

Examples of good solutions in the ELV recycling industry outside the EU —Japan

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PART. 1

Japan's declining birthrate and ageing population

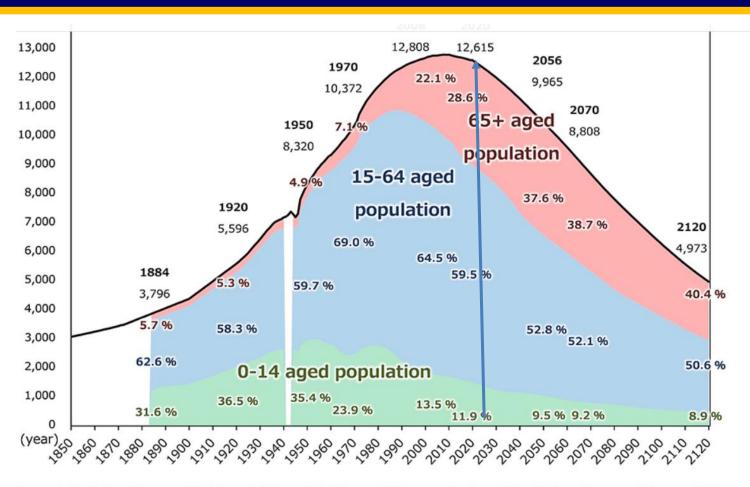


Long-term changes in Japan's declining birthrate and ageing population

Sources: KAMATA Kenji(2024)

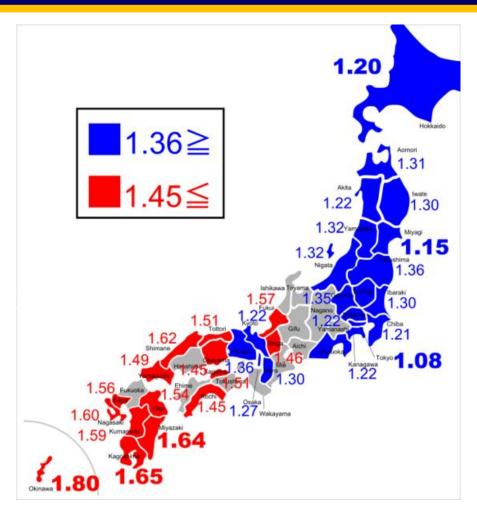
Associate Professor,
School of Political
Science and Economics,
Meiji University
Mechanisms of Japan's
Population Decline
Unstoppable despite
Countermeasures for
Declining Birthrate

https://englishmeiji.net/articles/4502/



Source: Statistics Bureau, Ministry of Internal Affairs and Communications, Population Census of Japan. Unless otherwise stated in the notes, the table is concerned with the population of the whole national area (homeland) that the administrative authority has covered as of October 1 of each year. Therefore, the data for 1945-1970 do not include Okinawa Prefecture. National Institute of Population and Social Security Research, Population Projections for Japan: 2021-2070 (2023). The projected population as of October 1 of each year. The estimated population as of January 1 of each year based on Cabinet Statistics Bureau, Meiji 5 Nen Ikou Wagakuni No Jinkou (1930)

Total Fertility Rate in Poland, and Japan

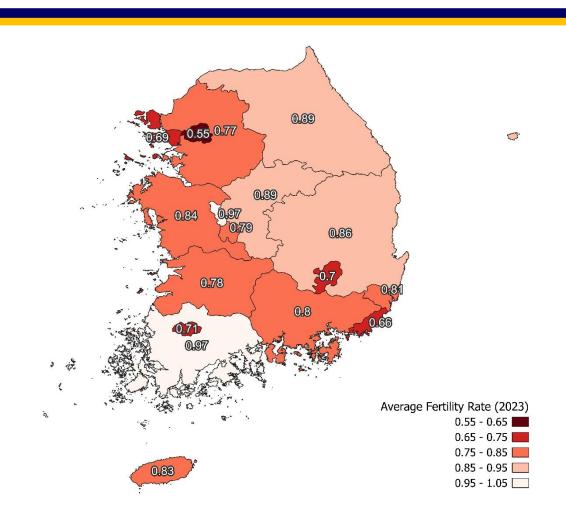


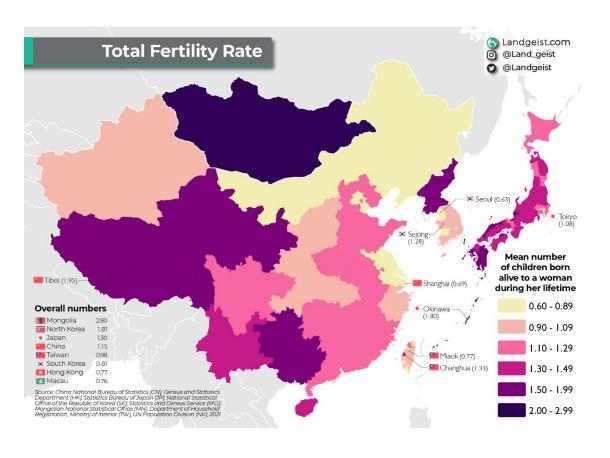


https://commons.wikimedia.org/wiki/File:TFR_%28Japan%29.p

https://www.reddit.com/r/europe/comments/1i5wgr6/total_fe
rtility rate in poland by voivodships in/

