

[Highly Efficient Use of Energy]

Name	Affiliation	Research Theme	Related Websites
AMANO, Yoshiharu	Faculty of Science and Engineering	Integration of Energy and Data Flow System for Sustainable Society	http://www.waseda.jp/across/en/laboratory/lab0_amano/
ARIGA, Takashi	Faculty of Science and Engineering	City and Regional Planning for Environmentally Sustainable Development / Spatial Planning Theories and Citizen-based Project Methods of Machizukuri with Urban Eco-Systems / Climate Risk Mitigation with Local Community Empowerment / Participatory Urb	<ul style="list-style-type: none"> ●ARIGA Laboratory Web Site https://www.arigalab.arch.waseda.ac.jp/ ●Researchmap https://researchmap.jp/read0056014/published_papers ●UN COP26 Glasgow Urban and Regional Planning for the Global Climate Change https://www.youtube.com/watch?v=aI0M-zyshKs ●International Laboratory of Architecture and Urban Design (ILAUD) Urban and Regional Planning for the Global Climate Change https://www.ilaud.org/all4climate/?playlist=0173024&video=2636405 ●Invited Lecture Ferrara University International Urban Design Conference https://www.youtube.com/watch?v=YDzaicTq8KY ●Invited Lecture Thammasat University https://www.youtube.com/watch?v=m1BgOsv3Lz4
FUJIMOTO, Yu	Advanced Collaborative Research Organization for SmartSociety	low-carbon energy management using distributed energy resources,demand-sensitive carbon intensity assessment based on smart meter data	
FUNAKI, Yukihiko	Faculty of Political Science and Economics	laboratory experiment for energy saving / laboratory experiment for resource recycling	Published English articles: http://yfunaki.blogspot.com/
FURUYA, Masahiro	Faculty of Science and Engineering	Fusion reactor design / Offshore floating nuclear power plant design / Fission reactor safety evaluation / Machine learning approach of predictive maintenance / Electrochemical reduction catalyst development for CO2 utilization	https://www.aoni.waseda.jp/furuya/en/project.html
GOTO, Haruhiko	Faculty of Science and Engineering	City planning (regeneration of suburban residential areas, community development based on medical science)	https://pi-mbt.wixsite.com/home/home-e

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Name	Affiliation	Research Theme	Related Websites
HASEGAWA, Tsuyoshi	Faculty of Science and Engineering	Hardware-based AI for edge computing	https://waseda.pure.elsevier.com/en/persons/tsuyoshi-hasegawa
HAYASHI, Yasuhiro	Faculty of Science and Engineering	Energy management system via decarbonization x decentralization x digitalization (smart house / building, smart grid, smart city, etc.)	https://waseda.pure.elsevier.com/en/persons/yasuhiro-hayashi
HONJO, Shoichi	Advanced Collaborative Research Organization for Smart Society	Next-Generation Power Network Stabilization Technology Development for Large-Scale Integration of Renewable Energies	http://www.waseda.jp/across/en/top/
IINO, Yutaka	Advanced Collaborative Research Organization for Smart Society	Research on demand science, blackout resilience, and optimization of multi-energy networks	https://w-rdb.waseda.jp/html/100001705_en.html https://researchmap.jp/yutakaiino?lang=en
ISHIYAMA, Atsushi	Faculty of Science and Engineering	Application of superconducting technology for realization of energy-saving and low-carbon society	http://www.eb.waseda.ac.jp/ishiyama/
ITSUBO, Norihiro	Faculty of Science and Engineering	Environmental life cycle assessment, Environmental economic assessment, Evaluation of carbon pricing, Carbon management, Life cycle management, Sustainability assessment	
IWATA, Hiroyasu	Faculty of Science and Engineering	AI technology for energy consumption reduction in robotic automated drilling	http://www.ijmerr.com/index.php?m=content&c=index&a=show&catid=209&id=1733 http://jubi-party.jp/
JIN, Qun	Faculty of Human Sciences	Smart Energy Based on Data-Driven Efficiency and Optimization / A Dynamic Reward-Maximized Real-Time Bidding Scheme for Deregulated Electricity Markets / Attack Detection in Smart Grids	https://researchmap.jp/jinqun/?lang=english
KAMIYA, Yushi	Faculty of Science and Engineering	Electric-driven vehicles (Battery electric vehicles / Plug-in hybrid vehicles / Fuel cell vehicles)	https://w-rdb.waseda.jp/html/100000039_ja.html

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Name	Affiliation	Research Theme	Related Websites
KANEKO, Nanae	Faculty of Science and Engineering	Factor analysis and forecasting of electricity demand using machine learning approaches, Frequency control reserve procurement methods using virtual power plant of distributed energy resources	research map (https://researchmap.jp/NanaeKaneko)
KASAHARA, Hironori	Faculty of Science and Engineering	Green multicore computing (next-generation low power consumption and high performance computing)	
KATTO, Jiro	Faculty of Science and Engineering	Power saving for video processing and video communications	https://www.katto.comm.waseda.ac.jp/prof
KIKUSATO, Hiroshi	Faculty of Science and Engineering	Power system stabilization / Grid integration of inverter-based resource (IBR)	
KIMURA, Keiji	Faculty of Science and Engineering	Low power consumption and multi-core computing	http://www.apal.cs.waseda.ac.jp/kimura/index.html.en
KONDO, Keiichiro	Faculty of Science and Engineering	Energy saving in electric mobility systems / electric railway technologies that contribute to carbon neutrality / electrification technologies for automobiles, etc. / advanced utilization of electric power by power electronics	https://waseda.pure.elsevier.com/en/persons/keiichiro-kondo
KUSAKA, Jin	Faculty of Science and Engineering	Carbon-Neutral and Zero Emission Mobility / Research and Development on Internal Combustion Engine, Catalyst, Hybrid System with Carbon-Neutral and Decarbonized Fuels like e-fuel / Research and Development on eMachine in electric vehicles	http://www.f.waseda.jp/jin.kusaka/
MATSUDA, yu	Faculty of Science and Engineering	Advanced Thermal and Fluid Measurement and Control for Highly Efficient Energy Utilization	

