



**Mizuho Bank, Ltd – Baker & McKenzie
Taiwan Renewable Energy Financing Seminar**

**Financing of Renewable Projects
in Taiwan**

**Mizuho Bank, Ltd.
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Table of Contents

I.	Overview of Banking Market and Project Finance in Taiwan	P.2
II.	Bankability Considerations of Renewable Project Financing in Taiwan	P.14
III.	Possible Financing Sources for Renewable Projects in Taiwan	P.18
IV.	Local Institutional Investors – An Alternative Funding Source	P.23
Appendix		
I.	Mizuho's Experience and Credentials	P.27
II.	Contact List	P.39

I. Overview of Banking Market and Project Finance in Taiwan

The Financial Sector in Taiwan

- Banks remains as the dominant force in the financial sector and the major source of funding in Taiwan.
- In Taiwan, banks are categorized into:
 - I. Domestic Taiwanese Banks
 - II. Local Branches of Foreign Banks
 - III. Local Branches of Mainland Chinese Banks

Institutions	Head Office in Taiwan	No. of Branches in Taiwan
1. Monetary Institutions		
Central Bank of the Republic of China (Taiwan)	1	---
Domestic Taiwanese Banks	38	3,421
Local Branches of Foreign Banks	26	35
Local Branches of Mainland Chinese Banks	3	3
Credit Cooperatives	23	266
Credit Departments of Farmers' Association	283	820
Credit Departments of Fishermen's Association	28	44
Subtotal – Monetary Institutions	373	4,589
2. Other Financial Institutions		
The Postal Savings System	1	1,310
Securities Finance Corporation	2	4
Non-Life Insurance Corporation	20	171
Life Insurance Corporation	23	123
Bills Finance Companies	8	30
Deposit Insurance Corporation	1	---
Subtotal – Other Financial Institutions	55	1,638
Grand Total	428	6,227

Source: Financial Statistics from Central Bank of China

List of Domestic Banks in Taiwan

- Majority of Taiwanese banks are privately owned whilst eight banks being wholly owned or partially owned by the Government as public banks (公股銀行).
- Five foreign banks, including Citi, HSBC, Standard Chartered, DBS and ANZ, acquired local Taiwanese banks to set up local subsidiaries and are regarded as local banks in Taiwan.

Ranking (as of 30/9/2017)	Equities (NTD M)	Ranking (as of 30/9/2017)	Equities (NTD M)		
1	Bank of Taiwan 臺灣銀行#	285,462	20	HSBC Bank (Taiwan) Limited 滙豐(台灣)	47,533
2	CTBC Bank Co., Ltd. 中國信託	272,791	21	Standard Chartered Bank (Taiwan) 渣打銀行	43,682
3	Mega International Commercial Bank 兆豐國際*	263,709	22	Ta Chong Bank 大眾銀行	42,813
4	Taiwan Cooperative Bank 合作金庫*	198,198	23	Far Eastern International Bank 遠東銀行	42,376
5	First Commercial Bank 第一商業*	192,277	24	Taichung Commercial Bank 台中銀行	42,310
6	Taipei Fubon Commercial Bank Co., Ltd. 台北富邦	177,298	25	Union Bank of Taiwan 聯邦銀行	37,356
7	Cathay United Bank 國泰世華	176,315	26	Kings Town Bank 京城銀行	36,612
8	Hua Nan Commercial Bank, Ltd. 華南銀行*	173,064	27	DBS Bank (Taiwan) 星展(台灣)	31,626
9	E.Sun Commercial Bank, Ltd. 玉山銀行	143,888	28	Entie Commercial Bank 安泰銀行	31,373
10	Chang Hwa Commercial Bank 彰化銀行*	143,053	29	The Export-Import Bank of The Republic of China 中國輸出入銀行	29,395
11	Land Bank of Taiwan 臺灣土地銀行#	142,349	30	O-Bank Co., Ltd. 王道銀行	29,303
12	Bank Sinopac Company Limited 永豐銀行	123,667	31	Sunny Bank Ltd. 陽信銀行	26,284
13	The Shanghai Commercial Savings Bank, Ltd. 上海商業儲蓄	122,988	32	ANZ Bank (Taiwan) Limited 澳盛(台灣)	25,530
14	Taishin International Bank 台新銀行	122,493	33	Jih Sun International Bank 日盛銀行	20,227
15	Citibank Taiwan Limited 花旗(台灣)	99,437	34	Bank of Kaohsiung 高雄銀行	14,241
16	Taiwan Business Bank 臺灣中小企業*	74,829	35	Bank of Panhsin 板信銀行	13,584
17	Yuanta Commercial Bank 元大銀行	60,872	36	Cota Bank 三信銀行	10,101
18	KGI Bank 凱基銀行	60,840	37	Hwatai Bank 華泰銀行	9,454
19	Taiwan Shin Kong Commercial Bank 臺灣新光	51,829	38	Taipei Star Bank 瑞興銀行	5,287

Source: Banking Bureau, Financial Supervisory Commission R.O.C.

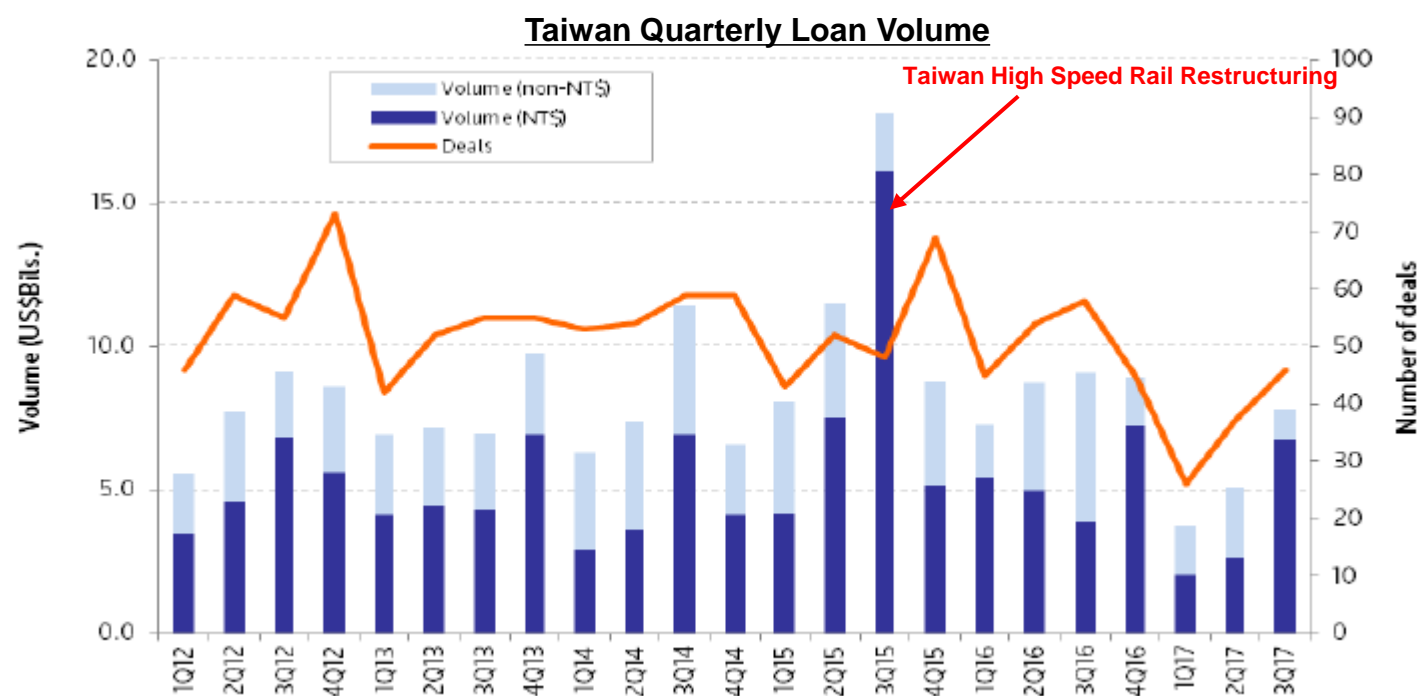
List of Local Branches of Foreign Banks in Taiwan

- In terms of scales, local branches of foreign banks are comparatively much smaller than the local Taiwanese banks.
- The five foreign banks with its local subsidiaries still maintain their foreign branches in Taiwan.

