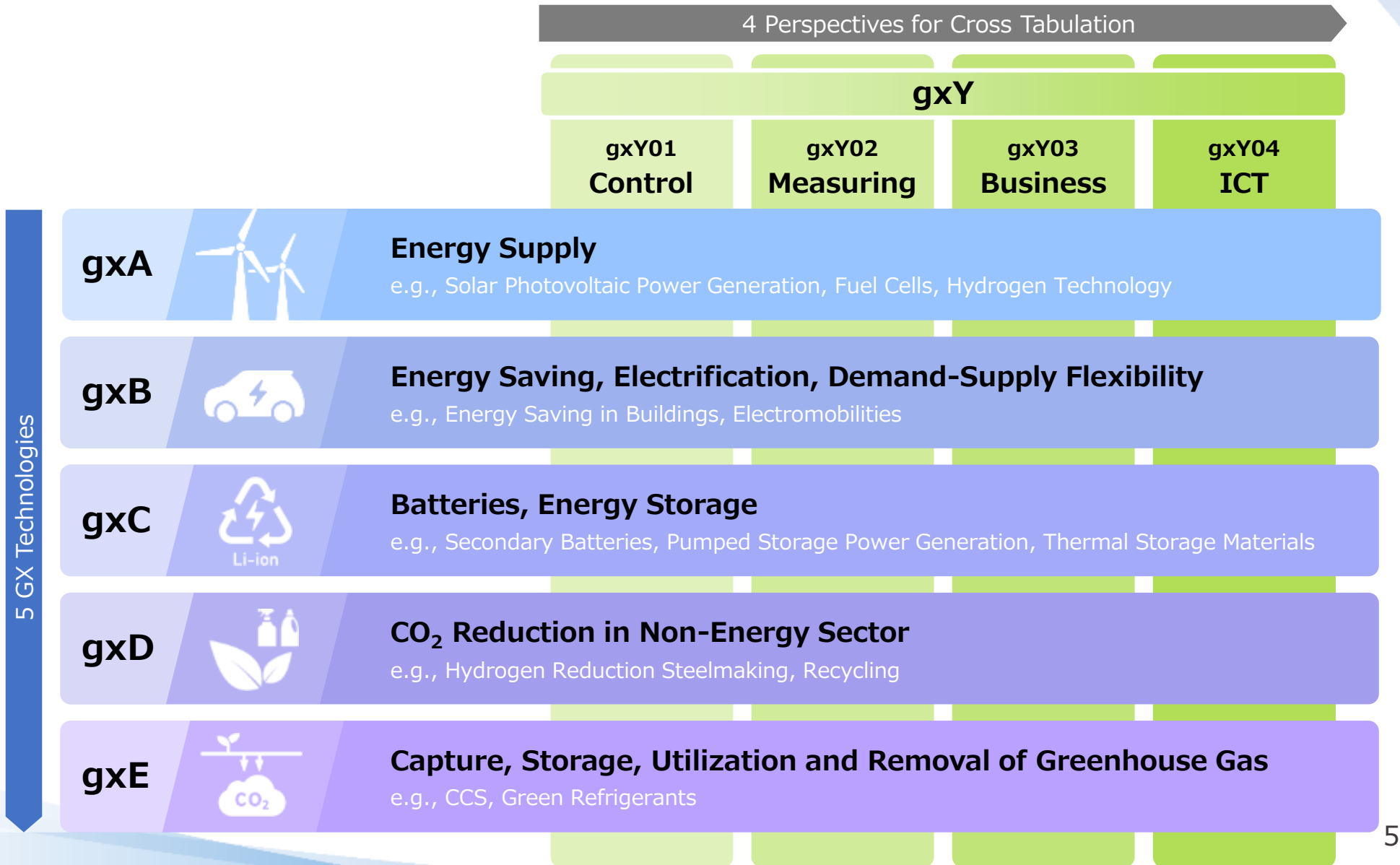