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Name	Affiliation	Research Theme	Related Websites
MATSUKATA, Masahiko	Faculty of Science and Engineering	Carbon dioxide capture / carbon dioxide recycling (carbon recycling) / large-scale energy-saving technologies in chemical processes / plastics recycling / nitrogen cycle (ammonia production) Recycling of plastics / separation and catalytic processes related to CCUS /supply chain clarification and carbon neutralization related to chemistry / carbon neutralization of industrial complexes	https://matsukata-lab.jp/
MATSUMARU, Takafumi	Faculty of Science and Engineering	Application of robotics and mechatronics technology to efficient and productive human society	[Laboratory] http://www.waseda.jp/sem-matsumaru/ [Personal] http://www.f.waseda.jp/matsumaru/ [YouTube] https://www.youtube.com/channel/UCfWTATHOOQtLY_1kyICLmAw/videos?
MATSUNO, Takamichi	Faculty of Science and Engineering	Development of piezocatalysts utilizing minute pressure	https://shimajima-lab.com/
MITSUOKA, Masataka	Advanced Collaborative Research Organization for Smart Society	Decarbonization through sector coupling between the electricity system and the transportation system	
MIYASHITA, Tomoyuki	Faculty of Science and Engineering	Design optimization of Cooling System of Power Generation Device	http://www.miyashita.mmech.waseda.ac.jp/
MIYATAKE, Kenji	Faculty of Science and Engineering	efficient hydrogen production by water electrolysis	https://www.waseda.jp/inst/nanolife/en/institutes/
MIZOKAWA, Takashi	Faculty of Science and Engineering	research of energy-related materials with synchrotron radiation spectroscopy	https://www.f.waseda.jp/mizokawa/index_e.html
MOMMA, Toshiyuki	Faculty of Science and Engineering	Research and development of electrochemical energy storage devices and systems / Materials for Energy Storage / Battery System / Battery Diagnosis	https://www.f.waseda.jp/momma/

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Name	Affiliation	Research Theme	Related Websites
NAITOH, Ken	Faculty of Science and Engineering	Hydrogen engine with very high thermal efficiency for automobiles, power generations, aircrafts, and aerospace, Fundamental study on carbon neutral based on macroscopic economic theory, Weak nuclear engine	https://www.k-naito.mech.waseda.ac.jp/english/
NAKAGAWA, Kenta	Comprehensive Research Organization	Development of low-power optical interconnect metalenses using dielectric metasurfaces	
NAKAI, Hiromi	Faculty of Science and Engineering	Theoretical study on next-generation secondary battery development Theoretical study on CO2 capture, utilization, and storage (CCUS)	http://www.chem.waseda.ac.jp/nakai/?lang=en
OGATA, Tetsuya	Faculty of Science and Engineering	Development of robot OS using AI to reduce power consumption	https://ogata-lab.jp/member/ogata.html
OGAWA, Tetsuji	Faculty of Science and Engineering	Development of advanced technology for wind turbine operation (anomaly detection, etc.)	
OKADA, Hisanori	Environmental Research Institute	Integrated Social-System Management	
ONODA, Hiroshi	Faculty of Science and Engineering	Next-generation mobility system (mobility as a service (MaaS)) / smart community / regional energy systems / design for environment (DfE) / life cycle assessment (LCA) / energy management / waste energy utilization systems	
OTA, Eisuke	Faculty of Science and Engineering	Transformation of naturally-occurring molecules enabled by visible light and metals with high crustal abundance	Our lab's website (http://www.jyamaguchi-lab.com) Press Release of the latest research in this topic (https://www.waseda.jp/top/en/news/75852) Eurek Alert (https://www.eurekalert.org/news-releases/953259)
OYAIZU, Kenichi	Faculty of Science and Engineering	Development of Polymers for Energy Storage Applications and Ultra-high Refractive Index Polymers ecological energy conversion and storage system/recyclable hydrogen storage eco-material	https://oyaizu.myportfolio.com/

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Name	Affiliation	Research Theme	Related Websites
Ratnak, SOK	Research Organization for Next Generation Vehicles	Electrified transportation (HEV, PHEV, EV) / carbon-neutral fuel transportation / transportation emissions	http://www.f.waseda.jp/jin.kusaka/ https://researchmap.jp/ratnaksok?lang=en
SAITO, Kiyoshi	Faculty of Science and Engineering	Unified analysis method for energy conversion engineering / Digital transformation of thermal systems / next generation heat pump technologies	https://www.saito.mech.waseda.ac.jp/saito-lab/member/?lang=en
SAWADA, Hideyuki	Faculty of Science and Engineering	Micro-vibration actuators / Tactile display / Chemical robots driven by chemical reaction / Soft robots	http://www.sawada.phys.waseda.ac.jp/
SEKINE, Yasushi	Faculty of Science and Engineering	Hydrogen production/Carbon dioxide utilization/ Green innovation/Biomass utilization/Carbon capture	
SHI, Youhua	Faculty of Science and Engineering	Development of integrated systems with energy harvesting, sensing, and computation	
SODA, Osamu	Faculty of Social Sciences	Sustainable community development and ESD Local SDGs strategic story	
SUGANO, Shigeki	Faculty of Science and Engineering	Development of smart robots that recharge themselves at optimal times during the work hours	http://www.sugano.mech.waseda.ac.jp/
SUWA, Hiroshi	Advanced Collaborative Research Organization for Smart Society	power system control of next carbon neutral society	
TAKAGUCHI, Hiroto	Faculty of Science and Engineering	Policy for Energy saving and Decarbon on building / Improving performance of existing buildings / Environmental Communication, Planning of Zero-energy district / Planning of zero-energy building	https://takaguchi.arch.waseda.ac.jp/wp/?page_id=46
TANABE, Shinichi	Faculty of Science and Engineering	Zero-energy buildings / zero-energy houses / energy policy	

