

Green & Digital Research Map Carinthia 2022



Automation and Artificial Intelligence (AI)

AAU – Inst. for Artificial Intelligence and Cybersecurity – Optimization, Knowledge Processing, Efficient Production Systems
AAU – DIARC – Responsible & Ethical AI, Computational Linguistics, Algorithms & Society
AAU – Department of Economics – Inflation Measurement, Big Data, Scanner Data
DEIF Wind Power Technology Austria
Machine Learning, Retrofit of Existing Wind Turbines, Self-Optimizing Systems
Infineon Technologies Austria – Thin-Wafer-Handling, Automated Fab
Joanneum Research – ROBOTICS – Industrial Robotics, Robot Safety, Sensors/Perception
KESTRELEYE – Industrial Image Processing, Neural Networks, AI-Training-Pipelines/Software
PMS – Test Field Development, Digital Twin, Manufacturing Guidance Software

Green Mobility

AAU – Inst. for Mathematics – Micro Public Transport, Demand-Responsive Transport, Resource-Efficient Logistics Planning
AAU – Inst. for Production, Energy and Environmental Management – Resource-Saving Transport, Efficient Production
Economica Inst. for Economic Research Carinthia – Digital Technologies in the Mobility Sector
Infineon Technologies Austria – Power Electronics, Energy Efficiency, Wide-Band-Gap-Semiconductors
Joanneum Research – LIFE - Competence Group Urban Living Lab
Agent-Based Traffic Modeling, Mobility as a Service, Digital Twin

Green Heating and Electricity

AAU – Institute for Technics and Science Research – Energy Transformation, Energy Transition
AAU – Institute of Economics – Vehicle to Grid Problems, Energy Supply Assurance
Encom Energy Performance – Photovoltaics, Predictive Maintenance
FH Kärnten – Research Group ABMS - Advanced Battery Management Systems
Storage Technologies, Li-Ion Batteries
GREENoneTEC Solarindustrie – Solar Thermal Collectors, Solar Water Heaters
KNG-Kärnten Netz – Distribution Networks, Renewable Energy Sources, Energy Communities
Kelag – Energy Communities, Climate Neutral Community, Renewable Energy
KEW - Kelag Energie und Wärme – High Temperature Heat Pumps, Geothermal Energy, Digital Twin
PMS – Thermoprocessing, Photovoltaics&Solar Application

IoT, Sensors, Semiconductor Industry

CISC Semiconductor – Security, Privacy, Performance
FH Kärnten – ADMIRE – Additive Manufacturing, Sensors, Robotic Systems
Infineon Technologies Austria – IoT-Systems, MEMS, System-on-Chip, Packaging
IoT40 Systems – AI, Sensors, Automation
J. Pichler – Airflow and Air Quality Sensor Technology, Ventilation System Solutions
Lam Research
Wet-Chemical Processes on Si-Single Wafers, Sensing / Robotics / Automation, Plant Productivity Optimization
Messfeld – Maintenance, Energy Monitoring, Industrial Measurement Technology
Ortner Reinraumtechnik – Rapid Decontamination Assessment
Silicon Austria Labs – Microsystems
Thin-Film Technologies; Integrated Photonics Technologies,
Magnetic Microsystem Technologies
Silicon Austria Labs - Sensorsystems – Photonic Systems; Electronic Sensors, Sensor Applications

IT Security, Collaborative Systems and Networks

AAU – DIARC – System Security, Side Channel Attack
AAU – Karl Popper Kolleg SEEROSE – Risk Management, Incentive-based Security, ROS Security
AAU – Inst. for Computer Science Systems
Program Analysis, Automating Software Engineering, Human-Computer Interaction
AAU – Inst. of Economics – Public goods provision problems
AAU – Inst. for Intelligent System Technologies – State Estimation, Sensing and Perception, Machine Learning
AAU – Institute for Statistics – Computational Statistics, Computational Stochastics, Simulation
AAU – Inst. for Mathematics
Extremum Seeking Control, Collision-Free Navigation, Stabilization of Autonomous Vehicles, Public Key Cryptography
Bitmovin – Adaptive Streaming over HTTP, Emerging Networked Multimedia Services
dataCycle – DataHub, DataSpace, Knowledge Graph
Lakeside Labs – Self-Organizing Systems/Swarm Intelligence, Collaborative Drone and Robot Systems
TECHNIKON Forschungs- und Planungsgesellschaft – Hardware/Software entangled Security



Intermediaries and Multipliers

BABEG Carinthian Agency for Investment Promotion and Public Shareholding
DIH INNOVATE
build! Gründerzentrum
Digital Innovation Hub Süd
Green Tech Cluster
High Tech Campus Villach
Kunststoff-Cluster
Kärntner Wirtschaftsförderungs Fonds
Lakeside Science & Technology Park
Silicon Alps Cluster
Software Internet Cluster
Timber Innovation Network Alpe Adria

Climate-sensitive Regional Development

AAU – Inst. for Geography and Regional Research – Sustainable regional industries, Agriculture, Forestry
AAU – Inst. for Technology and Science Research
Smart Farming / Climate-Smart Farming, Smart Cities & Regions
FH Kärnten – Research Group TransSpace - TRANSformative Societal Political AND Cultural Engagement
Demographic Change, Globalization, Interculturality
Kärntner Inst. für höhere Studien – Regional Economic Effects, Trade-offs, Energy Efficiency
City of Klagenfurt am Wörthersee – Climate Change Adaptation Measures, Energy Communities, Mobility as a Service
City of Villach – Climate Neutral Cities, Smart Cities, Sustainable Urban Development