Total Fertility Rate in East Asia, and South Korea



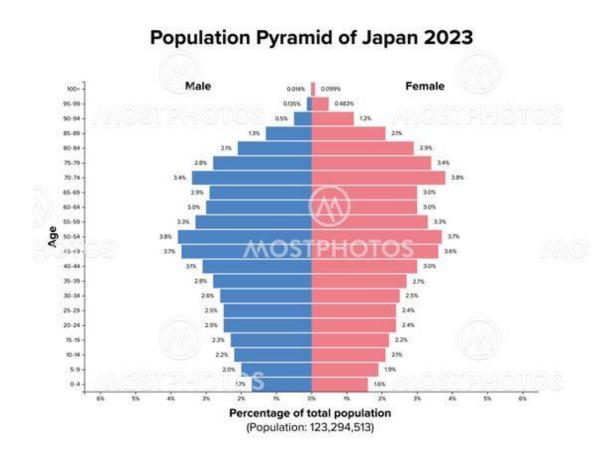


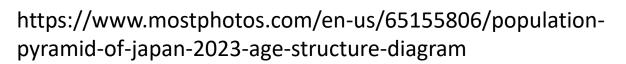
https://www.reddit.com/r/MapPorn/comments/1ctbmoa/the_infamous_fertility_rates_of_south_korea/#lightbox

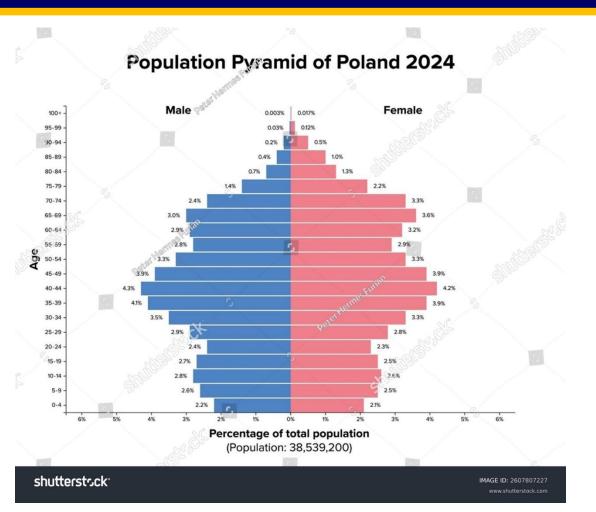
https://landgeist.com/2023/01/17/total-fertility-rate-in-east-asia/

Kumamoto University

Population Pyramid in Poland, and Japan







https://www.shutterstock.com/image-vector/populationpyramid-poland-2024-age-structure-2607807227

PART. 2

Young people turning away from cars: Japanese case study



Young people turning away from cars

- In Japan, Multiple studies have highlighted the decreasing interest in car ownership among young people:
- Several factors contribute to this trend, including:
- •Economic Decline: Reduced income and purchasing power among young people.
- •Higher Car Prices: Increasing costs of new and used cars.
- •Lifestyle Changes: Urban living, high parking costs, and the development of public transportation.
- •Social Environment: Growth of car sharing and home delivery services.
- •Market Contraction: Declining youth population and lower new car purchase rates among single young adults.
- •Diversification of Interests: Increased spending on non-car-related hobbies like technology and gaming.
- **Product Value Decline**: Cars perceived mainly as transportation tools rather than status symbols.

Current Perspectives: Desire vs. Feasibility

Despite the decline in economic power, young people still express a desire to drive. The issue lies not in a lack of interest but in the economic and practical barriers to car ownership. Surveys indicate that:

- •70% of Gen Zers enjoys driving.
- •Over 70% want to own a car in the future.
- •Interest in car sharing and subscriptions is rising.