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Name	Affiliation	Research Theme	Related Websites
TANIGUCHI, Takuya	Center for Data Science	Development of energy-conversion materials aided by materials informatics	https://www.aoni.waseda.jp/takuya.taniguchi/index_eng.html
TOGAWA, Nozomu	Faculty of Science and Engineering	Highly-efficient next-gen computing / Quantum Computing	https://www.togawa.cs.waseda.ac.jp/English/
UENO, Takahiro	Faculty of Science and Engineering	Roadmap making to a zero-energy community/Energy independence in remote islands and mountainous regions/Proposals for low-carbon operations for existing buildings	https://researchmap.jp/ueno_takahiro?lang=en
UMEZU, Shinjiro	Faculty of Science and Engineering	Next-generation solar cell / Energy harvesting robotics	http://www.umeshin.mmech.waseda.ac.jp/en/
WASA, Yasuaki	Faculty of Science and Engineering	Mechanism design for real-time distributed optimization, control, and behavioral change in the social infrastructure systems	http://www.f.waseda.jp/wasa/index_e.html
WASHIZAKI, Hironori	Faculty of Science and Engineering	Software Energy Savings / Software Development Energy Savings / IoT, AI, and DX research that contributes to carbon neutrality and recurrent education for working professionals	http://www.washi.cs.waseda.ac.jp/
WATANABE, Takanobu	Faculty of Science and Engineering	Development of micro thermoelectric devices using silicon technology	https://ambientronics.com/introduction-2/greeting/?lang=en
YAMAGUCHI, Junichiro	Faculty of Science and Engineering	Development of molecular catalysts for carbon monoxide desorption, Developing molecules to improve plant production efficiency	http://www.jyamaguchi-lab.com
YAMAGUCHI, Kyohei	Faculty of Science and Engineering	Improving the efficiency of powertrain systems for mobility	

[Zero-Carbon Energy Supply]

Name	Affiliation	Research Theme	Related Websites
AKANUMA, Satoshi	Faculty of Human Sciences	Development of enzyme design techniques to promote enzyme utilization	http://www.f.waseda.jp/akanuma/indexe.html
ENDO, Noriko	Waseda Research Institute for Science and Engineering	Low carbon power sources and Energy security	
ESTEBAN, Miguel	Faculty of Science and Engineering	Simulation of zero emissions Japanese electricity grid / natural disasters and climate change mitigation	
FURUI, Kenji	Faculty of Science and Engineering	Application of petroleum and natural gas development technologies to CCS and geothermal development	https://waseda.pure.elsevier.com/en/persons/kenji-furui
FURUYA, Masahiro	Faculty of Science and Engineering	Fusion reactor design / Offshore floating nuclear power plant design / Fission reactor safety evaluation / Machine learning approach of predictive maintenance / Electrochemical reduction catalyst development for CO2 utilization	https://www.aoni.waseda.jp/furuya/en/project.html
HAMADA, Michiaki	Faculty of Science and Engineering	Biomolecular design that contributes to carbon neutrality	https://www.hamadalab.com/
HANADA, Nobuko	Faculty of Science and Engineering	Development of hydrogen storage materials and systems for the utilization of hydrogen energy	
HOMMA, Takayuki	Faculty of Science and Engineering	Next generation energy materials	http://www.sc.appchem.waseda.ac.jp/en/
ISHII, Hideo	Advanced Collaborative Research Organization for Smart Society	Integration of renewable energy sources, Next generation energy management	http://www.waseda.jp/across/en/top/ http://www.waseda.jp/across/en/laboratory/labo_hayashi/
ISHIMURA, Kosei	Faculty of Science and Engineering	Space solar power	https://waseda.pure.elsevier.com/en/persons/kosei-ishimura

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Name	Affiliation	Research Theme	Related Websites
ITSUBO, Norihiro	Faculty of Science and Engineering	Environmental life cycle assessment, Environmental economic assessment, Evaluation of carbon pricing, Carbon management, Life cycle management, Sustainability assessment	
KANEKO, Akihisa	Advanced Collaborative Research Organization for SmartSociety	energy management in transmission and distribution system with renewable energy	Waseda University Advanced Collaborative Research Organization for Smart Society (ACROSS)Research Institute for Advanced Network Technology (RIANT) website https://www.waseda.jp/inst/across/en/institutes/hayashi
KAWADA, Hiroyuki	Faculty of Science and Engineering	Development of advanced composite with high strength and high conductivity	
KAWANO, Mariko	Faculty of Law		
KOHORI, Fukashi	Faculty of Science and Engineering	Application of crystallization technology to energy storage devices	
KURIHARA, Masanori	Faculty of Science and Engineering	Behavior prediction of carbon dioxide capture, utilization and storage (CCUS) / Behavior prediction of geothermal reservoirs	https://waseda.pure.elsevier.com/en/persons/masanori-kurihara
MATSUKATA, Masahiko	Faculty of Science and Engineering	Carbon dioxide capture / carbon dioxide recycling (carbon recycling) / large-scale energy-saving technologies in chemical processes / plastics recycling / nitrogen cycle (ammonia production) Recycling of plastics / separation and catalytic processes related to CCUS /supply chain clarification and carbon neutralization related to chemistry / carbon neutralization of industrial complexes	https://matsukata-lab.jp/
MIYAGAWA, Kazuyoshi	Faculty of Science and Engineering	Hydroelectric power generation (renewable energy) / Pumped storage power generation (energy storage) / Hydrogen energy carriers (energy transport)	https://www.miyagawa.mech.waseda.ac.jp/members/professor/

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Name	Affiliation	Research Theme	Related Websites
MIZOKAWA, Takashi	Faculty of Science and Engineering	research of energy-related materials with synchrotron radiation spectroscopy	https://www.f.waseda.jp/mizokawa/index_e.html
MOMMA, Toshiyuki	Faculty of Science and Engineering	Research and development of electrochemical energy storage devices and systems / Materials for Energy Storage / Battery System / Battery Diagnosis	https://www.f.waseda.jp/momma/
NAKAGAKI, Takao	Faculty of Science and Engineering	Thermochemical energy storage and transport system of unused heat derived from renewable energy utilizing zeolite ad/desorption cycle	
NODA, Suguru	Faculty of Science and Engineering	Development and technical assessment of next-generation high-capacity power storage devices	http://www.f.waseda.jp/noda/index.html
OKADA, Hisanori	Environmental Research Institute	Integrated Social-System Management	
OKAZAWA, Atsushi	Faculty of Science and Engineering	Rechargeable batteries for renewal energy	http://www.f.waseda.jp/m-okubo/en/index.html
OKUBO, Masashi	Faculty of Science and Engineering	Next-generation power storage devices	https://www.f.waseda.jp/m-okubo/en/people.html
★ OTSUKI, Takashi	Faculty of Science and Engineering	Energy and power mix toward 2050 and beyond / Climate change mitigation / Integrated assessment of energy and critical mineral flows / The economics of hydrogen energy carriers / Renewable energy potentials	https://otsukilab.w.waseda.jp/
OYAIZU, Kenichi	Faculty of Science and Engineering	Development of Polymers for Energy Storage Applications and Ultra-high Refractive Index Polymers ecological energy conversion and storage	https://oyaizu.myportfolio.com/