Ranking (as of 30/9/2017)		Equities (NTD M)	No. of Branches	Ranking (as of 30/9/2017)		Equities (NTD M)	No. of Branches
1	Mizuho Bank, Ltd.	11,048	3	14	State Street Bank and Trust Company	2,783	1
2	The Bank of Tokyo-Mitsubishi UFJ, Ltd.	8,582	2	15	JPMorgan Chase Bank, N.A.	2,503	1
3	Bank of America	7,229	1	16	Citibank N.A.	2,206	1
4	Oversea-Chinese Banking Corporation Ltd	5,622	1	17	Societe Generale	1,900	1
5	UBS AG	4,732	3	18	The Bank of East Asia Ltd.	1,664	1
6	Bangkok Bank Public Company Ltd.	4,550	3	19	The Hong Kong and Shanghai Banking Corp. Ltd.	1,620	1
7	Sumitomo Mitsui Banking Corporation	4,489	1	20	Standard Chartered Bank	1,601	1
8	Australia and New Zealand Bank	4,144	1	21	Deutsche Bank AG	1,385	1
9	DBS Bank Ltd	4,090	1	22	The Bank of New York Mellon	1,364	1
10	United Overseas Bank	3,723	1	23	Banco Bilbao Vizcaya Argentaria S.A.	674	1
11	Calyon Corporate and Investment Bank	3,566	1	24	Metropolitan Bank and Trust Company	516	1
12	ING Bank, N.V.	3,054	1	25	NATIXIS Bank	319	1
13	BNP Paribas	2,881	3	26	Wells Fargo Bank, National Association	179	1

The Syndication/Club Loan Market in Taiwan

- Majority of the syndicated loans or club deals are denominated in NTD. For non-NTD transactions, it is mostly denominated in USD.
- Between 2013 and 2016, more than USD30 billion loans were closed each year, with the exception of 2015 when the Taiwan High Speed Rail was refinanced. The syndication market hit a low this year due to the decreased investment of the Taiwanese corporations and the preference to refinance with bilateral loans.



	2013	2014	2015	2016	2017 (Q1 – Q3)
Loan Volume (USD Billion)	30.9	31.6	46.5	34.0	16.9
Number of Deals Closed	204	225	212	202	109

The Dominance of Local Banks in the Syndicated Loan Market

- The syndicated/club loan market is dominated by the local banks due to its strong funding, especially public banks which are relatively pricing insensitive and are willing to provide aggressive pricing.

Taiwan MLA Ranking (2017 Q1 – Q3)	USD M	Mkt Share	No. of Deals
1 Bank of Taiwan	2,212	13.33%	34
2 Mega International Commercial	2,052	12.36%	37
3 Land Bank of Taiwan	1,840	11.09%	34
4 Taiwan Cooperative Bank	1,632	9.83%	41
5 Taiwan Fubon Commercial Bank	1,061	6.39%	19
6 Taiwan Business Bank	863	5.20%	26
7 Chang Hwa Commercial Bank	826	4.97%	18
8 Taishin International Bank	814	4.91%	12
9 Hua Nan Commercial Bank	723	4.36%	22
10 CTBC Bank	664	4.00%	11
11 DBS Bank	491	2.96%	7
12 First Commercial Bank	469	2.82%	18
13 E Sun Commercial Bank	307	1.85%	13
14 Cathay United Bank	265	1.60%	4
15 Agricultural Bank of Taiwan	197	1.18%	7

All international currency and NTD syndicated and club loans

Taiwan MLA Ranking (2016)	USD M	Mkt Share	No. of Deals
1 Bank of Taiwan	3,316	9.76%	71
2 Taiwan Cooperative Bank	2,935	8.64%	73
3 Mega International Commercial	2,901	8.54%	69
4 Taishin International Bank	2,223	6.54%	36
5 Land Bank of Taiwan	2,130	6.27%	46
6 CTBC Bank	2,114	6.22%	44
7 Hua Nan Commercial Bank	2,087	6.14%	54
8 Chang Hwa Commercial Bank	1,957	5.76%	50
9 Taipei Fubon Commercial Bank	1,817	5.5%	47
10 Taiwan Business Bank	1,447	4.26%	42
11 First Commercial Bank	1,419	4.17%	40
12 ANZ	1,222	3.59%	2
13 Bank Sinopac	1,021	3.00%	25
14 Cathay United Bank	925	2.72%	18
15 E Sun Commercial Bank	820	2.41%	23

All international currency and NTD syndicated and club loans

The Project Finance Market in Taiwan

- The project finance market is virtually non-existing in Taiwan with limited number of deals closed in the last few years.
- Most of the infrastructure projects are financed with corporate finance with sponsor guarantee. Hence, local banks have limited project finance experience.
- Local project finance are mainly applied for conventional IPP projects and port projects in Taiwan as well as government-driven project such as the Taiwan High Speed Rail.

Year	Loan (USD M)	No. of Deal	Remarks
2017 1H	0	0	
2016	76.9	1	Formosa I Offshore Wind Phase I Financing
2015	12,052.9	1	Debt Restructuring of Taiwan High Speed Rail
2014	0	0	
2013	0	0	
2012	0	0	
2011	397.2	2	Two conventional IPPs were refinanced in this year.
2010	12,064.4	2	Refinancing of Taiwan High Speed Rail

- In recent years, besides local project finance, a few local banks have started to gain more experience by participating in and expanding their project finance business overseas to projects in Southeast Asia and Australia.

Project Finance Experience of Local Taiwanese Banks

- The project finance experience of local banks are limited to mainly the conventional IPP financing (and the subsequent refinancing) and some transportation infrastructure financing.
- Some local banks, after being the subsidiary of the foreign banks, have quit the project finance market in Taiwan.
- Due to the constraint of long term NTD funding, the participation of foreign banks in local project finance is very limited, with the exception of Mizuho.
- The local banks which were relatively active in the project financing were mainly the public banks (公股銀行) and those which topped the ranking in the MLA league table, equity size and loan outstanding.

Local Banks with Relatively More Project Finance Experience	Public/Private Bank	Ranking in terms of Equities (2017 Q3)	Ranking in terms of Loans (2017 Q3)	Rank in MLA League Table (2016)	Rank in MLA League Table (2017 Q1-3)
Bank of Taiwan 臺灣銀行 (“BOT”)	Public Bank	1	1	1	1
CTBC Bank Co., Ltd. 中國信託 (“CTBC”)	Private Bank	2	6	6	10
Mega International Commercial Bank 兆豐國際 (“MEGA”)	Public Bank	3	4	3	2
Taiwan Cooperative Bank 合作金庫 (TCB”)	Public Bank	4	2	2	4
First Commercial Bank 第一商業 (“FCB”)	Public Bank	5	7	11	12
Taipei Fubon Commercial Bank Co., Ltd. 台北富邦 (“FUBON”)	Private Bank	6	11	9	5
Cathay United Bank 國泰世華 (“CUB”)	Private Bank	7	8	14	14
Hua Nan Commercial Bank, Ltd. 華南銀行 (“HUANAN”)	Public Bank	8	5	7	9
Land Bank of Taiwan 臺灣土地銀行 (“LBOT”)	Public Bank	11	3	5	3
Chang Hwa Commercial Bank 彰化銀行 (“CHB”)	Public Bank	10	9	8	7
Taiwan Business Bank 臺灣中小企業 (“TBB”)	Public Bank	16	12	10	6
The Shanghai Commercial Savings Bank, Ltd. 上海商業儲蓄 (“SCSB”)	Private Bank	13	15	N/A	N/A
KGI Bank 凱基銀行 (“KGI”)	Private Bank	18	22	N/A	N/A