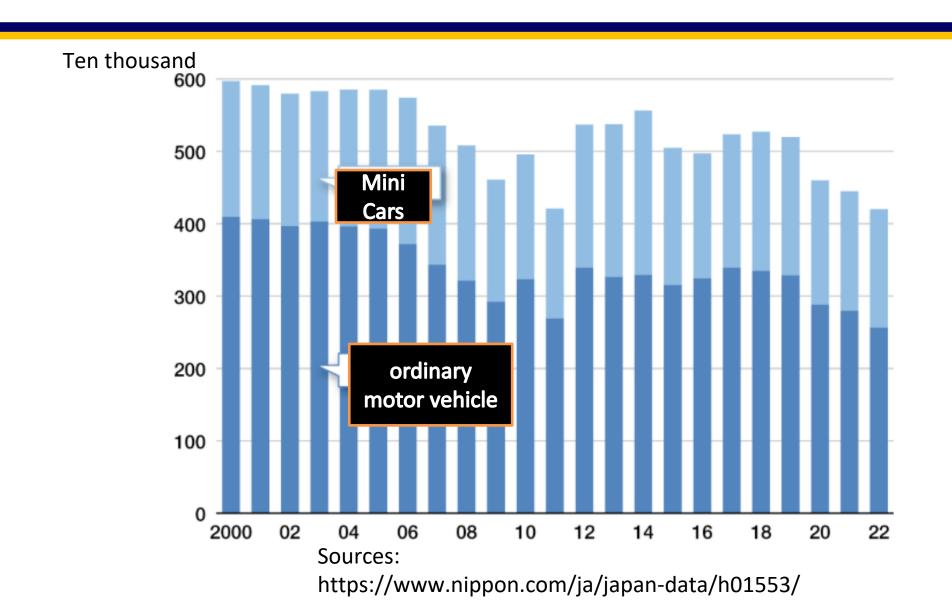


PART.3

Decrease in the number of ELVs

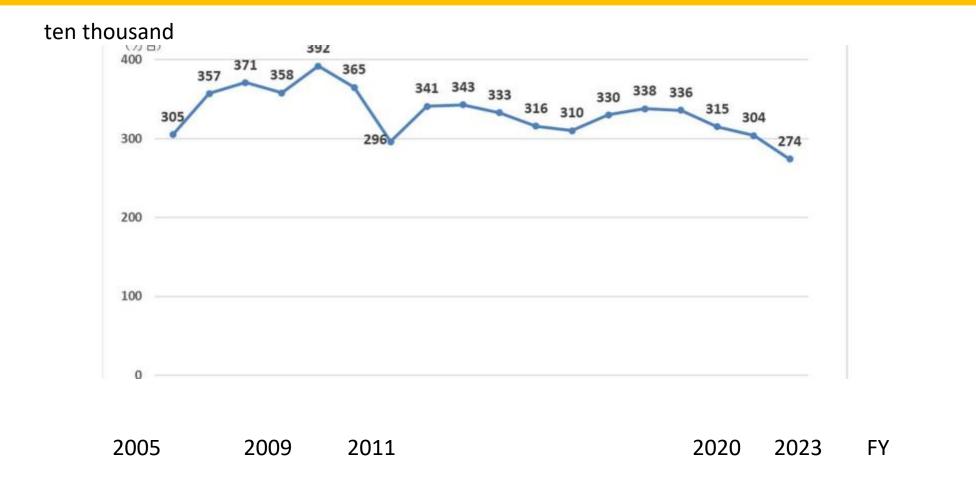


Trends in new vehicle sales in Japan





Changes in the number of ELVs in Japan over time





Source: Meti

How to respond to the decreasing ELVs?

- Closure =Going out of Business
- Transfer of business → Succession issues: Transfer to Islamic buyers
- Kitakyushu Eco Town: Formation of a recycling complex seeking the benefits of agglomeration
- Removal of high value-added parts in collaboration with metal smelters



Good Case? Kitakyushu Eco Town



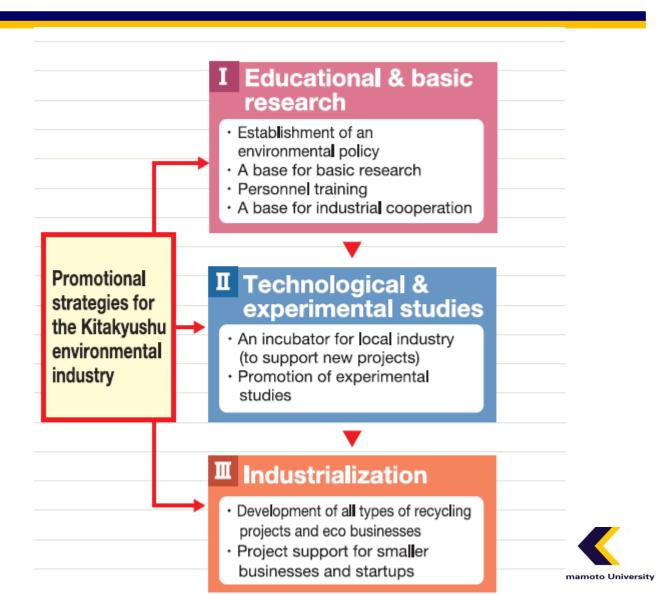
Creating CE Industrial town Kitakyushu Eco Town

- The Kitakyushu Eco Town Project involves integrating environmental conservation and industrial promotion efforts, and carrying out comprehensive development of educational & basic research, technological & experimen tal studies and industrialization in the environmental field. All types of waste are utilized as resources, and, to the extent possible, a policy of "zero emissions" whereby no waste is produced, is promoted.
- •A consortium consisting of one major and seven small ATFs is located in this eco-town area, where they cooperate and compete with each other.