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Name	Affiliation	Research Theme	Related Websites
SEDDON, Jack	Faculty of Political Science and Economics	I am working on questions of market structure and change and price benchmarks in the global commodity markets. This work grapples with the design of carbon trading and green bond markets and issues of structural change in oil and gas and other commodity m	www.jack-seddon.com
SEKINE, Yasushi	Faculty of Science and Engineering	Hydrogen production/Carbon dioxide utilization/ Green innovation/Biomass utilization/Carbon capture	
TAKAHASHI, Ryo	Faculty of Political Science and Economics	Community-based forest management, property rights and natural resource management, eco-friendly certification, sustainable consumption	http://www.waseda.jp/prj-takahashi/en/
TAKIZAWA, Kenji	Faculty of Science and Engineering	Computational analysis of turbomachinery, including wind turbines, and its lifetime evaluation	https://www.jp.tafsm.org/en/
TOMINAGA, Motoki	Faculty of Education and Integrated Arts and Sciences	Increased production of plant biomass	https://waseda.pure.elsevier.com/en/persons/motoki-tominaga
WAKAO, Shinji	Faculty of Science and Engineering	Technologies for the operation of solar power generation systems / Solar radiation prediction technologies	https://www.waseda.jp/pep/en/universities/professor/265/?university-category=waseda-en
YABE, Kuniaki	Advanced Collaborative Research Organization for Smart Society	The economical optimization of power and storage battery configuration and operation toward carbon neutral	http://www.waseda.jp/across/en/laboratory/labo_hayashi/
YAMAJI, Akifumi	Faculty of Science and Engineering	Advanced nuclear reactor design (Generation IV Reactor Design)	http://www.f.waseda.jp/akifumi.yamaji/
YAMAMOTO, Tomoyuki	Faculty of Science and Engineering	Development of materials for next generation solar cells	http://www.cms.sci.waseda.ac.jp/

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Name	Affiliation	Research Theme	Related Websites
AKAO, Kenichi	Faculty of Social Sciences	Economic theory of sustainable development and the tragedy of the commons, Economic analysis of international environmental agreements	
AOKI, Noriyuki	Faculty of Law	The Idea of Control under the Property Law in the Era of Carbon Neutral Policy	
ARIGA, Takashi	Faculty of Science and Engineering	City and Regional Planning for Environmentally Sustainable Development / Spatial Planning Theories and Citizen-based Project Methods of Machizukuri with Urban Eco-Systems / Climate Risk Mitigation with Local Community Empowerment / Participatory Urb	<ul style="list-style-type: none"> ●ARIGA Laboratory Web Site https://www.arigalab.arch.waseda.ac.jp/ ●Researchmap https://researchmap.jp/read0056014/published_papers ●UN COP26 Glasgow Urban and Regional Planning for the Global Climate Change https://www.youtube.com/watch?v=aI0M-zyshKs ●International Laboratory of Architecture and Urban Design (ILAUD) Urban and Regional Planning for the Global Climate Change https://www.ilaud.org/all4climate/?playlist=0173024&video=2636405 ●Invited Lecture Ferrara University International Urban Design Conference https://www.youtube.com/watch?v=YDzaicTq8KY ●Invited Lecture Thammasat University https://www.youtube.com/watch?v=m1BgOsv3Lz4
ARIMURA, Toshihide	Faculty of Political Science and Economics	Carbon pricing, energy conservation, renewable energy policy	
ASABA, Shigeru	Faculty of Commerce	Industry system for carbon neutral society	
ASAKAWA, Tatsuto	Faculty of Human Sciences	Research on consensus building in community toward carbon neutrality	
BABA, Kenshi	Faculty of Science and Engineering	Consensus building methods for environmental conflicts associated with the introduction of renewable energy, Policy diffusion/transfer/learning of climate change policies, Monitoring of climate change impacts by citizen science, Co-creation of climate cha	

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Name	Affiliation	Research Theme	Related Websites
BANZAI, Hiroyuki	Faculty of Law	Protection and Preservation of Marine Environment / Disarmament and Non-Proliferation of Weapons Mass Destruction / International Responsibility of States / Sources of International Law / Climate Security	https://researchmap.jp/h-banzai?lang=en
CHEUNG, Ming Yan William	Faculty of Commerce	Investments with the adaptation of climate risks	
DOLAN, Daniel P.	Faculty of Commerce	I am researching how AI, and particularly generative AI, can aid researchers and scholars to identify the strategies most effective for achieving carbon neutral status, and also how AI can implement those carbon neutral strategies.	
FUJIMURA, Shigeru	Faculty of Science and Engineering	Electricity Demand Forecasting, Production /Scheduling for Electricity Demand Leveling / Smart Industry	http://www.smartindustry.jp/
FURUYA, Shuichi	Faculty of Law	An International Human Rights Approach to Climate Change, Strategies of International Climate Litigation	
FURUYAMA, Nobuhiro	Faculty of Human Sciences	Elucidation of the Mechanism that Leads to Behavioral Change from Mere Awareness of Issues of Carbon Society from the Viewpoint of Human Sciences	
GOTO, Masayuki	Faculty of Science and Engineering	Design of Recycling- based Society System based on Data Science Approach	
GRAY, Matthew Barry	Faculty of International Liberal Studies	Investigation the changes in the political economies of major oil and gas producers in the Middle East	https://researchmap.jp/7000018060?lang=en
HAMADA, Michiaki	Faculty of Science and Engineering	Biomolecular design that contributes to carbon neutrality	https://www.hamadalab.com/

