

DGE-METI WG ON NEW ENERGY SYSTEMS

Grenoble, France
February 11th and 12th, 2020

DGE
DIRECTION GÉNÉRALE
DES ENTREPRISES

In collaboration with:
 経済産業省
Ministry of Economy, Trade and Industry

 GRENOBLE ALPES
MÉTROPOLIS

 République Française
LE MINISTRE DE L'ÉCONOMIE
DES AFFAIRES FINANCIÈRES
ET DU DÉVELOPPEMENT
DURABLE

Participating Entities

	Name of entity	Type	Sector	Status
FR	Ministry of Economy and Finance – Directorate General for Enterprises (DGE)	Ministry		Confirmed
FR	Ministry of Ecological and Solidary Transition – Embassy of France in Japan	Ministry		Confirmed
FR	Ministry of Europe and International affairs (MEAE)	Ministry		Confirmed
FR	Grenoble-Alpes Métropole	Local Government		Confirmed
FR	Invest in Grenoble	Development agency		Confirmed
FR	Economic services of State for Auvergne-Rhône-Alpes	Local representation of ministry		Confirmed
FR	Business France	National Public Agency		Confirmed
FR	Bpifrance	National Bank Agency		Confirmed
FR	CEA / CEA INES / CEA LITEN	National Energy Commission	Hydrogen	Confirmed
FR	AD Venta	Start-up	Hydrogen	Confirmed
FR	Engie Cofely	Group	Hydrogen	Confirmed
FR	Air Liquide	Group	Hydrogen	Confirmed
FR	Atawey	Start-up	Hydrogen	Confirmed
FR	InnoEnergy	SME	Hydrogen	Confirmed
FR	GRDF or GRTgaz	Group	Hydrogen	Confirmed
FR	Syfen	Start-up	Hydrogen	Confirmed
FR	H2Sys	SME	Hydrogen	Confirmed
FR	Vicat	Group	Hydrogen	Confirmed
FR	Colas / Wattway	Group	PV	Confirmed
FR	Rosi	Start-up	PV	Confirmed
FR	ApollonSolar	Start-up	PV	Confirmed
FR	Veolia	Group	PV	Confirmed
FR	Serma Technologies	SME	PV / Hydrogen	Confirmed
FR	APIX	Start-up	Biomass	Confirmed
FR	Leroux et Lotz	SME	Biomass	Confirmed
FR	Naskeo Environnement	SME	Biomass	Confirmed
FR	Waga Energy	Start-up	Biomass	Confirmed
FR	Compagnie du chauffage	Group	Biomass	Confirmed
FR	Schneider Electric	Group	Smart Grids	Confirmed
FR	Cosmotech	SME	Smart Grids	Confirmed
FR	Enedis	Group	Smart Grids	Confirmed
FR	Energy Pool	SME	Smart Grids	Confirmed
FR	Exagan	SME	Smart Grids	Confirmed
FR	Roseau Technologies	Start-up	Smart Grids	Confirmed
FR	RTE	Group	Smart Grids	Confirmed
FR	Institut des smart grids	Association	Smart Grids	Confirmed
FR	IFP – Energies nouvelles	School / training / R&D	Cross sectorial	Confirmed
FR	Tenerdis	Cluster	Cross sectorial	Confirmed
JP	Ministry of Economy, Trade and Industry (METI)	Ministry		Confirmed
JP	Embassy of Japan in France	Ministry		Confirmed
JP	JETRO	Public Agency		Confirmed
JP	NEDO	Public Agency		Confirmed
JP	Asahi Kasei	Group	Hydrogen	Confirmed
JP	Toyota	Group	Hydrogen	Confirmed
JP	Iwatani	Group	Hydrogen	Confirmed
JP	Itochu	Group	Cross-sectorial	Confirmed
JP	Japan Electrical Power Information Center	Non-profit association	Cross-sectorial	Confirmed
JP	Panasonic	Group	Hydrogen	Confirmed
JP	Kaneka	Group	PV	Confirmed
JP	NPC	SME	PV	Confirmed
JP	The Glass Recycling Committee of Japan (GRCJ)	General incorporated association	PV	Confirmed
JP	Harita Metals	SME	PV	Confirmed
JP	Fuji Clean	SME	Biomass	Confirmed
JP	Hokkaido University	University	Biomass	Confirmed
JP	Daikin	Group	Smart Grids	Confirmed
JP	NEC	Group	Smart Grids	Confirmed
JP	Nissan	Group	Smart Grids	Confirmed
JP	Sumitomo Electric Industries	Group	Smart Grids	Confirmed
JP	Mitsubishi Electric	Group	Smart Grids	Confirmed

