ACADEMIC PARTNERSHIP AGREEMENT

by and between

ENEL

and

UNIVERSITY of GENOA
ACADEMIC PARTNERSHIP AGREEMENT

BY AND BETWEEN

(1) **ENEL S.p.A.,** a company duly organized under the laws of Italy, c.f. 00811720580 having its registered offices in Viale Regina Margherita 137 Rome, Italy, hereby represented by hereby represented by Francesca Di Carlo and Ernesto Ciorra, hereinafter indicated as “ENEL”;

AND

(2) **University of Genoa** ( “University”), with registered office in Via Balbi, 5 Genoa, Italy represented for the signing of this document by the Rector, Prof. Paolo Comanducci authorized to sign this document ,

ENEL and UNIVERSITY are also hereinafter referred to individually as “Party” and collectively as “Parties”;

WHEREAS

(A) Enel is a multi-national power company and a leading integrated player operating in 30 countries across 4 continents, generating power from over 90 GW of net installed capacity and distributing electricity and gas through a network spanning around 1.9 million km;

(B) UNIVERSITY of Genoa is a prestigious academic institution, ranked among the top 2% worldwide (average position according to major ranking agencies: 350-400) and among the top 20 universities nationwide. UNIVERSITY can provide research based solutions for society’s/utilities’s most pressing problems. University presently has focused research initiatives on smart city, smart grid and cybersecurity for electrical system.

(C) ENEL is developing a specialist partnership program (“Specialist Partners Program”) dedicated to establish structural cooperation with Academia, also in the interest of the Enel Group companies and the Fondazione Centro Studi Enel (“Enel Foundation”);

(D) It has already been realized the "Living Lab Microgrid", which is a joint national laboratory between ENEL and UNIVERSITY for the study and simulation for energy technologies of the Smart City of the Future whose activity is aimed at testing resilient and sustainable urban energy systems.

Now therefore it is hereby agreed as follows:

1 RECITALS AND ATTACHMENTS

The Recitals and the Attachments constitute integral and substantial part of this Academic Partnership Agreement (hereinafter “Agreement” or “APA”).
2 THE SCOPE OF THE Agreement

2.1 The scope of this Agreement is to forge a cooperation particularly in the fields smart city, smart grid and cybersecurity for electrical system (“the specialist core competences”) aimed at:

- collaborations with the University to support scientific discovery and technical development of products & solutions relevant and with impact under current market conditions;
- assisting Enel in addressing corporate research priorities and challenge to create new path & products by gaining among other features a window into cutting-edge research and into future technologies coming down the pipeline;
- contaminating each other by means of cross fertilizing training activities, dedicated internships program and specific recruiting campaigns.

3 OBLIGATIONS

For the execution of the scope of the Agreement,

3.1 ENEL will provide UNIVERSITY, directly or indirectly through the companies of the Enel Group, with:

   (i) all information available and that will become available concerning the ENEL research priorities and challenge to create new path & products, unless covered by specific non-disclosure agreement with third Parties;

   (ii) the nonexclusive right – granted only to participant into the Specialist Partners Program - to be informed and, if deem it appropriate by the University at its sole discretion, to possibly match

       a. requests for proposal within a specified time frame established by Enel, related to academic support within the specialist core competences;

       b. specific request for partnership related to application for public funds;

   (iii) List of specific Facilities and/or Labs Available for free from time to time for Academic purpose and according to a specific schedule to be finalize in relation to the University specific needs.

   (iv) Availability for mentoring & support for specific training activities run by the University for free up to 25 hours per year;

   (v) The nonexclusive right to compete for award-winning paid summer internship program for students and fresh alumni for the benefit of the Enel Group Companies.

3.2 UNIVERSITY will provide ENEL with:

   (i) any information available that is deemed appropriate to define and start possible joint research activities between UNIVERSITY and ENEL, unless covered by specific non-disclosure agreement with third Parties;
(ii) the nonexclusive right to be informed if deem it appropriate by the parties, to possibly match specific request for partnership related to the application for public funds;

(iii) Host technical personnel of Enel and/or Enel group companies for the purpose of collaborating with technical projects of interest subjected to specific agreements;

(iv) List of specific Facilities and/or Labs Available at cost under the UNIVERSITY rules related to Health and Safety from time to time for business purpose and according to a specific schedule to be finalized in relation to the Enel specific needs. Draft initial list at Annex 1.

(v) Executive education opportunities and participation in seminars, workshops and academic meetings for employees of Enel and/or Enel Group companies, as specified in Annex 2.

(vi) Availability to contribute in kind to the Enel Foundation research activities as per Annex 3.