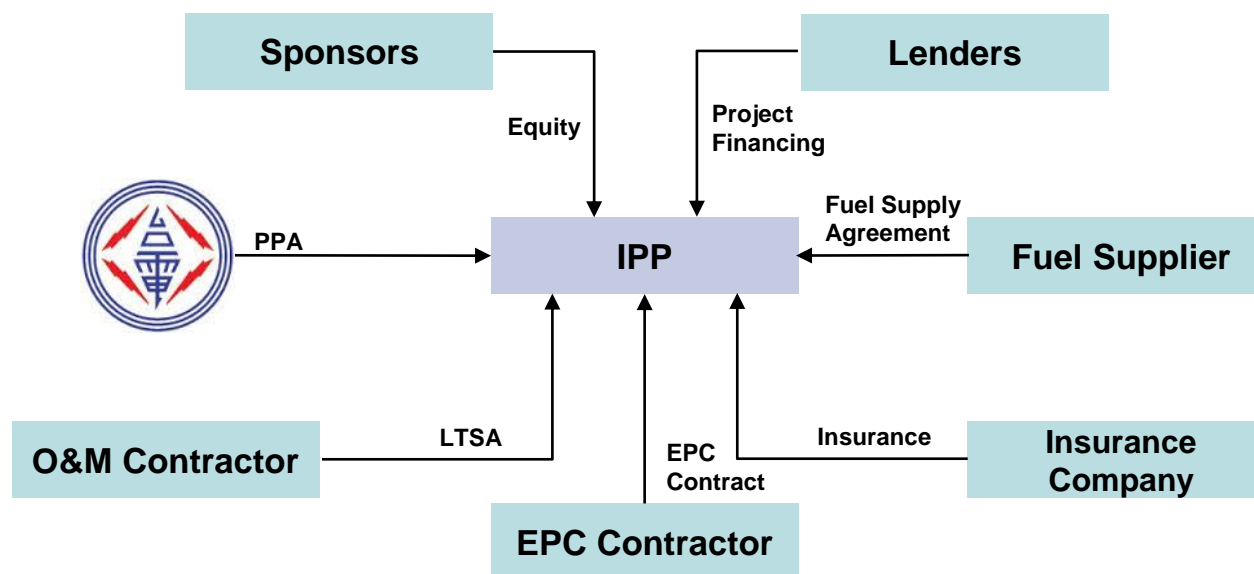
Project Finance Experience in Renewable Sector of Taiwanese Local Banks

■ The project finance experience of local Taiwanese banks in renewable sector is very limited.

<p>Solar</p>	<ul style="list-style-type: none"> ■ Limited to small-scaled roof-top solar projects only ■ For roof-top solar projects, the common terms include: <ul style="list-style-type: none"> • Debt amount up to 80% of project cost • Tenor up to 15 years (recently in a 5+5+5 tenor structure) • Insurance required • Pledged of project assets
<p>Wind</p>	<ul style="list-style-type: none"> ■ Limited to a few onshore wind IPP projects only in which the local banks acted as NTD funding banks under the securitization guarantee scheme by the European ECAs ■ Other onshore wind projects owned by Taipower were financed on balance sheet
<p>Hydro</p>	<ul style="list-style-type: none"> ■ Most of the hydro power capacity in Taiwan is owned by Taipower and financed by its own balance sheet
<p>Geothermal</p>	<ul style="list-style-type: none"> ■ There is no operating geothermal project in Taiwan

The Project Finance for Power Sector in Taiwan

- Although there are only nine conventional IPPs in Taiwan, the contractual structure of the IPPs are quite in line with international standard, with the aim to allocate the project risks to different stakeholders to achieve risk sharing:
 - A long-term take-or-pay power purchasing agreement with Taiwan Power Company 台灣電力 (“Taipower”)
 - A long-term gas supply agreement with CPC Corporation 台灣中油 for gas-fired IPPs/coal supply agreement with coal suppliers for coal-fired IPPs
 - EPC contracts with reputable contractors were commonly seen
 - Long term services agreement with the equipment suppliers were common
 - Placement of typical insurance for IPP projects is required by lenders



- Due diligence requirement is relatively relaxed by local banks, especially the environmental and social due diligence since Equator Principles were not applicable in the past in Taiwan (currently only three Taiwanese banks have adopted the Equator Principles).

Common Terms and Conditions for IPP Project Financing in Taiwan (1)

- The project finance for IPPs in Taiwan are on non-recourse basis (for earlier cases, personal guarantee of the chairman or general manager of the SPV were procured)
- The documentation is in Chinese and relatively less comprehensive than international standard documentation
- With the expected involvement of international banks and ECAs, especially for the offshore wind, it is expected the documentation will follow international standard and the IPP financing documentation could be a reference for the documentation for Taiwanese renewable financing.
- The general terms and conditions of the Taiwan IPP project financing are as follows:

Tenor	<ul style="list-style-type: none"> ■ Up to 15 years (Refinancing after commercial operation is common)
Facilities	<ul style="list-style-type: none"> ■ Term loan facilities ■ Performance bond/Stand-by L/C facilities
Currency	<ul style="list-style-type: none"> ■ NTD for term loan and performance bond/stand-by LC facilities ■ USD for performance bond/stand-by L/C facilities
Common Interest Base Rate	<ul style="list-style-type: none"> ■ Deposit rate announced by Chunghwa Post (中華郵政) ■ Taiwan Prime Lending Rate (the average loan interest rate charged by five major commercial banks in Taiwan) ■ Taiwan Secondary Commercial Paper Rate as published by Reuters <p>(Current common interest base rate in the syndication market is Taiwan Interbank Offered Rate (“TAIBOR”))</p>
Securities/ Collateral	<ul style="list-style-type: none"> ■ Charge of land, building, structure, machinery, equipment and project accounts ■ Assignment of project contracts (except PPA), insurance policy and insurance proceeds <p>(The PPA with Taipower is not assigned to lenders and no direct agreement would be executed. Instead, it is commonly for Taipower to provide a consent to the step-in right of lenders and to pay the tariff proceeds into the designated Revenue Account)</p>

Common Terms and Conditions for IPP Project Financing in Taiwan (2)

Project Accounts	<ul style="list-style-type: none"> ■ CAPEX Account, Revenue Account, Debt Services Reserve Account, OPEX Account, Insurance Proceed Account, Distribution Account (not to be pledged) ■ Customary cashflow waterfall
Financial Covenant	<ul style="list-style-type: none"> ■ Leverage Ratio (Total Debt/Total Net Worth) ■ Debt Service Coverage Ratio ■ Interest Coverage Ratio ■ Current Ratio
Undertaking	<ul style="list-style-type: none"> ■ Information covenant such as construction progress report, annual operating budget, financial statements ■ Insurance undertaking during construction and operation ■ Maintain proper O&M of the project, the validity of all project agreements, permits, approvals ■ Change of control restriction ■ No sales, lease, transfer or other disposal of the material operation assets or proceeds ■ Dividend distribution restriction ■ Pari passu ■ No additional indebtedness and share repurchase
Hedging Requirement	<ul style="list-style-type: none"> ■ Nil, interest rate hedging is not common for project financing in Taiwan among the local banks
Governing Law	<ul style="list-style-type: none"> ■ Laws of Taiwan, with court in Taipei as jurisdiction
Others	<ul style="list-style-type: none"> ■ Conditions precedent, representation and warranty, events of default, change in law, amendment and voting

II. Bankability Considerations of Renewable Project Financing in Taiwan

Bankability Considerations of Renewable Project Financing in Taiwan (1)

- The following merits enhance the bankability of offshore wind and solar power projects in Taiwan