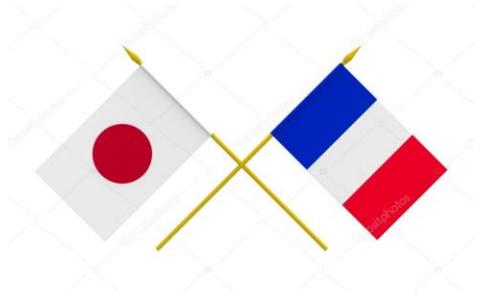


Time	Events	Place
Tuesday 11th, February 2020		
8.00	Mandatory meeting point for bus pick-up - Hôtel d'Angleterre Grenoble Centre	5 Place Victor Hugo
8.20-9.30	8.20-8.30 Welcome Coffee 8.30-8.40 Welcome by Christophe FERRARI , President of Grenoble-Alpes Métropole 8.40-9.00 Welcome by Caroline MISCHLER , Head of DGE delegation and Masaomi KOYAMA , Head of METI delegation - Presentation of the workshop 9.00-9.20 Presentation of the Grenoble Energy ecosystem by Cyril ISABELLO , Director of Innovation unit 9.20-9.30 Pictures and departure by bus	Grenoble-Alpes Métropole (GAM) Le Forum 3 rue Malakoff 38031 Grenoble
10.00-13.30	Hydrogen Sequence : Co-chair DGE/METI Visits of CEA infrastructures on hydrogen production and P2X (1hr) Presentations (1hr) <ul style="list-style-type: none"> ○ Introduction to the CEA Liten new energy strategy (15') ○ Presentation of the Valomé project – Vicat (20') ○ GRDF hydrogen gas transportation by gas pipeline (20') Presentation of Japanese and French companies on hydrogen (10' each) + Q&A <ul style="list-style-type: none"> ○ AD Venta, Atawey, Sylfen, H2sys ○ Toyota, Iwatani, Panasonic 	 The Alternative Energies and Atomic Energy Commission (CEA) 17 Avenue des Martyrs 38000 Grenoble
13.30-14.30	Lunch buffet - BtoB	CEA
14.30-15.30	Green H2 production: <ul style="list-style-type: none"> ○ Visit of Engie Cofely installation of green H2 production on site <i>Bus transport mandatory to Air Liquide</i> 	CEA
16.00-18.30	Hydrogen: Air Liquide (Co-chair DGE/METI) <ul style="list-style-type: none"> ○ Security clearance (15') ○ Presentation of hydrogen strategy (15') ○ Presentation by Asahikasei (10') ○ Workshop visits / discovery of activities: hydrogen and biogas / space (an example of expertise and use of hydrogen) and cryogenics (illustration production tool) (2hrs) 	 Air Liquide 2 Rue de Clémencièrre 38360 Les Côtes-de Sassenage
19.30-22.00	Diner at Les Jardins de Sainte Cécile – Return free time by public transport	18 Rue de l'Alma