Kitakyushu Eco Town

- A cluster of many recycling factories
- Waste from one type of recycling plant becomes the raw material for another type of recycling plant.
- For example, there are eight automobile dismantling plants in Kitakyushu Eco Town, seven of which are small businesses that jointly operate press machines. In addition, ATF, a subsidiary of another steel manufacturer, collects plastic waste from these seven plants, crushes them using a crusher, and then recycles it as raw material for resin at a recycling plant near Eco Town.



PART.5 Good Case?

Developing Urban Mine



Gold mines in Kyushu Island

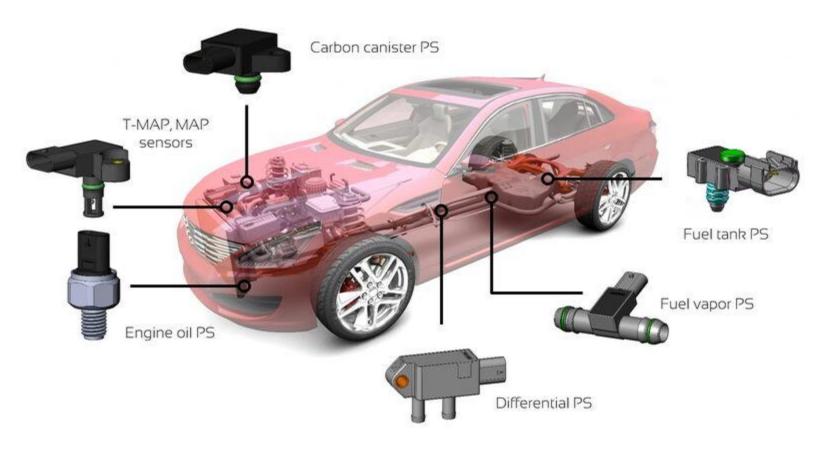
There are many gold mines in Japan. Many mines have exhausted their resources, but in the south of Kyushu Island, there are some of the world's largest gold mines. As a result, Japan has the most advanced gold refining technology. Gold contained in electronic products is also refined. https://www.japangold.com/news/2020/japan-goldannounces-country-wide-alliance-with-barrick-goldcorporation-acquires-six-new-projects-in-the-

southern-kyushu-epithermal-gold-province





What specific products are available as sensors for in-vehicle equipment?

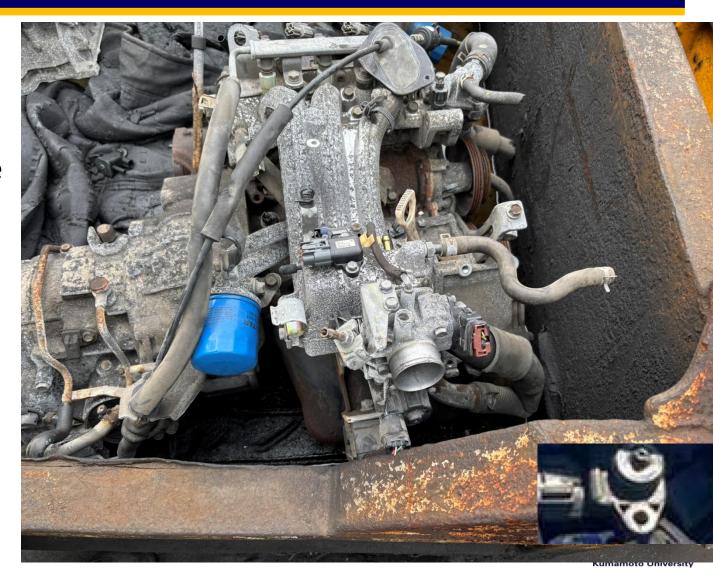


https://www.pex.de/sensors/pressure-sensors/



Working with a gold refinery to develop a Moving Mine: Special Urban Mine

- Sensors have begun to be used extensively in automobiles.
- •In particular, sensors are used in components such as cameras in Japanese cars manufactured around 2010.
- •When an intake high pressure sensor attached to an engine was analysed at a gold refining factory in Kyushu, it was found that intake high pressure sensors manufactured by a certain company during a certain period contained a high amount of gold, with a value of 67 euros per 35 grams.



Thank You. Dziękujemy za wysłuchanie.