3.3 JOINTLY the UNIVERSITY and ENEL will
(i) exchange of academic materials, publications and other information appropriately edited data sets in order to facilitate the joint research projects;

(ii) organize “info sessions”, targeted to reach objectives foreseen in article 2 and, if deemed appropriate by Enel, enlarging the scope of the partnership outside the boundaries of the specialist core competences.

4 PROJECT ORGANIZATION

4.1 The Parties shall establish a Project Management Group (the “PMG”) which shall include the persons (two for each party) nominated by the Parties to coordinate the joint activities. All decisions by the PMG shall be unanimous; in case unanimous agreement cannot be reached, the Parties will negotiate in good faith under the principles set forth hereunder to find a satisfactory solution.

4.2 Each Party agrees to nominate 1 (one) representative to the PMG with due authorisation to discuss, negotiate and agree decisions. The representative of ENEL shall be the chairperson of the PMG, whose only faculties shall be organizational ones (e.g., calling the PMG, setting the agenda, summing up the decisions taken by the PMG). In his or her absence at a meeting of the PMG, ENEL has the right to nominate a substitute.

4.3 In particular, the PMG shall:
   a. evaluate and discuss all the aspect of the partnership;
   b. prepare and approve, in full co-operation between the Parties, a report when deemed appropriate, which will include among others possible identification of projects of interest and relative reasons to be further deepened and discussed;

5 OBLIGATIONS AND LIABILITY

5.1 Each Party shall:

   (i) use the highest possible good standard endeavours to ensure the accuracy of any information it provides and the highest possible diligence in its research and development work and tasks it performs hereunder;
(ii) ensure not to use any proprietary rights or to grant licences, rights to use or any other similar industrial or intellectual property rights of a third party for which such Party has not acquired the right to grant licences and user rights to the other Party. In the event that a claim is brought by a third party, the Party having furnished the disputed documentation shall be solely responsible for the defence and settlement of such claim. Further, it shall indemnify and hold harmless the other Party from all costs, claims, actions, expenses or liabilities incurred by or imposed upon such other Party as a result of or in connection with its failure, breach or default by using other’s property rights or granting licences, rights to use or any other’s similar industrial or intellectual property rights.

5.2 Notwithstanding the above, the Parties shall assume no liability for the result of the cooperation and neither Party accepts any liability or responsibility for any use which may be made by the other Party of any results of the cooperation.

5.3 Neither Party shall be liable to the other in connection with this Agreement or the subject matter hereof for any indirect, incidental, special, or consequential damages, loss of revenue, cost of capital, or loss of profit or business opportunity, whether such liability arises out of contract, or as a result of the use of the information provided hereunder.

6 FURTHER AGREEMENTS

Except as provided in the present Agreement, specific research projects will be ruled by further individual agreements (hereinafter “Further Agreement”), to be entered into by the University and by Enel and/or the Enel Group Companies and/or Enel Foundation, after a specific call for proposal launched by the PMG and consequent award of the single project by the University.

7 DURATION

This Agreement shall remain in effect for two (2) years from the date of the signature. It may be terminated, amended or extended by a prior written agreement between both Parties hereto. The Agreement may be terminated early by either of the Parties, with three (3) months prior written notice and without right to compensation of any sort, or in the event of breach of the obligations set out in Articles 3, 4, 5, 6, 8, 9, 11 and 13.

8 INTELLECTUAL PROPERTY RIGHTS

The Parties acknowledge and agree that:

(i) for the purpose of this Agreement “Intellectual Property Rights” (“IPRs”) means a recognized protectable intellectual property right of either Party, such as patents, utility models, copyrights, corporate names, trade names, trademarks, trade dress, service marks, applications for any of the foregoing, software, firmware, trade secrets, mask works, industrial design rights, rights of priority, know how, design flows, methodologies and any and all other information or intangible protectable proprietary information that is legally recognized.

(ii) Each Party shall remain the exclusive owner of its own Background IPR’s existing at the date of signature of this Agreement.

(iii) With respect to All inventions, innovations and information created, invented or first reduced to practice independently by a Party during the term of this Agreement and availing exclusively of its Background IPR’s (“Foreground IPR’s”), the rights of authorship, copyright, ownership, database rights, patents, trademarks and other similar IPR’s shall vest exclusively in the Party creating it.
With respect to all inventions, innovations and information jointly created invented or first reduced to practice during the term of this Agreement by the Parties (or by one of the Parties availing of the other Party’s Background IPR’s) within a specific research project under the Further Agreement (Joint Foreground IPR’s), specific terms and conditions shall be negotiated in good faith by the Parties on a case by case basis in such Further Agreement, also regulating the rights of authorship, copyright, ownership, database rights, patents, trademarks and other similar IPR’s.