Long Term Power Offtake	<ul style="list-style-type: none"> ■ Eligible projects are entitled to execute a 20-year power purchase agreement with Taipower ■ Favorable feed-in tariff regime in which the FiT is fixed for the tenor of the PPA (for offshore wind, projects can choose either a fixed FiT for 20 years or a step-down FiT scheme fixed with 10 years each)
Reputable Offtaker	<ul style="list-style-type: none"> ■ Taipower is a state-owned entity with strong credit rating (AA- by Fitch) ■ Taipower never defaults in its tariff payment
Outstanding Resources	<ul style="list-style-type: none"> ■ Taiwan strait possess abundant wind resources and is one of the best areas to develop offshore wind projects
Strong Government Support	<ul style="list-style-type: none"> ■ Determination to achieve the aggressive renewable development target by 2025 in Taiwan ■ The renewable PPA is protected by Renewable Energy Development Act and other regulatory framework
Minimal Country Risk	<ul style="list-style-type: none"> ■ Strong sovereign rating (AA- S&P)

Bankability Considerations of Renewable Project Financing in Taiwan (2)

- Lenders would bear in mind the following issues regarding the financing renewable projects in Taiwan

Uncertainty of Feed-in Tariff for Solar	<ul style="list-style-type: none"> ■ For solar projects, the applicable FiT would be determined upon the commencement of project operation, rather than execution of the PPA.
Grid Connection	<ul style="list-style-type: none"> ■ The capacity of the Taipower's grid for the newly developed renewable projects ■ The capability of Taipower for grid expansion to be delivered on time
Seismic & Weather	<ul style="list-style-type: none"> ■ The challenge posted by typhoon and earthquake, especially for offshore wind, on construction and operation
Simple Document	<ul style="list-style-type: none"> ■ Simple PPA not up to international standard ■ Absence of some provisions such as liabilities, liquidated damages, termination payment ■ Not assignable to lenders and no direct agreement concept
Curtailment Risk	<ul style="list-style-type: none"> ■ No guaranteed full dispatch from Taipower
Future of Taipower	<ul style="list-style-type: none"> ■ The proposed segregation and privatization of Taipower by the Government ■ The credit worthiness of the new succeeding offtaker in the future

Bankability Considerations of Renewable Project Financing in Taiwan (3)

Construction Risk (for Offshore Wind)	<ul style="list-style-type: none"> ■ Absence of lump-sum fixed price turn-key EPC contracts for offshore wind projects ■ Multiple contractual construction structure leading to interface risk ■ Inexperienced local contractors ■ Insufficient infrastructure and potential unavailability/disruption of construction supply chain ■ Cost overrun and completion delay risk
Technical Risk	<ul style="list-style-type: none"> ■ Untested and unproven technology of new turbine models with limited track record for offshore wind
Wind/Solar Resources Risk	<ul style="list-style-type: none"> ■ Level of wind/solar resources would affect the power generation and hence the project cashflow ■ Seasonality of wind/solar resources (inter-year and intra-year) will lead to fluctuation of revenue
Environmental Risk	<ul style="list-style-type: none"> ■ The impact on the environment and social-economic activities around the project, especially for the offshore wind projects
Potential Currency Mismatch	<ul style="list-style-type: none"> ■ Potential currency mismatch between the equipment contract payment and debt financing ■ Potential currency mismatch between the debt services and the FiT (in NTD)
Illiquid Derivative Market	<ul style="list-style-type: none"> ■ Limitation of NTD interest rate swap tenor ■ Limitation of currency swap tenor

III. Possible Financing Sources for Renewable Projects in Taiwan

Possible Financing Sources

- Due to the huge project costs for the offshore wind projects or mega solar farm projects, sponsors should consider to source their funding from multiple financing sources.



Possible Financing Sources – Local Taiwanese Banks

- Given the strong promotion of renewable energy by the government and the strong long term NTD funding, we expect that local banks would be one of the funding major sources of the renewable projects in Taiwan.

Merits of Local Banks

- Strong long term NTD funding to match the FiT in NTD
- Relatively cheaper pricing (from our experience in the IPP financing)
- Less stringent terms and conditions compared with international banks
- More familiar with and acceptable to local issues such as the local standard renewable PPA, the sustainability of the FiT and segregation of Taipower
- Less stringent requirement in general due diligence and credit approval process time

Points to Consider

- Only have experience in finance roof-top solar projects; lack of experience and technical know-how to finance offshore wind projects and mega solar projects
- For offshore wind, skeptical to the technology, especially for earthquake and typhoon and the construction risk
- Prefer an experience international developer for project developments and operations due to the inexperienced local sponsors
- Require the guidance of international banks in structuring the financing
- Subject regulatory single borrowing limit: 15% of net worth in which unsecured exposure not to exceed 5% of net worth

Possible Financing Sources – International Banks

- We believe that the involvement of international banks are required to guide the local banks in structuring the financing of the large-scaled renewable projects in Taiwan, especially the offshore wind.

Merits of International Banks

- Strong track record in offshore wind and mega solar farm project financing
- Hands-on experience in renewable project analysis and structuring
- Familiar with the offshore wind and solar technology
- Hands-on experience to co-work with ECAs/MLAs

Points to Consider

- Some international banks may be lack of long term NTD funding
- For NTD lending, subject to regulatory group limit of NTD7 billion (~USD230M)
- Relatively more expensive pricing (comparing to local IPP financing)
- Unfamiliar to local specific issue such as the simple renewable PPA
- Interest rate hedging requirement
- More stringent terms and conditions
- More demanding requirement in due diligence and longer process time, especially environmental due diligence for Equator Principles

Possible Financing Sources – Export Credit Agency

- Given the expected size of the financing, the involvement of export credit agency would definitely expand the financing sources through its direct loans or guarantee/insurance coverage program.

Merits of ECA

- Strong track record in renewable project financing for European/Japanese ECAs
- Hands-on experience in renewable project analysis and structuring
- Familiar with the renewable technology
- Guarantee/insurance coverage program may address concern of commercial lenders
- Relatively cheaper pricing and longer tenor of financing

Points to Consider

- Eligibility required for ECA (export contract element for tied program and shareholding for untied program)
- Lack of long term NTD funding
- Unfamiliar to local specific issue such as the simple renewable PPA
- Interest rate hedging requirement
- More stringent terms and conditions
- More demanding requirement in due diligence and longer process time, especially environmental due diligence for Equator Principles

IV. Local Institutional Investors – An Alternative Funding Source

Increasing Participation of Institutional Investors in European Offshore Wind

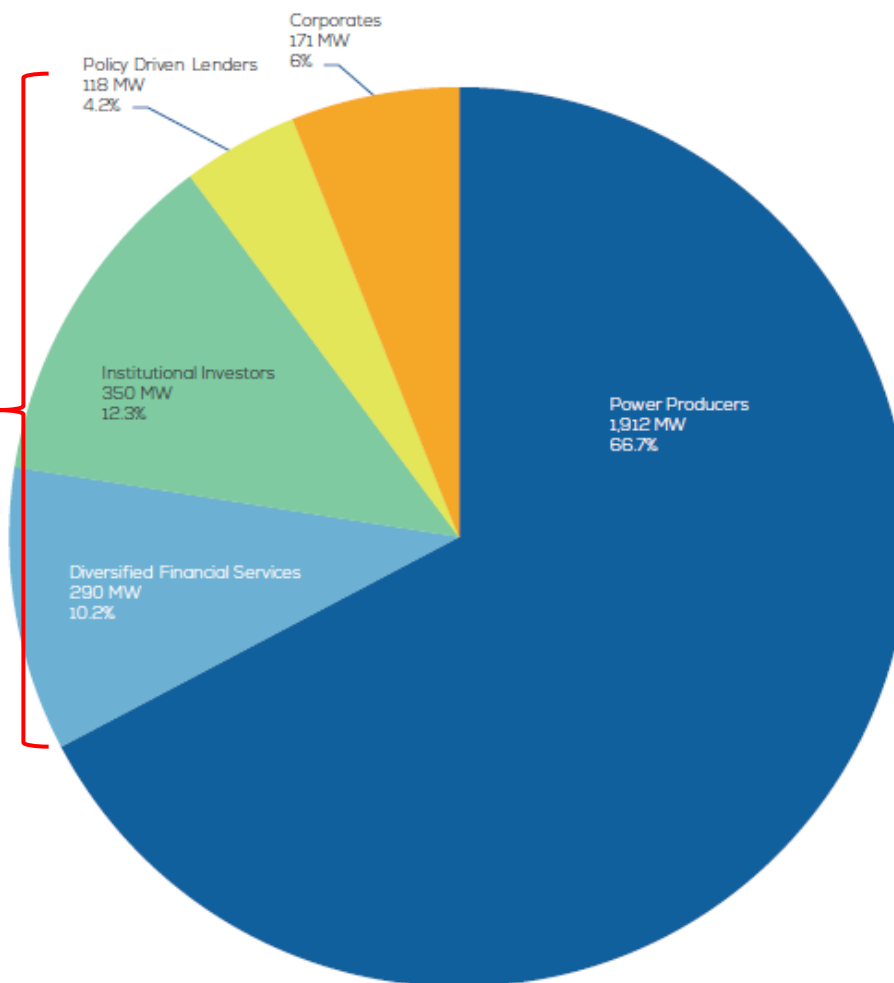
Institutional investors, including pension fund, insurance, infrastructure and private equity funds have become more active in investing in offshore wind projects in Europe, either as equity partners or debt providers.