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Name	Affiliation	Research Theme	Related Websites
HAMAMOTO, Atsushi	Faculty of Social Sciences	Infrastructure construction, hydroelectricity, concrete and community for the next generation	
HAYASHI, Naoyuki	Faculty of Sport Sciences	decrease in food consumption, decrease in energy consumption due to choice of transportation	
HIRATSUKA, Motoshi	Faculty of Human Sciences	Role of terrestrial ecosystems in mitigation and adaptation of climate change (e.g., reducing emissions from deforestation and forest degradation, and sustainable forest management) / Elucidation of citizens' consensus building toward the realization of a carbon-neutral society from the viewpoint of human sciences	https://waseda.pure.elsevier.com/en/persons/motoshi-hiratsuka
HIROSE, Norikazu	Faculty of Sport Sciences	The prevention of injury and illness induces walkability contribute on the carbon neutral	https://hirose-labo.jimdofree.com/
IKENAGA, Takeshi	Faculty of Science and Engineering	High efficient social system (e.g. next-generation FA & robotics, high-reality remote work) based on ultra-low delay video information systems	http://www.f.waseda.jp/ikenaga/
ITSUBO, Norihiro	Faculty of Science and Engineering	Environmental life cycle assessment, Environmental economic assessment, Evaluation of carbon pricing, Carbon management, Life cycle management, Sustainability assessment	
JIN, Qun	Faculty of Human Sciences	Human Behavioral Data Analytics for Energy Saving	https://researchmap.jp/jinqun/?lang=english
KAMIJO, Yoshio	Faculty of Political Science and Economics	Theoretical and Experimental Investigations on Voting System to Correct Distortions in a Super-Aging Society	
KATAYAMA, Hajime	Faculty of Commerce	determinants of energy saving behavior	
KATO, Maki	Faculty of Human Sciences	Zero Emission Traffic to improve Health and Environment	

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Name	Affiliation	Research Theme	Related Websites
KATSUMA, Yasushi	Faculty of International Research and Education	planetary health	
KAWAKAMI, Tomoko	Faculty of Commerce	Research on social innovation and behavioral transformations oriented towards a circular economy / Marketing to popularize MaaS / Digital marketing for the utilization of big data in transportation systems / International comparative research on utilizati	https://www.waseda.jp/fcom/wbs/faculty-en/6112 https://www.waseda.jp/foLaw/icl/news-en/2020/10/08/6956/
KAWANO, Mariko	Faculty of Law		
KIKUCHI, Tomoo	Faculty of International Research and Education	The effects of green finance on international capital flows and global income inequality	https://sites.google.com/site/tomookikuchi76/
KURIZAKI, Shuhei	Faculty of Political Science and Economics	Social responsible investing / Global Accountability in the Shareholding Network / Corporate Control through Equity Ownership	https://doi.org/10.1371/journal.pone.0256160
KURODA, Kazuo	Faculty of International Research and Education	Education for Sustainable Development (ESD) / SDG Goal 4 / Global Governance of Education	https://www.jica.go.jp/jica-ri/experts/kuroda-kazuo.html
KURUMISAWA, Yoshiki	Faculty of Law	De- and reconstruction of basic legal categories for a sustainable society	

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Name	Affiliation	Research Theme	Related Websites
MATSUKATA, Masahiko	Faculty of Science and Engineering	Carbon dioxide capture / carbon dioxide recycling (carbon recycling) / large-scale energy-saving technologies in chemical processes / plastics recycling / nitrogen cycle (ammonia production) Recycling of plastics / separation and catalytic processes related to CCUS /supply chain clarification and carbon neutralization related to chemistry / carbon neutralization of industrial complexes	https://matsukata-lab.jp/
MATSUMARU, Takafumi	Faculty of Science and Engineering	Application of robotics and mechatronics technology to efficient and productive human society	[Laboratory] http://www.waseda.jp/sem-matsumaru/ [Personal] http://www.f.waseda.jp/matsumaru/ [YouTube] https://www.youtube.com/channel/UCfWTATHOOQtLY_1kyICLmAw/videos?
MATSUOKA, Shunji	Faculty of International Research and Education	Social Innovation Creation for Carbon Neutral	●研究室HP http://www.f.waseda.jp/smatsu/ ●研究所HP http://www.waseda.jp/prj-matsuoka311/
MATSUZAWA, Shin	Faculty of Law	Criminal punishment for environmental damage	
MIKOSHIBA, Yoshiyuki	Faculty of Letters, Arts and Sciences	Environmental ethics of the city / Intergenerational ethics	
MISHIMA, Hiroyuki	Faculty of Human Sciences	Mutuality in perception of affordances (psychological resources in the environment) and control of behavior.	
MIYACHI, Motohiko	Faculty of Sport Sciences	Contribution to the Carbon Net Zero Challenge by physical activity and nutrition improvement technology	
MORIMOTO, Akinori	Faculty of Science and Engineering	Advanced transport systems, smart city, compact city	http://www.waseda.jp/sem-morimoto/en_index.html
MORIMOTO, Hideka	Faculty of Law	Environmental and energy policies for carbon neutrality	

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Name	Affiliation	Research Theme	Related Websites
MORIOKA, Masahiro	Faculty of Human Sciences	A philosophical approach to environmental issues	http://www.lifestudies.org/
NABESHIMA, Kaoru	Graduate School of Asia Pacific Studies	Empirical Research on assessing the impacts of regulations and private standards on international trade	https://researchmap.jp/7000011927?lang=en
NAGASHIMA, Kei	Faculty of Human Sciences	Relationship between local thermal environment and disease; the influence of heat acclimation on health condition and energy management	http://btfl.jp/en/
NAITOH, Ken	School of Fundamental Science and Engineering	Hydrogen engine with very high thermal efficiency for automobiles, power generations, aircrafts, and aerospace, Fundamental study on carbon neutral based on macroscopic economic theory, Weak nuclear engine	https://www.k-naito.mech.waseda.ac.jp/english/
NAKAJIMA, Seio	Faculty of International Research and Education	Sustainable Automobilities	
NAKAJIMA, Tatsuo	Faculty of Science and Engineering	Developing behavior changing technology towards the carbon neutral society	www.dcl.cs.waseda.ac.jp
NAKAMURA, Hidetoshi	Faculty of Political Science and Economics	The role of Japan and the European Union in international climate regime	
NAKAMURA, Nobuo	Faculty of Commerce	Legal regulation on activities of business entities for sustainable society and economy	
NAKAMURA, Tamio	Faculty of Law	Law and sustainability for a sustainable world	
NAKANO, Kentaro	Faculty of Science and Engineering	Information systems for supporting environmental activities / Environmental project management for local communities / Assessment in regional implementation of environmental and energy technologies	http://www.aeontowa.jp/