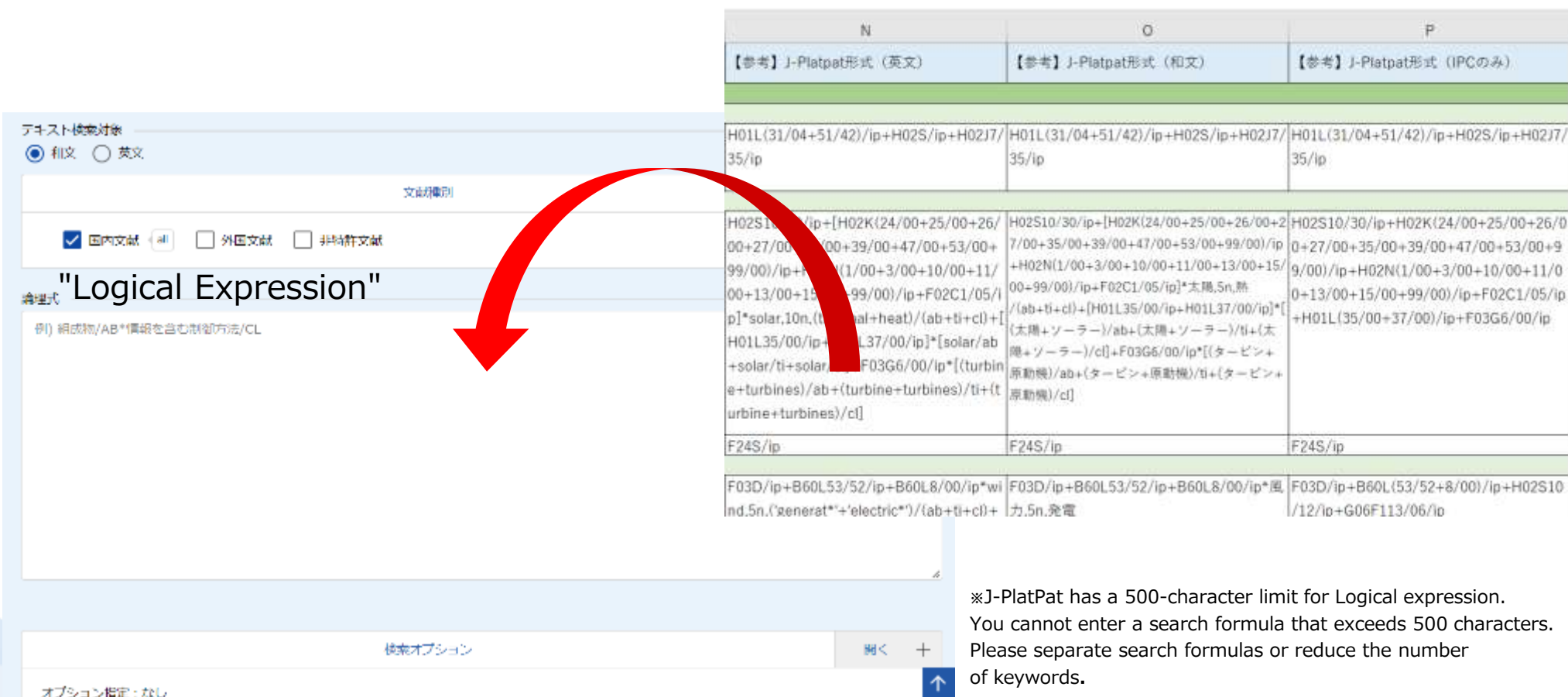