9 CONFIDENTIALITY

9.1 The execution of this APA is subject to the following provisions. Any written or oral information which will be provided in words, in writing, in electronic format or in whatever other manner by one Party to another Party, concerning Enel and the Companies of Enel Group, will be kept strictly confidential (“Confidential Information”). For the purposes of this APA the term Companies of the Enel Group means any company controlled by Enel S.p.A. until the control exists. To this purpose the term “control” means the possession, directly or indirectly, of the power to direct or cause the direction of management or policies (whether through ownership of securities, partnership or other ownership interests, by contract or otherwise), provided that, in any event, any company that owns or holds, directly or indirectly, more than fifty percent (50%) of the share capital or of the voting securities, or other equity interests of any other company will be deemed to control such company. Any information that is already in the public domain and any information that has been obtained from a third-party source in a lawful and independent manner shall be excluded from this confidentiality obligation.

9.2 As an exception, the disclosure of all or part of this Confidential Information by the Parties is permitted, when:
(i) this disclosure is made mandatory by the law, the regulations applicable to a Party, a court decision or an administrative ruling; or
(ii) this disclosure is made to any governmental, regulatory or tax authorities to which such Party is required to report.

In case one Party is required to disclose the Confidential Information to comply with applicable laws or pursuant to an order from a judicial, governmental or other competent authority, this Party has to promptly (and before performing such order, whether legally possible) communicate to the other Party such request.

9.3 Notwithstanding the above, the Parties may disclose this Confidential Information to their affiliates, directors, officers, and advisors who (i) have a business or technical need to know such Confidential Information in the course of their activities on behalf of such Party; (ii) have been informed of the confidential nature of such Confidential Information; and (iii) by the nature of their position, pursuant to written agreement, or otherwise, are bound by disclosure and use restrictions with respect to such Confidential Information substantially equivalent to those set forth in this APA.

9.4 Each Party’s confidentiality obligations shall survive for 5 (five) years after any expiry or termination of this Agreement.

10 DATA PROTECTION

10.1 Each Party undertakes to comply with the legislation regarding the protection and processing of personal data, as established in the Further Agreement and in compliance with the applicable legislation.

10.2 Each party undertakes to not process, disseminate, and communicate any personal data of the other Party except for the purposes related to the execution of this Agreement.

10.3 Each party agrees and warrants that the processing, including the transfer itself, of the personal data has been and will continue to be carried out in countries that are part of the EU or in countries...
that guarantee adequate protection of personal data pursuant to the European Commission's Adequacy Decisions in force on the date of this Agreement.

11 APPLICABLE LAW AND DISPUTE RESOLUTION
This Agreement shall be governed by and construed in accordance with the Italian law.
Any disputes or claims arising out of or in connection with this APA whether in connection with its coming into force, application or interpretation, shall be finally settled by the Court of Rome.

12 ASSIGNMENT
Neither Party may assign, transfer or dispose of this APA in whole or in part or any right or obligation hereunder to any individual, firm, institution or corporation without obtaining prior written consent from the other Party; and such consent shall not be unreasonably withheld.
Notwithstanding the above, UNIVERSITY’s and ENEL’s rights and obligations may be assigned to any company of the ENEL Group upon written communication of the same to the other Party.

13 COMMUNICATIONS
Any notice provided for by, or to be given in connection with this APA shall be in writing and delivered by hand or sent by registered mail return receipt requested or by facsimile and shall be effective upon receipt. Notices hereunder shall be delivered or sent at the addresses specified herein below or at such other address as the Parties may, from time to time, notify in writing in the manner provided for herein:

- If to UNIVERSITY:
  For the personal attention of:
  Prof. Paolo Comanducci
  address via Balbi, 5, 16126 Genoa
  PEC: protocollo@pec.unige.it

- If to ENEL:
  For the personal attention of:
  Mr. Carlo Papa Head of relationship with research institutes & universities
  address via Bellini 24, 00198 Rome
  E-mail: carlo.papa@enel.com

14 MISCELLANEOUS

14.1 The Parties shall always negotiate publicity and/or public announcement (e.g., announcement of the signing of the current APA and press releases). Except as may be required by law, there shall be no publicity and/or public announcement whose consent shall not be unreasonably withheld, conditioned, or delayed.
ENEL informs, and UNIVERSITY hereby acknowledges that, in managing the business activities and the relationships, ENEL refers to the principles contained in its Code of Ethics, in the Zero Tolerance Plan against the corruption and in the Compliance Program pursuant to Italian Legislative Decree 231/2001 (available at www.enel.com).
UNIVERSITY informs, and ENEL hereby acknowledges, that in managing the business activities and the relationships, UNIVERSITY refers to the principles contained in its Code of Ethics (available at the following link: https://unige.it/regolamenti/org/documents/decreto497_codice_etico.pdf)