- Financing houses/institutional investors, such as pension, insurance, and funds, acquired 26.7% or 758MW of offshore wind capacity in 2016, second only to the traditional power producers.
- Instead of acquiring the equity stake after completion and commencement of operation, institutional investors were willing to take construction risk and invested in the projects during construction phase.
- The major institutional investors participating in European offshore wind include:

- Pension
 -    
- Infrastructure Fund
 -    
- Private Equity
 -  

Total: 26.7%

Market Segmentation of Major Equity Investors in 2016



- Their participation is either in the form of:
 - Equity Sponsor
 - Senior Debt/Subordinated Debt/Mezzanine Loan Provider
- In Taiwan, local life insurance companies are seen to be equity investors in conventional IPPs.
- Thus, is there any opportunities for local insurance companies to be involved in the renewable financing?

Participation of Institutional Investors in Renewable Sector in Taiwan

Conventional IPP	<ul style="list-style-type: none"> ■ Some local Taiwanese insurance companies invested in existing conventional IPPs as equity sponsors.
Offshore Wind	<ul style="list-style-type: none"> ■ Currently, no local institutional investor has invested in Taiwan offshore wind as sponsors. ■ Foreign institutional investors: Macquarie, Copenhagen Infrastructure Partners
Solar	<ul style="list-style-type: none"> ■ Local Taiwanese insurance companies are active in investment in solar power projects in Taiwan, including: <ul style="list-style-type: none"> • Taiwan Life Insurance 台灣人壽 • Cathay Life Insurance 國泰人壽 • Shin Kong Life Insurance 新光人壽 • TransGlobe Life 全球人壽 • Mercuries Life Insurance 三商美邦 ■ Local public banks co-invested in joint ventures specialized in roof-top solar project development ■ Swiss private equity fund Partners Group

Regulations Governing Use of Insurer's Funds in Renewable Projects

- In Taiwan, participation in projects by insurance companies is regulated by the Regulations Governing Use of Insurer's Funds in Special Projects, Public Utilities and Social Welfare Enterprises (“保險業資金辦理專案運用公共及社會福利事業投資管理辦法”).
- Although insurance companies are allowed to be involved in renewable projects, they are subject to some regulatory limitation as follows:

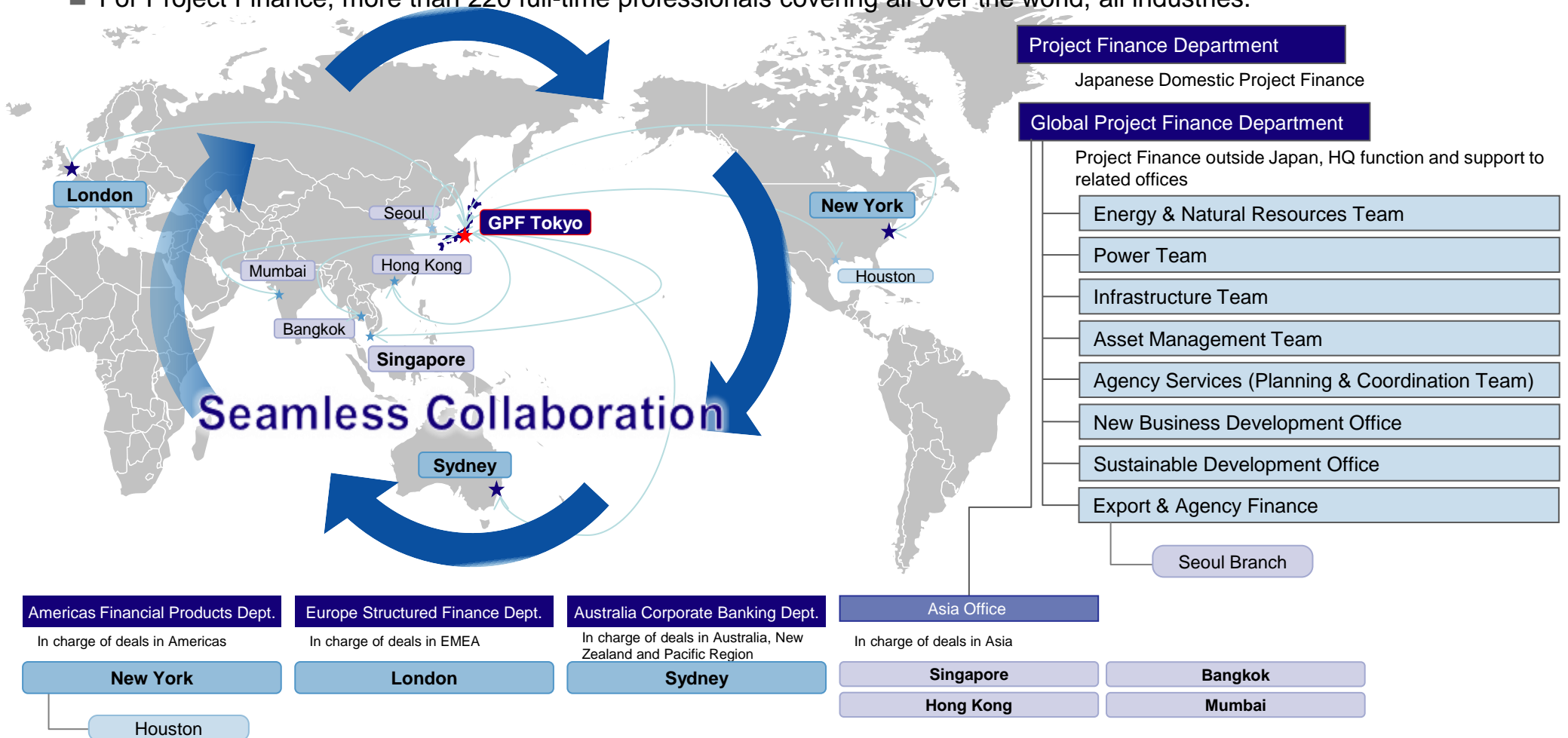
	Regulatory Limitations
Equity Sponsor	<ul style="list-style-type: none"> ■ Total investment amount in special projects and public utilities shall not exceed 10% of its total fund ■ For investment in one specific project, the investment amount shall not exceed 5% of its total fund ■ For investment in utilities or power projects, the investment amount in each project shall not exceed 10% of the paid-in capital of the invested entity
Debt Provider	<ul style="list-style-type: none"> ■ For extension of debt financing to projects, it has to be either: <ul style="list-style-type: none"> • guaranteed with collateral of properties or real properties • guaranteed by banks or other credit guarantee institutions ■ Given there is no real properties or assets can be pledged as collateral during construction period, local insurance companies would not be able to provide debt financing to greenfield renewable projects, unless such financing is guaranteed by a financing institution during construction period ■ Opportunities of cooperation between local insurance companies and international banks (which lack long-term NTD funding) ■ Opportunities of provision of long-term take-out financing by local insurance companies after completion

* Subject to legal due diligence and confirmation from legal advisors

Appendix I. Mizuho's Experience and Capability

Mizuho's Project Finance – Organizational Structure

- Mizuho has over 30 years of experience in the advising, structuring, arranging, closing, and distributing complex multi- source project finance transactions throughout the world.
- Mizuho PF team can utilize its extensive branch network worldwide, and its huge asset basis.
- For Project Finance, more than 220 full-time professionals covering all over the world, all industries.