Image of GXTI's utilization - Searching with J-PlatPat

- Anyone can search patent documents by copying and pasting GXTI's patent search formula into the "Logical Expression" column of J-PlatPat.
- Anyone can also search by applicant by multiplying the search formula by xxx (applicant name)/ap.



アキスト検索対象
 和文 英文

文庫分類

国内文献 外国文献 非特許文献

論理式
 例) 組成物/AB*情報を含む制御方法/CL
 "Logical Expression"

| N | O | P |
|--|--|---|
| 【参考】 J-Platpat形式 (英文) | 【参考】 J-Platpat形式 (和文) | 【参考】 J-Platpat形式 (IPCのみ) |
| H01L(31/04+51/42)/ip+H02S/ip+H02J/35/ip | H01L(31/04+51/42)/ip+H02S/ip+H02J/35/ip | H01L(31/04+51/42)/ip+H02S/ip+H02J/35/ip |
| H02S10/30/ip+[H02K(24/00+25/00+26/00+27/00+28/00+29/00+30/00+31/00+32/00+33/00+34/00+35/00+36/00+37/00+38/00+39/00+40/00+41/00+42/00+43/00+44/00+45/00+46/00+47/00+48/00+49/00+50/00+51/00+52/00+53/00+54/00+55/00+56/00+57/00+58/00+59/00+60/00+61/00+62/00+63/00+64/00+65/00+66/00+67/00+68/00+69/00+70/00+71/00+72/00+73/00+74/00+75/00+76/00+77/00+78/00+79/00+80/00+81/00+82/00+83/00+84/00+85/00+86/00+87/00+88/00+89/00+90/00+91/00+92/00+93/00+94/00+95/00+96/00+97/00+98/00+99/00)/ip+H02N(1/00+3/00+10/00+11/00+13/00+15/00+17/00+19/00+21/00+23/00+25/00+27/00+29/00)/ip+F02C1/05/ip]*solar,10n,(太陽+ソーラー)/ab+(太陽+ソーラー)/ti+(太陽+ソーラー)/c]+[H01L35/00/ip+H01L37/00/ip]*[solar/ab+solar/ti+solar/c]+F03G6/00/ip*[(turbine+turbines)/ab+(turbine+turbines)/ti+(turbine+turbines)/c] | H02S10/30/ip+[H02K(24/00+25/00+26/00+27/00+35/00+39/00+47/00+53/00+99/00)/ip+H02N(1/00+3/00+10/00+11/00+13/00+15/00+17/00+19/00+21/00+23/00+25/00+27/00+29/00)/ip+F02C1/05/ip]*太陽,5n,熱/(太陽+ソーラー)/ab+(太陽+ソーラー)/ti+(太陽+ソーラー)/c]+F03G6/00/ip*[(タービン+原動機)/ab+(タービン+原動機)/ti+(タービン+原動機)/c] | H02S10/30/ip+H02K(24/00+25/00+26/00+27/00+35/00+39/00+47/00+53/00+99/00)/ip+H02N(1/00+3/00+10/00+11/00+13/00+15/00+17/00+19/00+21/00+23/00+25/00+27/00+29/00)/ip+F02C1/05/ip+H01L(35/00+37/00)/ip+F03G6/00/ip |
| F24S/ip | F24S/ip | F24S/ip |
| F03D/ip+B60L53/52/ip+B60L8/00/ip*wind,5n,(再生**+electric*)/(ab+ti+c)+ | F03D/ip+B60L53/52/ip+B60L8/00/ip*風力,5n,発電 | F03D/ip+B60L(53/52+8/00)/ip+H02S10/12/ip+G06F113/06/ip |

検索オプション

オプション指定:なし

※J-PlatPat has a 500-character limit for Logical expression. You cannot enter a search formula that exceeds 500 characters. Please separate search formulas or reduce the number of keywords.

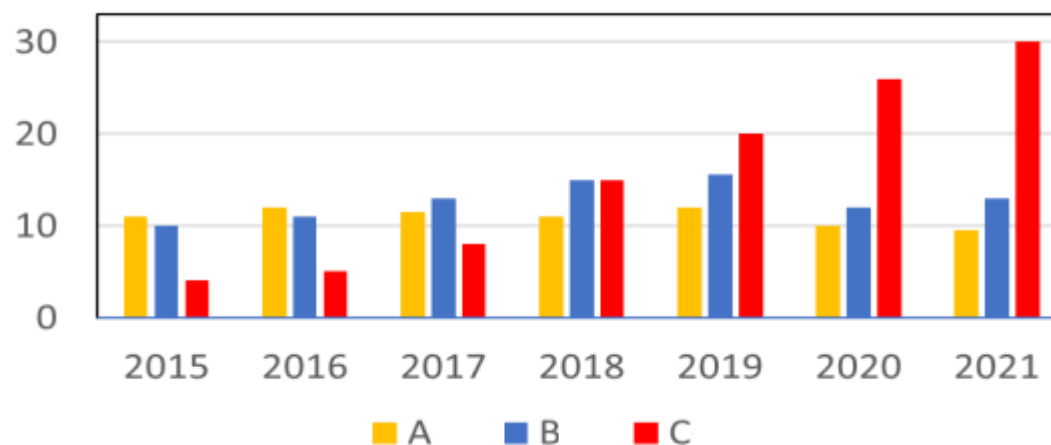
Image of GXTI utilization and its future

● Creating a graph of changes in the number of applications

Changes in the number of applications can be examined by multiplying the GXTI search formula by XXX/ap and searching by the date of publication, etc., separated by, for example, one year.

→ e.g., It is possible to show how much your company is focusing on a certain GX technology from the number of applications.

It would also be useful to analyze this data in relation to revenue, investment, etc.