【Transformation of Human Society】

Name	Affiliation	Research Theme	Related Websites
NEMOTO, Naoko	Faculty of Commerce	ESG factors and corporate values/Impact of ESG investment on Society	<ul style="list-style-type: none"> ●Strengthening ESG Investment under Covid-19 https://www.adb.org/adbi/news/strengthening-environmental-social-and-governance-investment-under-covid-19 ●ESG Investment Opportunities and Risks for Asia https://www.adb.org/adbi/news/environmental-social-governance-investment-opportunities-risks-asia
NISHIKIDO, Makoto	Faculty of Letters, Arts and Sciences	Renewable energy and acceptance by communities / Citizen activities for a carbon-free society	https://waseda.pure.elsevier.com/en/persons/makoto-nishikido
NOGUCHI, Haruko	Faculty of Political Science and Economics	Sustainable system design for health care and long-term care under global aging	http://www.waseda.jp/prj-wishproject/en/index.html
NOTOMI, Makoto	Faculty of Science and Engineering	Environmental impact assessment and LCA / Promotion of environmental education / Changing environmental awareness and promoting action / Development of methods for sustainable forest management / Factor analysis of sustainable environmental activities by	https://waseda.pure.elsevier.com/en/persons/makoto-notomi
NOZU, Takashi	Faculty of Science and Engineering	Balancing renewable energy with regional revitalization and food production	https://waseda.pure.elsevier.com/en/persons/takashi-nozu
OKADA, Hisanori	Environmental Research Institute	Integrated Social-System Management	
OTSUKA, Tadashi	Faculty of Law	Climate change legislation	https://waseda.pure.elsevier.com/en/persons/tadashi-otsuka
SAITO, Junichi	Faculty of Political Science and Economics	political responsibility for future generations	
SATO, Yasuhiko	Faculty of Science and Engineering	Design for structures in carbon neutral society	
SATOMI, Ryuju	Faculty of Human Sciences	An anthropological study of climate change and sustainability in the South Pacific	

【Transformation of Human Society】

Name	Affiliation	Research Theme	Related Websites
SAWADA, Susumu	Faculty of Sport Sciences	Promotion of physical activity	https://sites.google.com/site/sssawadalab/
SCHARLOTH, Joachim	Faculty of International Liberal Studies	social movements, history of environmental movements in Europe, action repertoire of environmental movements, discourses on violence in social movements	personal website: http://scharloth.com/index_en.htm website of publication series on social movements I co-edit: https://www.berghahnbooks.com/series/protest-culture-and-society
SHADRINA, Elena	Faculty of International Liberal Studies	Cooperation for Renewable Energy Development in Central Asia (2022 AY project) Global, International and National Perspectives on Climate Change Action (2023-2025 AY sabbatical project)	
SHIMOKAWA, Satoru	Faculty of Political Science and Economics	Sustainable food production and consumption	https://www.waseda.jp/prj-foodecon/english/
SHIZUME, Masato	Faculty of Political Science and Economics	socio-economic history of the global environmental problem	
SODA, Osamu	Faculty of Social Sciences	Sustainable community development and ESD / Local SDGs strategic story	
SUGIMORI, Eriko	Faculty of Human Sciences	Elucidation of Cognitive Biases that Hinder the Realization of a Carbon-Neutral Society	
SUZUKI, Rieko	Faculty of Law	The need for societal change in order to address climate change (mainly lifestyle changes based on growing awareness of the related issues)	
TAGO, Atsushi	Faculty of Political Science and Economics	Survey Experiment on Climate Change and International Conflict	https://github.com/A-Tago
TAKAHASHI, Ryo	Faculty of Political Science and Economics	Community-based forest management, property rights and natural resource management, eco-friendly certification, sustainable consumption	http://www.waseda.jp/prj-takahashi/en/

【Transformation of Human Society】

Name	Affiliation	Research Theme	Related Websites
TAMURA, Tatsuhisa	Faculty of Law	Law and Public Policy on SDGs and Carbon Neutrality	
TOYAMA, Yuta	Faculty of Political Science and Economics	Data analysis and regulatory design of emissions trading system / Measurement of energy productivity	https://yutatoyama.github.io/
TSUJIUCHI, Takuya	Faculty of Human Sciences	Medical Anthropological Study on Environmental Racism and Minority care in Realizing a Carbon-Neutral Society Learning from the Fukushima Nuclear Disaster	https://wima.jp/?page_id=1553
UEKI, Chikako	Faculty of International Research and Education	Carbon Neutrality and Great Power Relations	
WASHIZAKI, Hironori	Faculty of Science and Engineering	Software Energy Savings / Software Development Energy Savings / IoT, AI, and DX research that contributes to carbon neutrality and recurrent education for working professionals	http://www.washi.cs.waseda.ac.jp/
WASHIZU, Ayu	Faculty of Social Sciences	Renewable energy input-output analysis / a smart society for simultaneous resolution of the environment and other social issues / household environmental bookkeeping analysis for lifestyles in smart society	http://www.f.waseda.jp/washizu/ https://waseda.pure.elsevier.com/en/persons/ayu-washizu
YAGUCHI, Tetsuya	Faculty of Science and Engineering	City Planning/ Urban Design (Regenerative Design of the Built Environment)	http://yaguchilab.arch.waseda.ac.jp/
YAMADA, Kazuyoshi	Faculty of Human Sciences	Paleoclimates, interdisciplinary studies between environments and human activities	
YAMAMOTO, Satomi	Faculty of Letters, Arts and Sciences	Research Project at the Waseda Institute for Advanced Study, Humanities in the Anthropocene	https://www.waseda.jp/inst/wias/other-en/2021/10/29/8541/