League Table – Global Project Finance

Mizuho is one of the leading project finance banks in terms of loan amount and number of deals and we have consistently been one of the most active advisors and lead arrangers in the market. Our position in the industry league tables attests to our expertise as one of the premier project finance institutions on a global scale.

- #5 Global Mandated lead Arranger, Full Year 2015 (PFI, Dealogic, Thomson Reuters)
- #3 Global Mandated Lead Arranger, Full Year 2014 (Thomson Reuters)
- #5 Global Mandated Lead Arranger, Full Year 2013 (Thomson Reuters)
- #2 Global Financial Advisor, Full Year 2012 (Thomson Reuters)
- #3 Financial Advisor of Global Project Finance Deals, Full Year 2012 (Dealogic)

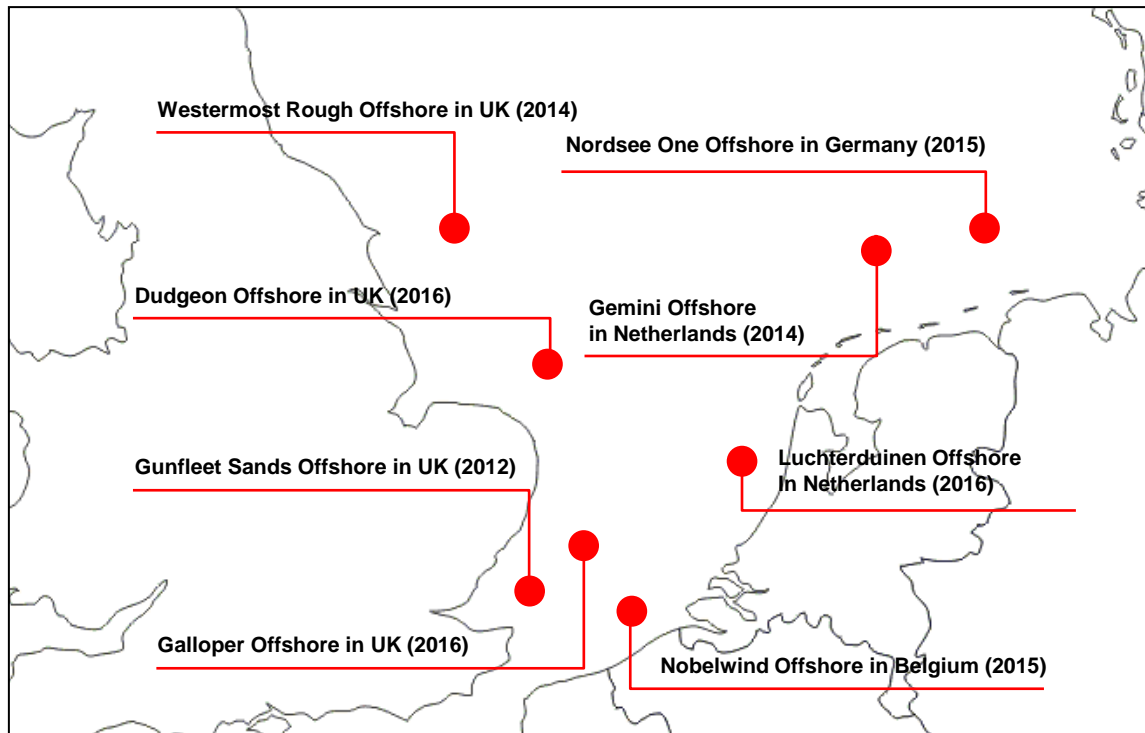
Mandated Lead Arranger: Global		Jan 1- Dec 31		
Total Ranking (2016)	US\$ M	Mkt. Share (%)	No. of Issues	
1	Mitsubishi UFJ FG	14,216	6.2	150
2	China Development Bank	13,203	5.7	3
3	Sumitomo Mitsui FG	11,004	4.8	109
4	Mizuho FG	7,676	3.3	63
5	Credit Agricole CIB	7,390	3.2	79
6	Societe Generale	5,967	2.6	67
7	BNP Paribas SA	5,080	2.5	63
8	ING	5,591	2.4	65
9	State Bank of India	5,278	2.3	12
10	Natixis	4,389	1.9	58

Mandated Lead Arranger: Asia Pacific & Japan		Jan 1- Dec 31		
Total Ranking (2016)	US\$ M	Mkt. Share (%)	No. of Issues	
1	State Bank of India	5,016	9.7	11
2	Mizuho FG	3,883	7.5	25
3	Mitsubishi UFJ FG	3,763	7.3	28
4	Sumitomo Mitsui FG	3,494	6.8	30
5	Commonwealth Bank of Australia	2,107	4.1	17
6	Westpac Banking	1,828	3.5	13
7	National Australia Bank	1,808	3.5	17
8	ANZ Banking Group	1,586	3.1	12
9	Credit Agricole CIB	1,482	2.9	9
10	China Development Bank	1,363	2.6	2

(Source) Thomson Reuters

Mizuho's Experience in Offshore Wind

Mizuho is one of the most active banks in the offshore wind project financing in Europe. We have been heavily involved in major offshore wind transactions in the past five years and are equipped with the latest know-how and expertise.

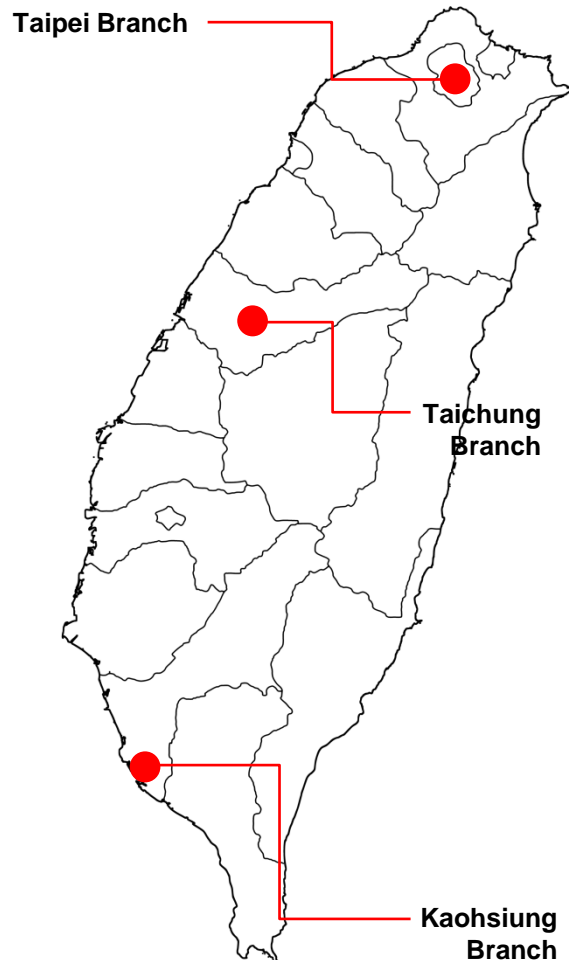


From these experience,

- We have hands-on experience to analyze and review the project documents of an offshore wind project to assess the bankability and to allocate the risk among the parties.
- We have a deep understanding of the particular risks that offshore wind projects generally face and the corresponding mitigation measures.
- We know how to structure the project to make it bankable to the prospective lenders and at the same time generating reasonable returns to the sponsors.
- We have the latest knowledge of the financing plan of the offshore wind projects and the associated financing terms and conditions which have been acceptable to the financing market in Europe.
- We understand lenders' requirement and expectation on the financial model for credit approval process.
- We procure the experience to work with European/Japanese export credit agencies and understand their requirement in structure, terms and due diligence to provide the financing to the project.