(image diagram)

<Future of GXTI (planned)>

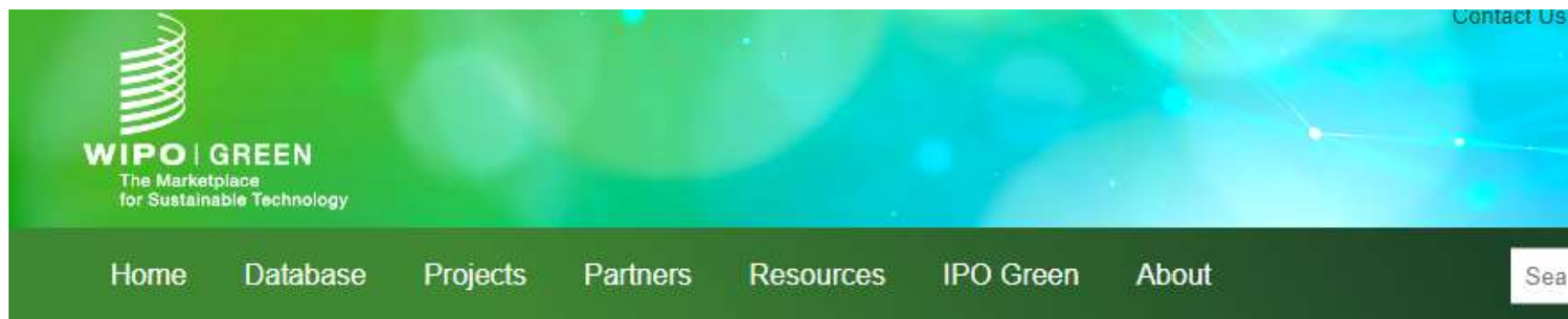
● Analysis at JPO

Patent application trend survey

● Collecting examples of utilization and soliciting opinions

● Developing internationally

● Soliciting opinion for GXTI <https://www.jpo.go.jp/resources/statistics/gxti.html>

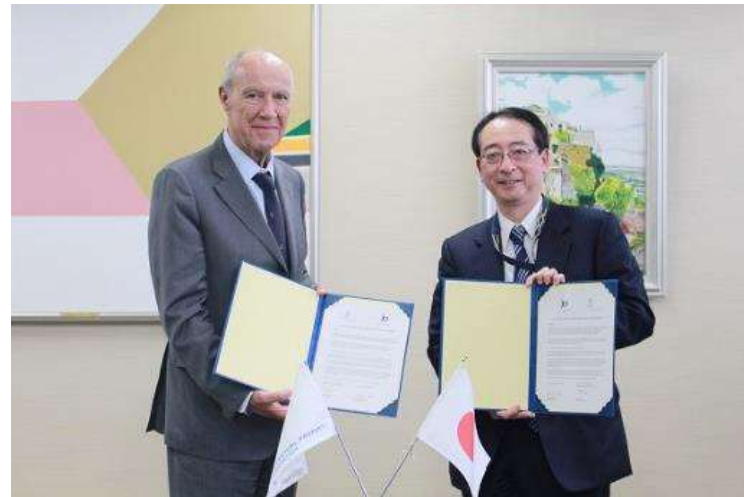


WIPO GREEN – The Marketplace for Sustainable Technology

WIPO GREEN is an online platform for technology exchange. It supports global efforts to address climate change by connecting providers and seekers of environmentally friendly technologies. Through its database, network and acceleration projects, it brings together key players to catalyze green technology innovation and diffusion.

WIPO GREEN Partner Membership

- JPO joined WIPO GREEN as a partner on February 19, 2020.
 - This was the first partnership among IP agencies in the Asia-Pacific region, and its features have included the following:
- Support by Japanese Industry
 - Japan ranks first globally in the number of partners, and second in the number of registered technologies.
- Contributions to the international community
 - Has helped realize the SDGs through Intellectual Property
 - Serves to enhance Japan's global presence
- Collaborations with WIPO Japan Office (WJO)



Partner participation signing ceremony

Example of Japan's WIPO GREEN Initiative

- WIPO GREEN Partner Fujitsu Ltd. Uploaded 400+ of its assets to the technology/needs database, and concluded its first two green technology licensing agreements

WIPO GREEN
Year in Review 2018

New!

Shiseido Grants Technology License to Toyo University for Environmental Impact Reduction

~ Anticipating the technology to be widely used in society to achieve SDGs ~

Partner of
WIPO GREEN

https://corp.shiseido.com/en/newsimg/3355_o5a36_en.pdf

Thank you for your attention

