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**Partner search**

**Date (****17-08-2020)**

* **(\*) Indicate numbers of relevant topics for Green Deal call:**

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| **LC-GD-4-1-2020: Building and renovating in an energy and resource efficient way** |

* **Quick description of the project**

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| **(describe the objectives, activities, partners requested and their skills)**We are looking for large European players in electricity, construction, partner in BIM/CIM and architect.We propose to bring our expertise to build a project fulfilling the aims of the area 4 of green deal call in:- electrical power measurements, smart electricity meters certification and verifications - building materials, fire behavior, energy performance, smart lighting- artificial intelligence |

* **(\*) Do you intend to apply as ? :**

Coordinator: **No**

Participant: **Yes**

**(\*) Either Description of the expertise requested (up to 1000 characters) - *specify which points of the "expected impact" of the call you are targeting***

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**Or Description of the expertise proposed (up to 1000 characters) - *specify which points of the "expected impact" of the call you are targeting***

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| LNE proposes a scientific support on topic 4.1 devoted to energy efficiency of building by bringing its expertise, skills and experimental/numerical facilities pertaining to * Renewable power generation performance (highly performant Photovoltaic solutions) and Energy storage systems (batteries, supercapacitors, phase change materials)
* Electrical power (high and low voltage, high impulse voltage, power measurements in highly distorted conditions, metrology, disruptive electrical phenomena)
* Artificial intelligence systems, e.g. for smart cities applications (ethical issues, functional performance, AI/Data regulatory framework e.g. GDPR and standards…)
* Evaluation of behaviour of materials against thermal fire and mechanical stress
* Characterisation of thermal and radiative properties of building materials
* New/recycling/reuse materials & system performance (thermal & mechanical behavior, reaction to fire, long-term performance, durability, COV abatement, glazing performance)
* Energy and fire safety performance (smoke management) of building
* Calibration and evaluation of wideband sensors, evaluation of AI-embedded sensors
* Characterisation of components (sources and sensors) of smart lighting
* Standardization

**+ key words :** Energy efficiency, Energy storage, Electrical measurements, Metrology, High impulse voltage, Power measurements, Disruptive electrical phenomena, Materials/System performance, In situ performance, Fire safety, Energy performance, AI evaluation, Photovoltaic, Smart lighting, Standardization |

**Organisation information**

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| **Organisation and country: LNE (Laboratoire National de métrologie et d’Essais - National metrology and testing laboratory) in FRANCE**  |
| **Type of organisation:****□ Enterprise □ SME □ Academic X Research institute □ Public Body □ Other: Association** |
| **Former participation in FP European projects?****X Yes □ No** |
| **Web address:** <https://www.lne.fr/en> |
| **Description of the organisation:** LNE is a public industrial and commercial institution (EPIC designation) placed under the trusteeship of the French Ministry for the Economy and Finance with oversight for Industry.Relying on an excellent scientific and technical skill set, LNE's research efforts form the basis of multiple applications: calibration, testing, certification, etc. Renowned for its expertise both in France and abroad, LNE performs measurements that serve the economy and society. Furthermore, LNE is the French National Metrology Institute and as such, one of its key missions is to establish the metrological traceability and to assess the uncertainty of analytical measurements, necessary to enhance the reliability of data.To execute its assigned technical assistance activities successfully, LNE develops a broad array of multidisciplinary resources and skills to respond better, in its role as a reference laboratory, to the diversity of problem situations it is tasked with addressing by industrial firms, laboratories or public authorities. The Laboratory produces reference test benches, in addition to developing new reference testing and analysis resources-methods across all fields These challenges span consumer protection, public health and safety, environmental preservation and energy efficiency. LNE pays close attention to regulatory and standardization issues as well. |

**(\*) Contact details**

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**(\*) –Mandatory**