Mizuho in Taiwan

Mizuho has had its business and operation in Taiwan for more than 50 years and is one of the very few international banks with a sizable set-up in the country, offering a full range of comprehensive banking products and services to our local clients and those from the overseas.



More Than 50 Years of Establishment

- Kangyo Bank, our legacy bank, established its Taipei Branch back to 1922.
- After the WWII, Kangyo Bank was the first foreign bank to re-open its Taipei Branch in 1959.
- It merged with the Taipei Branch of Fuji Bank in 2002 and subsequently renamed to Mizuho.

Extensive Network and Coverage

- Mizuho is one of the very few foreign banks have three branches in Taiwan, including Taipei, Taichung and Kaohsiung, covering business all over the country.
- We have more than 300 staff working in these three branches and we are one of the largest foreign banks in Taiwan.

Full Range of Products & Services

We provide customers with a comprehensive banking products and services, including:

- 1) Loan
 - NTD: Short/Long Term Loan, Bid Bond, Performance Bond, Customs Guarantee, Banker's Acceptance
 - Foreign Currency
- 2) Foreign Exchange: Short/Long Term Loan, Syndication, IBD
 - Export: Advising of L/C, L/C Negotiation
 - Import: Issuing of L/C, Usance, B/C
 - Remittance: T/T, T/C, D/D
- 3) Deposit
 - NTD: Checking Account, Current Account, Time Deposits
 - Foreign Currency: Current Account, Time Deposits
- 4) Strategic Advisory
 - M&A and Project Finance, Market Entry in Taiwan, Account Opening for Engineering Contracting Office

Mizuho in Taiwan – Our Prominence among Foreign Banks in Taiwan

- Besides our sizeable set-up and long history in Taiwan, our prominence could be shown by our outstanding operating statistics among the foreign banks in Taiwan.
- In terms of the amount of equity, asset, deposit and loans outstanding, Mizuho not only is in a leading position among the 3 Japanese mega banks, but also is the market leader among all foreign banks in Taiwan

Ranking of Local Branches of Foreign Banks in Taiwan

Ranking (as of 30/9/2017)	Equities (NTD M)	Assets (NTD M)	Deposits (NTD M)	Loans (NTD M)	No. of Branches
1 Mizuho Bank, Ltd.	11,048	430,340	249,991	256,441	3
2 The Bank of Tokyo-Mitsubishi UFJ, Ltd.	8,582	236,110	127,024	170,162	2
3 Bank of America	7,229	162,894	28,590	88,060	1
4 Oversea-Chinese Banking Corporation Ltd	5,622	122,805	228	14,237	1
5 UBS AG	4,732	196,063	85,210	110,373	3
6 Bangkok Bank Public Company Ltd.	4,550	41,330	9,803	21,323	3
7 Sumitomo Mitsui Banking Corporation	4,489	337,236	127,196	147,673	1
8 Australia and New Zealand Bank	4,144	84,203	-	18,822	1
9 DBS Bank Ltd	4,090	125,820	-	35,196	1
10 United Overseas Bank	3,723	193,976	11,852	47,012	1
11 Calyon Corporate and Investment Bank	3,566	98,043	39,616	33,811	1
12 ING Bank, N.V.	3,054	135,948	1,821	30,837	1
13 BNP Paribas	2,881	185,909	44,769	49,777	3
14 State Street Bank and Trust Company	2,783	10,600	-	-	1
15 JPMorgan Chase Bank, N.A.	2,503	60,067	46,331	4,129	1

Source: Banking Bureau, Financial Supervisory Commission, R.O.C.

Our Extensive Network in Taiwan - with Government Entities (1)

- We have close ties with government entities such as Ministry of Finance, Ministry of Economic Affairs, Central Bank, National Development Council and leading financial agencies
- We maintain regular dialogues with them to have the latest updates and information in the market to advise our clients
- We also have executed cooperation agreements with the government/agencies.

Memorandum of Understanding with Industrial Technology Research Institute



Letter of Interest with the Ministry of Economic Affairs of R.O.C.



Date: 10th December 2012

Outline:

The MOU with ITRI draws a framework to promote technology alliance and foster business partnership between Taiwanese and Japanese entrepreneurs by:

- Providing assistance on facilitating new technology and industrial science interactions as well as introducing business partners and providing support on prospective projects
- Supporting industrial knowledge and personnel interaction
- Introducing venture capital fund and such
- Supporting and/or collaborating on seminars

Aims:

- To increase bilateral investment activities and cooperation on technology development between Japanese and Taiwanese corporations
- To promote partnership between Taiwanese and Japanese entrepreneurs

Achievements:

- Mizuho Taipei has introduced 89 companies to ITRI which resulted in 30 successful cases of business matching between Taiwanese and Japanese companies.

Date: 2nd September 2015

Outline:

The LOI with MOEA provides an outline for both parties to:

- Providing information and to refer investment opportunities to Taiwanese and Japanese companies
- Attract and assist in investment activities
- Facilitate technical and economic cooperation between Mizuho and other Taiwanese companies
- Supporting and/or collaborating on seminars

Aims:

- MOEA recognizes the importance of Mizuho's services in enhancing Taiwan's global competitiveness and encourages Mizuho to foster its long-term cooperation with Taiwanese companies
- To strengthen support for Japanese companies investing in or expanding existing business in Taiwan

Our Extensive Network in Taiwan - with Government Entities (2)

- With our close network with the government entities in Taiwan as well as our reputable credentials in green energy project financing, Mizuho has been invited by the Taiwanese Government to attend and participate in high profile conference or seminar at transnational level in relation to renewable energy.

The 10th Taiwan-Japan Joint Seminar on Energy Cooperation

Date: April 2014

Co-Hosts: Bureau of Energy, Ministry of Economic Affairs and The Institute of Energy Economics, Japan (“IEEJ”)

Venue: The Sherwood Taipei

- The Joint Seminar is to strengthen the cooperation and communication of information regarding energy development between Japan and Taiwan.
- Mizuho Project Finance was invited by IEEJ to deliver a presentation to share the project finance market overview, the outlook of renewable and oil and gas projects and some case studies to the delegates and representatives from Taiwan.
- Besides the co-hosts, other attendees included: from Japan, Agency for Natural Resources and Energy, Ministry of Economics, Trade and Industry, Institute of Energy Economics, Japan etc; from Taiwan, Association of East Asian Relations, Atomic Energy Council, Taiwan Power Company, ITRI, Taiwan Academy of Banking and Finance, and other local banks.



The Conference on APEC Green Energy Finance 2016

Date: August 2016

Host: Bureau of Energy, Ministry of Economic Affairs

Execution Unit: Taiwan Institute of Economic Research

Venue: GIS MOTC Convention Center, Taipei, Taiwan

- Organized by the Energy Working Group of Asia-Pacific Economic Cooperation (“APEC”), the Conference aimed to provide a platform for comprehensive dialogue to support the financial sustainability of renewable energy to further ensure regional energy security and success of transformation to low carbon economy in APEC region.
- Experts, representatives of institutions and developers from members economies including Taiwan, Philippines, USA, Australia, Thailand and Japan etc were invited to share the policies, experiences and best practices from multiple perspectives and the development trend of green energy finance.
- Mizuho, with our fruitful project finance experience in renewable sector worldwide, was invited to join the Conference to deliver a speech to share our observation in the green energy financing trend in Asia as well as the challenges international banks may face.



 中華民國經濟部
Ministry of Economic Affairs, R.O.C.

