

**International Urban Cooperation
: Sustainable and Innovative Cities and Regions
Asia and the Americas
(IUC) Japan
4th Exchange Meeting of EU and Japanese Cities
Friday May 17th 2019**



Collaborations between Essen & Koriyama

ESSEN

**-Toward a mutually-beneficial & future-oriented relationship-
Cities of Essen & Koriyama**





Exchanges between Essen & Koriyama

(November 6th, 2017 - May 16th, 2019)

Promotion of Exchange with the City of Essen, the State of NRW, Germany (1)

➤ November 6, 2017

◆ Selected for the EU International Urban Cooperation (IUC) Project

Cities of Essen and Koriyama were selected as pairing cities

➤ December 1st, 2017

◆ Concluded the MOU on Inter-city Cooperation

- Witnessed by: Governor of Fukushima Prefecture, Ministry of Energy, the State of NRW and the Embassy of Germany in Tokyo
- MOU in the fields of 'Renewable Energy' and 'Medical Device Industry'

◆ Courtesy Visit to Chairperson of City Assembly

◆ Site Visits by the Hon. Tomas Kufen Lord Mayor of Essen City

- Fukushima Renewable Energy Institute, AIST (FREA)
- Fukushima Medical Device Development Support Center (FMDDSC)





The 1st Study Tour on the EU Programme IUC Project

➤ Tuesday April 24th- Thursday 26th 2018 in Koriyama

<Delegation of Essen>

◇ Delegation Members

- City of Essen
- EWG-Essen Economic Development Agency
- gwi-Gas- und Wärme-Institut Essen e.V.
- Essen University Hospital
- Faculty of Medicine, Duisburg-Essen University

◆ Courtesy Visit to Vice Governor Hata of Fukushima Prefecture

◆ Courtesy Visit to Mayor of Koriyama City & Chairperson of Koriyama City Assembly

- City of Koriyama: Promote inter-city exchanges attended by the directors from Policy Development Dept., Culture & Sports Dept., Environmental Affairs Dept., Agriculture & Forestry Dept., Public Health Center, Construction & Traffic Dept., Industry & Tourism Dept., Water & Sewerage Bureau





The 1st Study Tour on the EU Programme IUC Project

➤ **Tuesday April 24th - Thursday 26th 2018 in Koriyama**

◆ Site Visits



College of Engineering,
Nihon University



Ohu University



BNCT Research Center, Southern
Tohoku General Hospital



Fukushima Renewable Energy
Institute, AIST(FREA)



Fukushima Medical Device
Development Support Centre



Energy Agency. Fukushima



The 1st Study Tour on the EU Programme IUC Project

➤ Tuesday April 24th- Thursday 26th 2018 in Koriyama

◆ Site Visits



Fukushima Technology Center



Fureai Science Park



Wrap-up Meeting

◆ Essen-Koriyama Joint Seminar at College of Engineering, Nihon University

- Organize a seminar for research institutes and SMEs

⇒ **120 participants**

In addition to Fukushima Prefectural Office, attended by SMEs, industry support organizations, academic institutes, financial institutes and research institutes





Promotion of Exchange with the City of Essen, the State of NRW, Germany (2)

➤ Monday, August 20, 2018 in Essen

<Delegation of Educators of Koriyama to Essen>

◇ Delegation Members

- City of Koriyama
- Elementary School Teachers and JHS English Teachers

◆ Visit to a primary school in Essen

◆ Visit to the Consulate General of Japan in Düsseldorf





Exchanges between Essen & Koriyama

(November 6th, 2017 - May 16th, 2019)

The 2nd Study Tour on the EU Programme IUC Project

➤ **Tuesday, November 13th-Sunday, 18th, 2018 in Essen**

<Delegation of Koriyama to Essen>

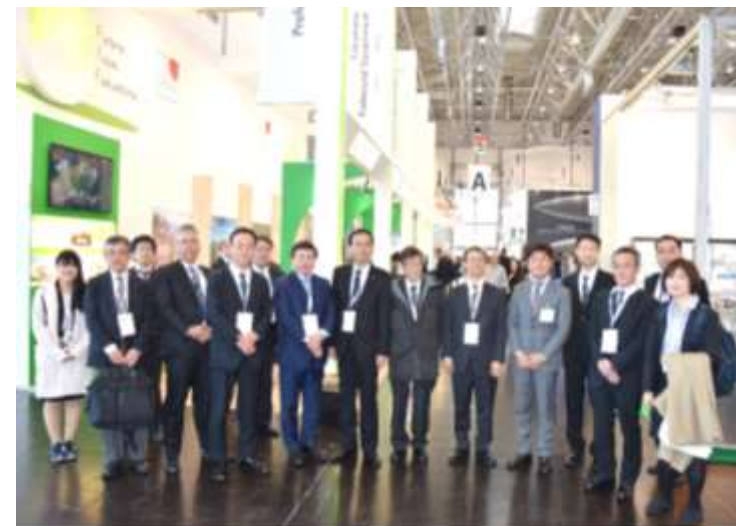
◇ Delegation Member

- Deputy Mayor of Koriyama City
- Fukushima Renewable Energy Institute, AIST (FREIA)
- Fukushima Medical Device
- Sourthen Tohoku General Hospital
- College of Engineering, Nihon University