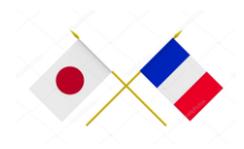
Wednesday 12th, February 2020

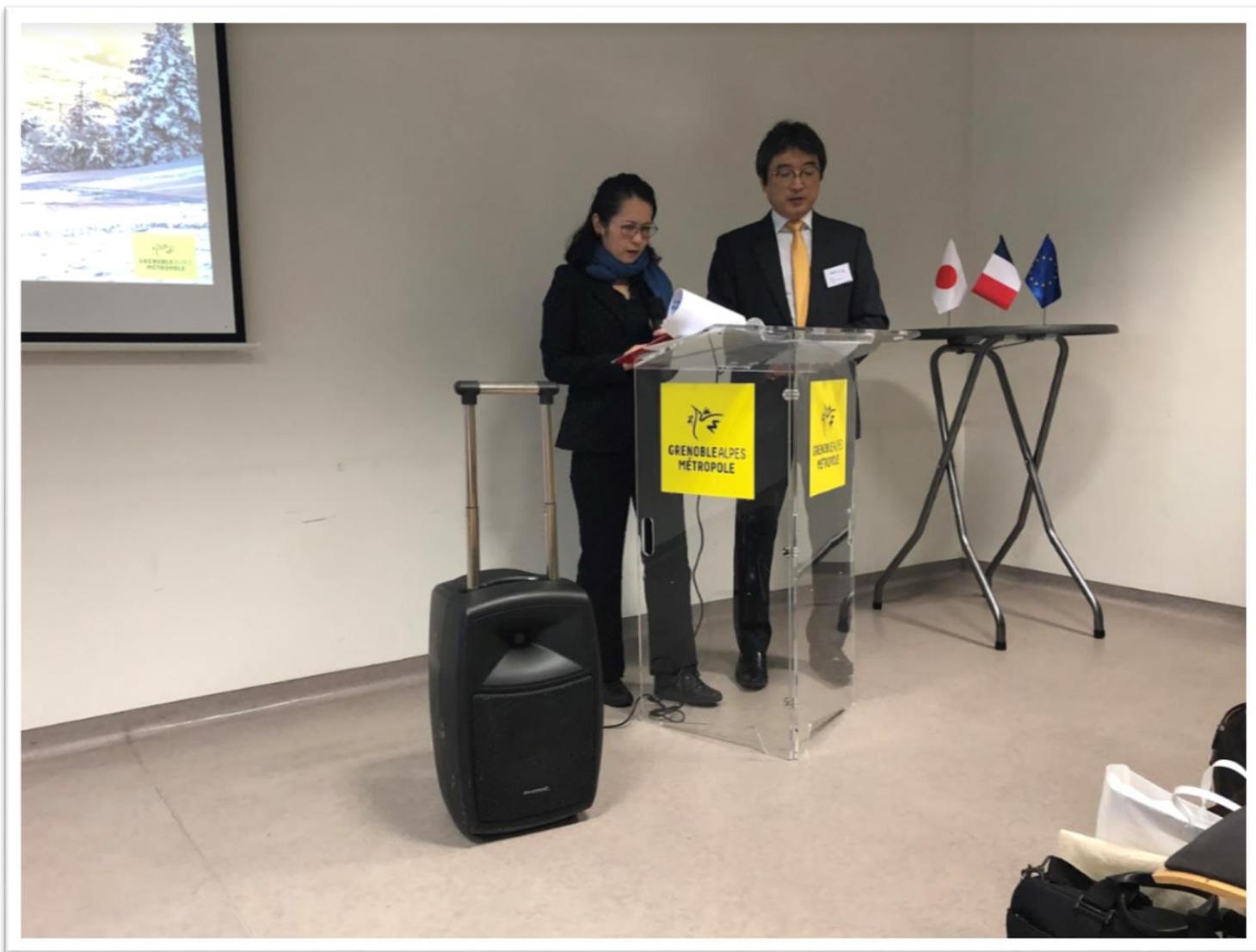
9.00	Mandatory meeting point for bus pick-up - Hôtel d'Angleterre Grenoble Centre		5 Place Victor Hugo
9.30-12.15	<p>Solar & PV Recycling Sequence : Co-chair DGE/METI</p> <ul style="list-style-type: none"> ➤ Presentation of the activities of the French national Institute on solar energy (LITEN) (30') ➤ Presentation of companies (10') Q&A - cards' exchanges <p>-Rosi, ApollonSolar, SERMa, Wattway -Kaneka, NPC,GRCJ, Harita Metals</p>	<p>Biomass Sequence : Co-chair DGE/METI</p> <ul style="list-style-type: none"> ○ Visit of La Poterne (boiler) presentation of the district heating network (60') ○ Presentation on bio resource thermo-conversion technologies for energy and P2X application (CEA Liten) (20') ○ Presentation of companies (10' each) on biomass - Q&A - cards' exchanges <p>-APIX, WAGA -Fuji Clean, Hokkaido University</p>	<p>Tenerdis 19 Rue des Berges 38000 Grenoble</p> <p>La Poterne 42 Chemin de la Poterne 38100 Grenoble</p>
12.30-13.30	Lunch buffet - BtoB		Schneider Electric
13.30-17.00	<p>Smart grid Sequence : Co-chair DGE/METI</p> <p>Introduction on Smart Grid followed by demos in show room and lab (90') :</p> <ul style="list-style-type: none"> ○ Group 1: New generation of Medium Voltage equipments: green (SF6 free) and digitally enabled (IoT)/ Software and analytics to manage DER (Distributed Energy Resources) integration on Grid. ○ Group 2: Demand Side: Microgrid solution for prosumers <p>Presentation of the Institut des Smart grids (5')</p> <p>Presentation of French and Japanese companies (10' each) + Q&A</p> <ul style="list-style-type: none"> ○ Enedis, Energypool, Exagan, Roseau tech, RTE / Cosmotech, INES, IFPEN ○ Daikin, NEC, Nissan, Sumitomo Electric Industries, Mitsubishi Electric 		<p>Schneider Electric Site Technopole GreenOvalley</p> <p>Conference Room & laboratories</p> <p>28 rue Henri Tarze 38000 Grenoble</p>
17.00-17.10	Closing comments by DGE and METI		
17.10-18.00	BtoB between companies (Smart grids)		Schneider Electric
18.00	Bus back to train/bus station		