Climate Change and Biodiversity

AAU – Institute for Philosophy – Climate Change, Climate Crisis, Environmental Ethics
AAU – Institute for Technology and Science Research – Citizen Science, Public Participation
AAU – Institute for Economics – Equilibria with incomplete specification, Big Data, Argo-Daten
E.C.O. Institut für Ökologie – Development of Protected Areas, Carbon Storage, Biodiversity Monitoring
ExAqua Forschungs GmbH – Climate Change Adapted Plant Breeding, Biological Vegetation Control
FH Kärnten – Research Group SIENA - Environmental Monitoring – Environmental Data, Unmanned Systems, Smart Data
FH Kärnten – UNESCO Chair on Sustainable Management of Conservation Areas
Biodiversity, Life on Land, Protected Areas
Fraunhofer Austria Research – Fraunhofer Innovation Center for Digitalization and Artificial Intelligence KI4LIFE
KI4WALD - Artificial Intelligence for Environmental Monitoring

Communication Technologies and Computer Systems

AAU – Digital Age Research Center (DIARC) – Data Analytics & Algorithms in Everyday Life, Speech Recognition & Language Generation
AAU – Inst. for Information Technology – Distributed/Cloud/Edge Computing
AAU – Inst. for Networked and Embedded Systems – Mobile Communications, Drones, Sensor Networks
AAU – Inst. of Economics – Algorithmic Game Theory, Mechanism Design
Alturos Destinations – Marketing, Advertising Services, Internet Platforms
COYERO – Connected Services, Secure Access
FH Kärnten – CIME - Carinthian Institute for Microelectronics – Integrated Systems and Circuits Design
FH Kärnten – ROADMAP5G - R&D Center for 5G Use Case Integrations – 5G
Neptun Data Processing – Media Intelligence, Natural Language Processing, Artificial Intelligence
Onda TLC – Tracking Systems, Data products
PiktID – Safe Data Extraction
City of Villach – Urban Cockpit, Lorwan Sensors in Public Space, Mobility and Environmental Data
Streamdiver GmbH – Deep Search, Deep Learning, Artificial Intelligence
TECHNIKON Forschungs- und Planungsgesellschaft – 6G

Circular Economy

AAU – Inst. of Economics – General Equilibrium with Externalities
AAU – Inst. for Innovation Management and Entrepreneurship – Emission-Reduced/Climate-Neutral Business Models
Europlast Kunststoffbehälterindustrie – CO₂-Neutral Production, Smart/Digital Containers
KIOTO Photovoltaics/Sonnenkraft – Recycling & Development of Photovoltaic Modules
Lindner Recyclingtech – Intelligent Sorting, Shredder Technology

Sustainable Industry

AAU – Inst. for Innovation Management and Entrepreneurship – Digital Technologies & Sustainable Value Creation
AAU – Inst. for Statistics – Boundary Layer Meteorology, Pollutant Dispersion Simulation, Environmental Sensor Networks
FH Kärnten – AMAVIS – 3-D Printing, Additive Manufacturing
FH Kärnten – CISMA – Integrated piezoelectric sensors, Acoustic metamaterials, Phase-changing materials
FH Kärnten – Research Group SIRaD – Transdisciplinary, Sustainable Innovations
FH Kärnten – TripleE - Entrepreneurship & Entrepreneurship Education – Entrepreneurship, Start-Ups
Fundermax – Sustainable Products, Green Electricity & District Heating, Upcycling/Recycling
HASSLACHER NORICA TIMBER – R&D Department, Norms & Certification
Sensors, Autonomous Production Plants, Forest of the Future
Joanneum Research – LIFE - Sustainable Energy Systems and Lifestyles
Climate Neutrality, Circular Economy, Life Cycle Analysis
Kompetenzzentrum Holz – Wood K plus – Surface technology, Wood-Based Materials, Composites
MTI – Process Engineering, Electroanalytics
Sensolligent – SPS Circuits, Artificial Intelligent Systems
Treibacher Industrie – Steel Refining Alloys Ferrovandium and Ferromolybdenum, Hard Materials
Triboteco – Green Hydrogen, Additives for Wear Protection for Brake Pads
w&p Zement – CO₂-Neutral, Energy-Efficient Cement Production

Sustainable Construction

ARCH+MORE Ziviltechniker – Revitalization, Brownfield Development, Material Flows
FH Kärnten – Research Group CONNA - Construction needs Nature – Nature Protection, Space Consumption, Resource Scarcity
FH Kärnten – Research group FuCoSo - Future Concret Solutions
High-performance Concretes, Material and Analysis Technologies, Resource-Saving Construction Methods
J. Pichler – Heat Pump Technology, Fire Protection and Smoke Extraction Technology
nonconform – Participatory Development, Climate Neutral Building Culture
PSP – Stochastic Analysis, Structural Health Monitoring
Schwing GmbH – Development of Products, Automatisations, Process Development

The map was created and checked with the greatest possible care. Nevertheless, typesetting or printing errors cannot be ruled out.

AAU - University of Klagenfurt
FH Kärnten - Carinthia University of Applied Sciences

BABEG
SUCCESS IN CARINTHIA

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Sources: Statistik Austria research facilities catalogue (2022); FFG research database (2022); Green Tech Cluster "Green Tech Valley Research Map" (2022); GreenTech innovation clusters/hubs - Study commissioned by the BMK - Study commissioned by the BMK, Institute of Economic Research (2022); Keep.eu (Interreg with Carinthian participation 2000-2022); Innovation and Research Award of the State of Carinthia (KWF) 2012-2019; Innovation Assistant Network of the KWF 2021-2022; Annual Reports on Permits and Grants of the KWF 2013-2021; CORDIS - EU Research Results (2022).

Your institution/company is doing research in Carinthia and you would like to be represented on the map? Simply contact innovation@babeg.at.

Digital version