◆ Visit to 'MEDICA/COMPAMED'

- Visit to the Fukushima Prefectural booth (including Tosei EB Tohoku Company Limited from Koriyama City) and observe sales negotiations with visitors





The 2nd Study Tour on the EU Programme IUC Project

➤ Tuesday, November 13th-Sunday, 18th, 2018 in Essen

◆ Site Visits



Innogy SE



GWl (Gas- und Wärme-Institut e.V.)



ROESER Medical GmbH



EMSCHERGENOSSENSCHAFT



The 2nd Study Tour on the EU Programme IUC Project

➤ Tuesday, November 13th-Sunday, 18th, 2018 in Essen

◆ Site Visits



Contilia GmbH, Seniorenstift Haus Berge



NOWEDA Apothekergenossenschaft eG



Universität Duisburg-Essen Medizinische Fakultät, Lehr- und Lernzentrum (LLZ)



Zollverein Coal Mine Industrial Complex in Essen



The 2nd Study Tour on the EU Programme IUC Project

➤ Tuesday, November 13th-Sunday, 18th, 2018 in Essen

◆ JAPAN ERLEBEN in Essen -Symposium 'Potential and Future Perspectives of Cooperation between Essen and Koriyama'

- Organized by: Consulate General of Japan in Düsseldorf, City of Essen
- Co-organized by: Fukushima Prefecture, City of Koriyama
- Venue: Auditorium, Essen City Hall
- Lecture presentations given by Essen University Hospital, Energy Agency NRW, delegation of Koriyama to Essen about their research and efforts and future collaborations

◆ JAPAN ERLEBEN in Essen -Reception

- Concluded the partnership agreement on the EU programme IUC Project





The 3rd Study Tour on the EU Programme IUC Project

➤ **Wed. May 15th, 2019 - Thu. May 16th in Koriyama**

<Delegation of Essen to Koriyama>

◇ **Delegation Member**

- City of Essen
- Essen Economic Development Agency (EWG)

◆ **Courtesy Visit to Mayor of Koriyama City and Chairperson of Koriyama City Assembly**

◆ **Meeting with Medical Institutes in Koriyama**

- Exchange of Human Resources on Medical Field

⇒ Request for hosting interns from the Faculty of Medicine, Duisburg-Essen University





The 3rd Study Tour on the EU Programme IUC Project

◆ Meetings on the Local Action Plans and Future Collaborations

<1st Meeting>

- City of Koriyama: Policy Development Division, International Policy Division, Environmental Policy Division, Public Health Center, Business Creation Division

<2nd Meeting>

- City of Koriyama: Waterways Division, Water & Sewerage Bureau, Business Creation Division
- Flood Control, monitoring system of water level in sewer & hazard maps

◆ Site Visits Water Works (Arai Water Purification Plant)

- Advanced purification by ozonation and activated carbon





The 3rd Study Tour on the EU Programme IUC Project

◆ Essen-Koriyama Joint Seminar

- Organized by: City of Koriyama and City of Essen
- Co-organized by: JETRO-Fukushima Branch Office, Koriyama Chamber of Commerce & Industry
- Venue: Conference Hall, Koriyama City Hall
- Contents:
 - 'Achievement and future collaborations on EU IUC Project'
 - 'Key pointers to the successful exchanges with German enterprises'
 - 'Collaborations among Industry, academia and government on Fukushima Prefectural Asaka High School's Super Science High School Program'





Development of Local Action Plans (LAP)

(Mutual Challenges & Future Collaborations)

Fields of Cooperation between Essen & Koriyama

【Sector of Cooperation】

- ① Smart cities and Regional/Urban Innovation and Competitiveness
- ② Inclusive and sustainable economic growth
- ③ Urban mobility

【Four Fields of Cooperation】

- ① Renewable Energy
- ② Medical Device and Healthcare Industry
- ③ Water Management
- ④ Other Inter-city Exchanges





Development of Local Action Plans (LAP)

(Mutual Challenges & Future Collaborations)