Our Extensive Network in Taiwan - with Local Banks and Japanese Corporations

- Besides the government entities, we maintain a broad cooperation and correspondent network among the local Taiwanese banks and foreign banks. We have executed memorandums of understanding with local major state-owned bank and commercial banks to strengthen our collaboration especially in the area of project finance and syndicated loans
- We also have a network of contacts with prominent local specialized agencies such as lawyers and accountants and help our customer to access professional advice of all field by introducing these agencies.
- Being a major Japanese bank, we are the active member of the Japanese Chamber of Commerce and Industry Taipei which promotes the economic cooperation and trade between Japan and Taiwan and provides advises to the Taiwanese Government

Memorandum of Understanding with Bank of Taiwan



Date: 20th October 2015

Outline:

The MOU with Bank of Taiwan draws a framework to promote business cooperation and personnel training in the following areas:

- Project finance
- Syndicated loans
- Trade finance
- Operating funds facility
- Electronic banking
- Trust business

Aims:

- To provide a broader scope of banking services to Japanese customers in Taiwan and Taiwanese customers in Japan
- To facilitate the business development of Japanese corporates in Taiwan and Taiwanese corporates in overseas

The Japanese Chamber of Commerce and Industry Taipei



Date of Establishment: 26th March 1971

Number of Corporate Members (as of 31st March 2017): 466

Aims:

- To enhance the mutual relationship and the business convenience among the members
- To promote the trade and economic cooperation between Taiwan and Japan
- To provide advises to and facilitate communication and negotiation with the Taiwanese Government
- To share information about economy and regulation prepared by Mizuho among the members.

Mizuho's Role:

- Mizuho is one of the most active members of JCCI as board member and committee chairman.
- Mizuho actively participates in drafting policy suggestions to the Taiwan government in the JCCI's annual white paper.

Mizuho's Involvement in the Taiwan Offshore Wind Sector (1)

- Mizuho has been following and involved in the offshore wind industry in Taiwan since its early stage of development. From as early as January 2016, with our close relationship with the government, Mizuho has been invited to attend workshops and conferences organized by various government entities to share our offshore wind financing knowledge and experience with local banking sector and investors.
- We have been keeping regular dialogues with government entities, local developers, banks, consultants and potential investors from overseas to update the latest status of the development.
- We are familiar with the regulatory regime and with our active provision of financing to local conventional IPPs, Mizuho is equipped with the latest knowledge of the power market and the offshore wind power industry in Taiwan.

Event: 2016 Offshore Wind Farm Financing Workshop

Date: January 2016

Organizer: Bureau of Energy, Ministry of Economic Affairs

Coordinating Unit: Taiwan Academy of Banking and Finance

Speakers: Mizuho, Thousand Wind Turbines Promotion Office, AON

Participants: More than 200 professionals from local banks, local insurance companies, local law firms and local developers

Venue: Taiwan Academy of Banking and Finance

Aims:

- To let the local finance market be more familiar with the latest offshore wind finance market and its potential, the risk assessment in financing offshore wind and the offshore wind policy in Taiwan
- To attract more involvement of the local finance and wind power sector players in the offshore wind industry

Mizuho's Involvement:

- We shared the latest development of offshore wind in Europe and the major industry players and discussed the main financing sources for European offshore wind projects
- We discussed the major risk of an offshore wind projects and shared our experience in how to mitigate such risks in order to make the projects bankable
- Through the closed transactions Mizuho was involved, we illustrated how those projects were structured, how the risks were mitigated and the financing structure and conditions.
- A panel discussion was held among other speakers, representative from local bank and developer on the Taiwan offshore wind sector and its associated risk.



Mizuho's Involvement in the Taiwan Offshore Wind Sector (2)

- The Bankers Association of Republic of China was formed by local banks in Taiwan to assist the government in implementing financial policies, to promote economic development of Taiwan and to coordinate the members banks' relationship.
- During the early stage of development of offshore wind power in Taiwan, Mizuho was invited to attend the committee meeting of the Bankers Association of the Republic of China to share our experience in financing offshore wind projects in Europe with senior management representatives of the local member banks.

Event: Monthly Meeting of Lending Committee of Bankers Association of Republic of China

Date: January 2016

Organizer: Lending Committee of Bankers Association of Republic of China

Speakers: Mizuho

Participants: Senior Management Representatives of Local Member Banks

Venue: Bankers Association of Republic of China

The Lending Committee:

- The Lending Committee of the Association assists its member banks to improve and enhance their internal operation in relation to credit
- It holds monthly meeting for the representatives from each member bank in Taiwan to discuss the lending and credit issues they face.
- In order to procure the knowledge of how to assess the risk of an offshore wind project, Mizuho was invited to attend such monthly meeting to share our knowledge and experience.

Mizuho's Involvement:

- We discussed the major risk of an offshore wind projects and shared our experience in how to mitigate such risks in order to make the projects bankable
- Through the closed transactions Mizuho was involved, we illustrated how those projects were structured, how the risks were mitigated and the financing structure and conditions.



Mizuho's Project Finance in Taiwan

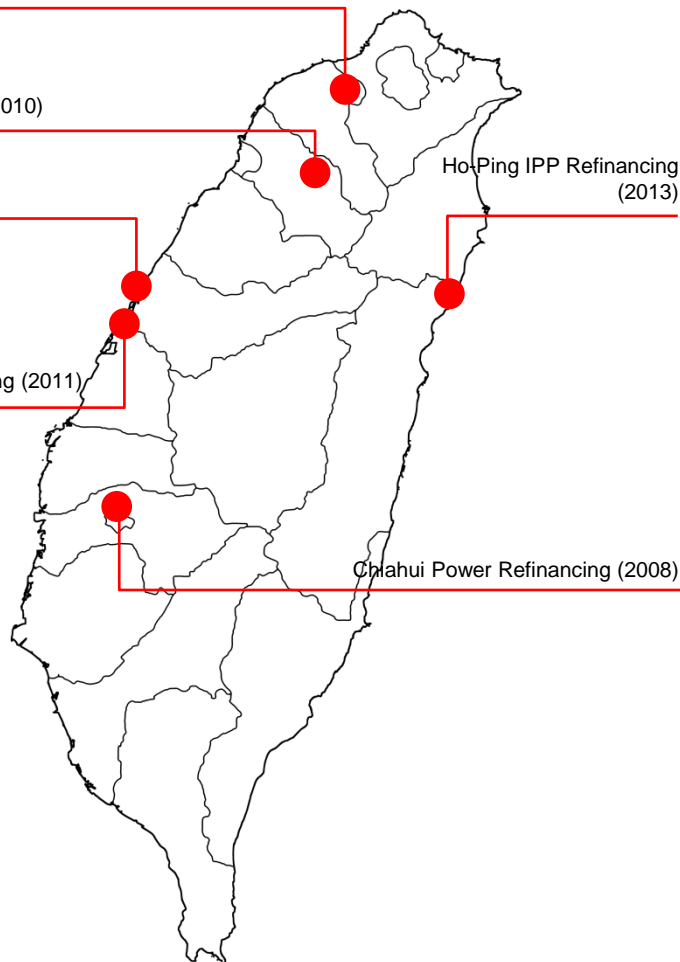
Mizuho's presence in Taiwan project finance was dated back to 1997, involving notable power projects and being the most active foreign project finance bank in the country.

Kuokuang IPP Acquisition (2006)

Acquisition of Hsin Tao IPP (2010)

CPC NiMic No. 1 – 4 (2006)

Star Energy Power Refinancing (2011)



Year	Project	Sector
2013	Ho-Ping IPP (和平電力) Refinancing	Power
2011	Star Energy Power (星能電力) Refinancing	Power
2010	Acquisition of Hsin Tao IPP (新桃電力)	Power
2008	Chiahui Power (嘉惠電力) Refinancing	Power
2006	NiMic No. 1 – No. 4	LNG Vessel
2006	Kuokuang Power (國光電力) Acquisition	Power

Appendix II. Contact List

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