【Transformation of Human Society】

Name	Affiliation	Research Theme	Related Websites
YANG, Da	Faculty of Letters, Arts and Sciences	Research on Online University Entrance Examinations -An Attempt at Fairness in IBT (Internet Based Testing)	https://www.kukangainen.co.jp/
YOSHIE, Osamu	Faculty of Science and Engineering	technology development for DX (digital transformation) and industrial structure revolution, human resource development for DX (digital transformation)	
YUKI, Takenobu	Faculty of Commerce	Reinterpreting Energy Transitions: A Corporate and Financial Network Perspective	

[Science of Climate Change]

Name	Affiliation	Research Theme	Related Websites
BABA, Kenshi	Faculty of Science and Engineering	Consensus building methods for environmental conflicts associated with the introduction of renewable energy, Policy diffusion/transfer/learning of climate change policies, Monitoring of climate change impacts by citizen science, Co-creation of climate cha	
ESTEBAN, Miguel	Faculty of Science and Engineering	Simulation of zero emissions Japanese electricity grid / natural disasters and climate change mitigation	
GOTO, Masayuki	Faculty of Science and Engineering	Design of Recycling- based Society System based on Data Science Approach	
HIRATSUKA, Motoshi	Faculty of Human Sciences	Role of terrestrial ecosystems in mitigation and adaptation of climate change (e.g., reducing emissions from deforestation and forest degradation, and sustainable forest management) / Elucidation of citizens' consensus building toward the realization of a carbon-neutral society from the viewpoint of human sciences	https://waseda.pure.elsevier.com/en/persons/motoshi-hiratsuka
ITSUBO, Norihiro	Faculty of Science and Engineering	Environmental life cycle assessment, Environmental economic assessment, Evaluation of carbon pricing, Carbon management, Life cycle management, Sustainability assessment	
KAMEYAMA, Wataru	Faculty of Science and Engineering	AI System for Early Prediction of Extreme Weather Using Dual-frequency Terahertz Radar	http://www.km.comm.waseda.ac.jp/
KAWANO, Mariko	Faculty of Law		
KAZAMA, Kentaro	Faculty of Human Sciences	Environmental impact assessments of renewable energy (particularly for wind power generation) / Impact of climate change on marine ecosystems and marine organisms	https://waseda.pure.elsevier.com/en/persons/kentaro-kazama

[Science of Climate Change]

Name	Affiliation	Research Theme	Related Websites
MORIYA, Kazuyoshi	Faculty of Education and Integrated Arts and Sciences	Increasing accuracy of future climate change projections on the basis of paleoclimate analyses of the past global warming Earth	http://www.waseda.jp/sem-paleobiology/English/index_E.html
NAGASHIMA, Kei	Faculty of Human Sciences	Relationship between local thermal environment and disease; the influence of heat acclimation on health condition and energy management	http://btfl.jp/en/
OKADA, Hisanori	Environmental Research Institute	Integrated Social-System Management	
OKOCHI, Hiroshi	Faculty of Science and Engineering	Environmental and health effects of atmospheric microplastics / synergistic effects of global warming and air pollution on the formation of torrential rains / observations of Earth's atmosphere using Mt. Fuji	https://waseda.pure.elsevier.com/en/persons/hiroshi-okochi
SODA, Osamu	Faculty of Social Sciences	Sustainable community development and ESD / Local SDGs strategic story	
SUGIMORI, Eriko	Faculty of Human Sciences	Elucidation of Cognitive Biases that Hinder the Realization of a Carbon-Neutral Society	
SUZUKI, Rieko	Faculty of Law	The need for societal change in order to address climate change (mainly lifestyle changes based on growing awareness of the related issues)	
YAMADA, Kazuyoshi	Faculty of Human Sciences	Paleoclimates, interdisciplinary studies between environments and human activities	
YOKOSAWA, Masayuki	Faculty of Human Sciences	Evaluating climate change impacts on ecosystem and proposing adaptation measures / Elucidating carbon circulation processes in ecosystem.	
YOSHITAKE, Shinpei	Faculty of Education and Integrated Arts and Sciences	Quantification of carbon balance in the forest ecosystems Long-term and stable carbon sequestration in the forest ecosystems using biochar application	

【Resource Circulation and Carbon Recycling】

Name	Affiliation	Research Theme	Related Websites
AKIYAMA, Mitsuyoshi	Faculty of Science and Engineering	Development of carbone-negative concrete	
FUKUNAGA, Akihiko	Faculty of Science and Engineering	Creation of novel nanocomposite electrodes for direct electrochemical synthesis of fuels and chemicals from carbon dioxide / Research and development of proton-conducting solid oxide fuel cells	http://www.sc.appchem.waseda.ac.jp/en/prof02
FUKUSHIGE, Shinichi	Faculty of Science and Engineering	Digital platform for circular economy, Product lifecycle simulation, Design for environment	
FUNAKI, Yukihiko	Faculty of Political Science and Economics	laboratory experiment for energy saving / laboratory experiment for resource recycling	Published English articles: http://yfunaki.blogspot.com/
GOTO, Masayuki	Faculty of Science and Engineering	Design of Recycling- based Society System based on Data Science Approach	
HARA, Taichi	Faculty of Human Sciences	Resource recycling of agricultural and marine resources CO2 reduction through the creation of alternative foods for livestock Development of high value functional entomophagy foods	
HOSOI, Atsushi	Faculty of Science and Engineering	Development of damage healing technology for metallic materials	https://www.hosoi.amech.waseda.ac.jp/index-e.html
ITSUBO, Norihiro	Faculty of Science and Engineering	Environmental life cycle assessment, Environmental economic assessment, Evaluation of carbon pricing, Carbon management, Life cycle management, Sustainability assessment	
KANOMATA, Nobuhiro	Faculty of Science and Engineering	Development of functional organic molecules useful for CO2 capture / Research on the design and synthesis of organic amine molecules for efficient atmospheric CO2 capture / Development of amine absorbents suitable for CO2 recovery from exhaust gases	http://www.chem.waseda.ac.jp/kanomata/index.html