1. Energy Industry

Topics of Actions	Specific Actions (Planned Activities)	Potential Actors in Koriyama (envisioned)
Storage & Use of Energy	<u>Storage & Use of Energy</u> <ol style="list-style-type: none"> 1. Sharing expertise on energy 2. Innovative energy carriers & technologies 3. P2X (e. g. power to methanol technology) 	<ol style="list-style-type: none"> 1. Fukushima Renewable Energy Institute, AIST (FREIA) 2. Koriyama City Study Group for Hydrogen Utilization Promotion 3. Private Sectors
Implementation of Environmental Management Systems & Energy Consulting	<u>Proactive Utilization of Locally-produced Energy</u> <ol style="list-style-type: none"> 1. Study tour on Stadwerke in Germany (July-August 2019)⇒Visit to Germany consisting of enterprises in the prefecture organized by Environmental Affairs Dept. 2. Establish intersectoral partnerships between companies, local authorities & experts (e.g. ÖKOPROFIT / ECOPROFIT) 3. Utilization of locally-produced New Energy & Storage Cells <u>Promotion of visualization on Energy Savings</u> <ol style="list-style-type: none"> 1. Data analysis to screen high potential facilities for effective energy savings 2. Energy savings assessment of each facility (on-site investigation) 	<ol style="list-style-type: none"> 1. Fukushima Renewable Energy Institute, AIST (FREIA) 2. Energy Agency, Fukushima 3. Koriyama City Environmental Council 4. Energy Savings Center 5. Private Sectors
Cooperation in Research & Development	<u>Promotion of Business Networking</u> <ol style="list-style-type: none"> 1. Collaborations among research and industry support organizations 2. Mutual Participation to trade fairs (E-world, REIF) 3. Visit to Essen (February 2020)⇒Visit to Germany in collaboration with industrial circles organized by Industry & Tourism Dept. 4. research institute-to-research institute, research institute-to-private enterprise, private enterprise-to-private enterprise 	<ol style="list-style-type: none"> 1. Fukushima Renewable Energy Institute, AIST (FREIA) 2. Energy Agency, Fukushima 3. College of Engineering, Nihon University 4. Private Sectors



Development of Local Action Plans (LAP)

(Mutual Challenges & Future Collaborations)

2. Medical Device & Healthcare Industry

Topics of Actions	Specific Actions (Planned Activities)	Potential Actors in Koriyama (envisioned)
Promotion of Business Networking	<ol style="list-style-type: none"> 1. Research & study on each private enterprise 2. Support for business networking 3. Running booths at each trade fairs (MEDICA/COMPAMED, Medical Creation Fukushima) 4. Verification of medical device products & new product announcement 5. Family Doctor System 6. Joint development of medical devices between foreign enterprises and university hospitals 	<ol style="list-style-type: none"> 1. Fukushima Medical Device Industry Association 2. Fukushima Medical Device Industry Promotion Agency (FMDIPA) 3. Koriyama Medical Association 4. Koriyama Chamber of Commerce & Industry 5. Koriyama Area Technopolis Promotion Organization 6. College of Engineering, Nihon University 7. Steering Committee of Medical Creation Fukushima
Partnerships with Medical Institutes	<p>Development of human resources</p> <ol style="list-style-type: none"> 1. Host interns from the Faculty of Medicine, Duisburg-Essen University at medical institutes in Koriyama in FY2020 2. Promote for collaborations toward the future development of medical device industry 3. Training Curricular 	<ol style="list-style-type: none"> 1. Koriyama Medical Association 2. Koriyama City International Exchange Ambassador (Dr. med. Seto, Senior Advisor of Southern Tohoku General Hospital)

3. Water Management

Topics of Actions	Specific Actions (Planned Activities)	Potential Actors in Koriyama (envisioned)
Technical Collaboration & Sharing Expertise on Water Management	<ol style="list-style-type: none"> 1. rainwater management & sewer management 2. Sewage Sludge Treatment & Disposal 3. Transformation of digester gas to biogas in sewage treatments plants and its utilization 4. Flood Control and wastewater management 5. Improvement of safety and water quality 6. Effective utilization of water resources 	<ol style="list-style-type: none"> 1. College of Engineering, Nihon University



4. Other Inter-city Exchanges

<Inter-city Topics of Action between Essen & Koriyama>

◆ Visit to Essen organized by Culture & Sports Department of Koriyama City (October 2019)

‘Global Exchanges on Culture, Industry and Agriculture Promotion Project’(tentative name)

◆ Visit to Essen by Fukushima Prefectural Asaka High School in 2020

Based on the Super Science High School program designated by the Ministry of Education, Culture, Sports, Science and Technology (MEXT), Asaka High School located Koriyama City sends a delegation consisting of approx.10 students and teachers

《Summary of Super Science High School Program》

- Aim at developing human resources who bear the future innovation
- Collaborations and joint researches with academic and research institutes
(e.g. Training program overseas etc.)

◆ Assumed office of International Exchange Ambassador

Dr. Kanichi Seto, Senior Advisor at Southern Tohoku General Hospital Group assumed office at international exchange ambassador



Thank you for your attention! The strong bond and relationship of the cities of Essen and Koriyama lasts after the IUC program!