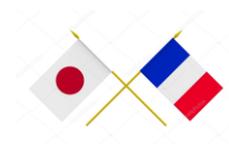
DGE-METI WG ON NEW ENERGY SYSTEM 「Solar & PV Recycling Sequence」

Feb.11th,2020@Grenoble, France



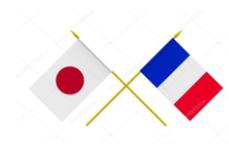


経済産業省
2月11日
WGスタート
小山室長 代表挨拶



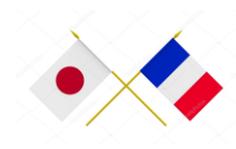


2月11日
ディナー
小山室長挨拶



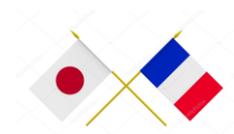


2月12日
GRCJ 加藤代表プレゼン





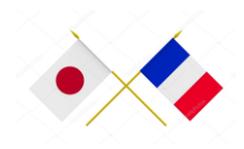
2月12日
ハリタ金属株式会社
代表取締役
張田 真 プレゼン



要点録 11日

- 水素がテーマのWG
- 再生可能なエネルギーから製造した水素
水素にする目的はストックするため。電池ストックよりもストックに優位性あり。
- 水素からメタンを製造する技術発表 メタンは汎用性が高くストックにも優れる
- 製造した水素を既存の天然ガスパイプに注入するプロジェクト
現在試験開始。今後注入比率を増やす予定。
既存の施設を使用したもので実現すると大きな社会成果へつながると感じた
- 水素充填インフラ
運搬からシステムの多くのプレゼン

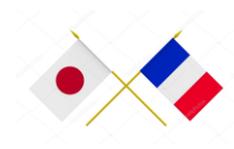
フランスの水素社会への転換の決意を感じるWGであった。



要点録 12日

- ・PVがテーマのWG
- ・再生可能エネルギーはテーマとしてPVリサイクルは欠かせない
- ・フランスプレゼン
道路設置型PV、シリコン特化リサイクル企業、PVメンテナンスサービス企業
- ・日本プレゼン
GRCJ ガラスリサイクル総論プレゼン
ハリタ金属、NPC PVリサイクルプレゼン
カネカ BIPVプレゼン

日本のPVリサイクルプレゼンからガラスのリサイクルに関する重要性を理解いただいた。
会場は椅子を追加するほどの盛況とのコメントをフランスDGEからいただく。
日仏でPVリサイクルの最新事例を共有し両国に関し有意義なWGとなった。



Thank you for your attention