【Resource Circulation and Carbon Recycling】

Name	Affiliation	Research Theme	Related Websites
KAWANO, Mariko	Faculty of Law		
KIGA, Daisuke	Faculty of Science and Engineering	Bio production by using biochemical reaction in test tube	
KIRIMURA, Kotaro	Faculty of Science and Engineering	Use of carbon dioxide as a resource by biocatalysts containing enzymes and microorganisms	At present, in preparation
KOMINE, Hideo	Faculty of Science and Engineering	THE CREATION OF A CARBON CAPTURE URBAN ENVIRONMENT USING CO2 FIXATION MATERIALS	Waseda Geo-Lab Website: http://www.f.waseda.jp/hkomine/ Research Topic: http://www.f.waseda.jp/hkomine/report.html JSPS fund Research: https://kaken.nii.ac.jp/en/grant/KAKENHI-PROJECT-23656294/
KONDO, Yasushi	Faculty of Political Science and Economics	Input-output analysis of material cycles and waste management	https://www.waseda.jp/fpse/faculty-en/2019/08/15/724/
Manabu Inutsuka	Waseda Center for a Carbon Neutral Society	Polymer chemistry for material cycles	
MATSUKATA, Masahiko	Faculty of Science and Engineering	Carbon dioxide capture / carbon dioxide recycling (carbon recycling) / large-scale energy-saving technologies in chemical processes / plastics recycling / nitrogen cycle (ammonia production) Recycling of plastics / separation and catalytic processes related to CCUS /supply chain clarification and carbon neutralization related to chemistry / carbon neutralization of industrial complexes	https://matsukata-lab.jp/
NAKAGAKI, Takao	Faculty of Science and Engineering	Research and development of carbon dioxide mineralization technology co-producing valuable materials from seawater and desalination brine / High speed and efficiency CO2 mineralization technology using iron and steel making slags / Enhanced rock weatherin	https://www.f.waseda.jp/takao.nakagaki/aboutus.html

【Resource Circulation and Carbon Recycling】

Name	Affiliation	Research Theme	Related Websites
NAKAI, Hiromi	Faculty of Science and Engineering	Theoretical study on next-generation secondary battery development Theoretical study on CO2 capture, utilization, and storage (CCUS)	http://www.chem.waseda.ac.jp/nakai/?lang=en
NAKAMURA, Shinichiro	Faculty of Political Science and Economics	Input-output analysis of waste and resource management in circular economies with emphasis on LCA and MFA	http://www.f.waseda.jp/nakashin/index.html
NOTOMI, Makoto	Faculty of Science and Engineering	Environmental impact assessment and LCA / Promotion of environmental education / Changing environmental awareness and promoting action / Development of methods for sustainable forest management / Factor analysis of sustainable environmental activities by	https://waseda.pure.elsevier.com/en/persons/makoto-notomi
OKADA, Hisanori	Environmental Research Institute	Integrated Social-System Management	
OTA, Eisuke	Faculty of Science and Engineering	Transformation of naturally-occurring molecules enabled by visible light and metals with high crustal abundance	Our lab's website (http://www.jyamaguchi-lab.com) Press Release of the latest research in this topic (https://www.waseda.jp/top/en/news/75852) Eurek Alert (https://www.eurekalert.org/news-releases/953259)
★ OTSUKI, Takashi	Faculty of Science and Engineering	Energy and power mix toward 2050 and beyond / Climate change mitigation / Integrated assessment of energy and critical mineral flows / The economics of hydrogen energy carriers / Renewable energy potentials	https://otsukilab.w.waseda.jp/
OYAIZU, Kenichi	Faculty of Science and Engineering	Development of Polymers for Energy Storage Applications and Ultra-high Refractive Index Polymers ecological energy conversion and storage system/recyclable hydrogen storage eco-material	https://oyaizu.myportfolio.com/
SEKINE, Yasushi	Faculty of Science and Engineering	Hydrogen production/Carbon dioxide utilization/ Green innovation/Biomass utilization/Carbon capture	

【Resource Circulation and Carbon Recycling】

Name	Affiliation	Research Theme	Related Websites
TAKEYAMA, Haruko	Faculty of Science and Engineering	Carbon cycle of raw materials: innovative use of microbiological resources	http://www.takeyama-lab.sci.waseda.ac.jp/en/
TANIMIZU, Yoshitaka	Faculty of Science and Engineering	Green supply chain management / Supply chain strategies for eliminating the trade-offs between environmental issues and economic efficiency / Low carbon supply chain, Closed loop supply chain	
TOKORO, Chiharu	Faculty of Science and Engineering	Advanced recycling processes / development of separation technologies for recycling / advising on designs that consider recycling	https://waseda.pure.elsevier.com/en/persons/chiharu-tokoro
TSUNEDA, Satoshi	Faculty of Science and Engineering	Microbial screening technology for bioproduction	
UMEZU, Shinjiro	Faculty of Science and Engineering	Next-generation solar cell / Energy harvesting robotics	http://www.umeshin.mmech.waseda.ac.jp/en/
VO, Thanh Hung	Waseda Research Institute for Science and Engineering	Global Carbon Storage / Carbon capture utilization and storage / Energy Transition	https://researchmap.jp/hungccs?lang=en
YAMAGUCHI, Katsunori	Faculty of Science and Engineering	Recycling metal resources	https://waseda.pure.elsevier.com/en/persons/katsunori-yamaguchi

【Other】

Name	Affiliation	Research Theme	Related Websites
AOKI, Takao	Faculty of Science and Engineering	Research toward realization of fault-tolerant universal quantum computers	
YAMANA, Hayato	Faculty of Science and Engineering	Privacy-preserving data analysis	https://www.yama.info.waseda.ac.jp/crest/

<Reference Information>

● **Waseda University Researchers Database**

<https://w-rdb.waseda.jp/search?m=home&l=en>

● **Waseda University Pure (Research Profiles by Scopus)**

<https://waseda.pure.elsevier.com/en>