14.2 If any provision of this APA is, or should become entirely or partially invalid, illegal or unenforceable, that provision or part-provision shall, to the extent required, be deemed to be deleted, and the validity and enforceability of the other provisions of this APA shall not be
affected. If any invalid, unenforceable or illegal provision of this APA would be valid, enforceable and legal if some part of it were deleted, the provision shall apply with the minimum modification necessary to make it legal, valid and enforceable. 
No failure or delay of a Party in enforcing or exercising any right hereunder shall be construed as a waiver thereof nor shall any single or partial exercise preclude any other or further enforcement or exercise thereof. 
None of the provisions of this APA shall be waived except by an instrument in writing signed by the Parties.-

14.3 This Agreement contains the entire understanding of the Parties with respect to the subject matter hereof and supersedes any prior agreement, arrangement, discussions, undertaking (whether written or oral) with respect thereto and such prior agreements shall be null and void and of no further force and effect. There are no other oral understandings, terms, or conditions and neither Party has relied upon any representation, express or implied, not contained in this Agreement. This APA does not obligate Enel to make an investment or provide funding to the UNIVERSITY.

This Agreement has been freely negotiated between the Parties, in witness whereof, the authorized representative of each Party has duly executed this APA in duplicate.

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For Enel For Enel For University

Francesca Di Carlo Ernesto Ciorra Paolo Comanducci
Head of HR & Organization Head of Innovability Rector
Enel Group Enel Group University of Genoa

(Firmato digitalmente il 26.7.2018)
ANNEX I

- “Interdepartmental Research Center on Cybersecurity of Electrical Infrastructures” (www.); head Prof.ssa Paola Girdinio; paola.girdinio@unige.it

- “Telecommunication Network and Telematics” (www.tnt-lab.unige.it); head Prof. Raffaele Bolla, raffaele.bolla@unige.it; Key words: 5G, Cloud, Fog, Edge Computing, ICT energy efficiency, security and reliability networks, Blockchain

- “Smart Lab” (www.smartlab.ws); head Prof. Davide Anguita, davide.anguita@unige.it; Key words: methods and algorithms for Computational Intelligence and Data Analytics.

- “IoT, ambient intelligence, localization and tracking Laboratory”; head Prof. Fabio Lavagetto, fabio.lavagetto@unige.it; Key words: ambient sensing, IoT apps, audio analysis, fog computing

- “Shared LAB Industry 4.0”; head Prof. Fabio Tonelli, shared with industries fabio.tonelli@unige.it
  Key words: Testing, training, integration, demonstration of soft 4.0 enabling technologies such as supply-chain planning and execution, Reference Architecture Model for Industry 4.0 (RAMI 4.0), industrial analytics, machine learning, production safety 4.0, augmented reality for quality inspection, electronic working instruction, technical data management, warehouse management, training.

- “Model of energy consumer behaviours and ex-ante simulation of energy consumption”; head Prof.ssa Giovanna Sissa, giovanna.sissa@eu.unige.it; Key words: Final-user awareness level modelling, impact of sociotechnical systems in energy use, changing consumer energy behavior.

- “Electrical mobility and autonomous vehicles”; head Prof. Maurizio Mazzucchelli, maurizio.mazzucchelli@unige.it; Keywords: Electric and Hybrid Vehicle, Standard and Opportunity Battery Charging and Battery Management, Intelligent Transport System, Planning of LPT Plants and networks

- “Evaluation of natural hazards impact on critical infrastructures” presso CIMA FONDATION (UNIGE) www.cimafoundation.org; head Prof. Luca Ferraris, luca.ferraris@unige.it

- “Data Science & Engineering”, head Prof. Alessandro Verri, alessandro.verri@unige.it; Key words: Research and technological transfer on the data life cycle.

- “Virtual Lab on Industrial Engineering”; head Prof. Roberto Revetria, roberto.revetria@unige.it
  Keywords: maintenance, security industry 4.0, IOT, digital twin, risk management, logistical, production

- “Wind engineering and structural dynamics” (www.windy.org); head Prof. Giovanni Solari, giovanni.solari@unige.it
“Energy Planning Laboratory”; head Prof. Vincenzo Bianco, vincenzo.bianco@unige.it

Key words: power market simulation, scenario analysis, energy planning, fuel market development, forecasting of energy consumption

ANNEX II

Each of the following courses will be available at no fees for 1 Enel employee/year:

1) II level Graduate Course in Cyber-security and critical infrastructure protection
   https://www.perform.unige.it/master/masterfse/master-cyber-security.html

2) II level Graduate Course in Internet of Things and Big Data

Further education opportunities could be identified from the second year of the partnership.

ANNEX III

UNIVERSITY can be involved to contribute in kind in research projects in the following Enel Foundation research areas of interests (the list is to be considered as non-exhaustive):

- Resilience of energy infrastructures
- Energy access
- Energy transition
- E-mobility
- Electrification of consumption