ORIGINAL ARTICLE

INCLUSIVE IN NOVATION IMPACT ON INEQUALITY GAP

| Ilan Bijaoui |

Graduate School of Business Management | Bar Ilan University | Ramat Gan | Israel |

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Abstract

Background: Inequality gap is growing in spite of or because of technological development. A growing aging and young population in advanced countries is excluded from the values generated by innovation. **Aims:** We intend to prove that inclusive innovation incorporates the excluded people into the innovation trends and improve the inequality gap. **Our Method**: A case by case analysis of inclusive innovation in several specializations proving their positive impact on inequality gap. **Results and Conclusion**: The overhauling of National Innovation Policy (NIP), in developed nations, by including inclusive innovation policy, could add to back off the disparity trend.
Keywords: *innovation, policy, BoP, inequality, community, technology, NIP, wealth*

1. INTRODUCTION

Technological development requests high education, knowledge, and make an ever-increasing number of individuals that are jobless or seeking employment requiring little specialization at a low payment.
Governments, through their National Innovation Policy (NIP), bolster high tech enterprises giving values to high skilled employees and top end customers. The rich are getting richer while the poor are progressively many more. Communities around the world seek for innovations adapted to their ecosystem, enhancing their quality of life [1].

The NIP could be fairer and bolster technological progress, the one producing wealth for high tech firms and high end customers and the other diffusing innovation and wealth low skills entrepreneurs and low end customers. We analyze cases of inclusive innovation in several specializations and prove their positive impact on inequality gap.

2. Inequality and wealth

Gini index close to 0 expresses total equality and close to 100 very wide inequality. In nations with Gini beneath 27 percent, the effect of wage imbalance on economic development is positive and winds up negative for values over 27 percent [2]. Disparity debilitates macroeconomic performance [3]. Rich people devour a smaller share of their wage than lower wage people do thus add up to request in the economy will be not as much as what the economy is equipped for providing.

Alesina and Perotti (1994) contend that high salary disparity prompts poor economic performance because of social strains and expanded vulnerability. In such conditions investment rate is lower [4].

The scope of Gini coefficient is from 0.26 on account of New Zealand and the United Kingdom (U.K). up to 0.31 for the United states (U.S.), Italy, Portugal, Spain, and Greece. Israel is closer to 0.42.

Fuest et all (2018) research demonstrate that there is a negative relationship amongst's inequality and growth just for low wage nations under around 5,000 US dollars, past it, the correlation is positive [5].

The U.S. remains the wealthiest nations, with 41.6% of the world's wealth and the highest wealth inequality, 80.56, trailed by Sweden, 79.90, U.K., 75.72, Austria, 73.59 and Germany, 73.34.

3. Technology and inequality

Innovative advances have been found to have contributed the most to rising salary imbalance in OECD nations, representing almost 33% of the broadening gap between the ninth and the tenth percentile workers throughout the most recent 25 years [6,7].

Skill-Based Technological Change (SBTC) demonstrates that the financial gap between talented and less-experienced specialists is growing [8,9].

Technology raises imbalance by furnishing trailblazers with monopolistic rents [10,11]. In the long run a positive environment may lessen disparity due to a stronger competition [12] and rising efficiency [13].

Perrmana (2017) proved the critical positive relationship between technological specialization and inequality [14]. Nations have a tendency to have the more elevated amount of pay imbalance in the event that they move innovation activities into few tight segments. Expansion into numerous segments restrains pay disparity.

The worldwide fragmentation of production improves the economic situation of developing countries but widen the gap between rich and poor in advanced countries [15,16,17].

Santos et al (2017) found of 131 nations, 75 nations just technology adoption causes higher inequality [18]. In 11 nations, Information and Communication Technology (ICT) selection tends to raise disparity and 8 ICT tends to diminish imbalance. Among the main group are The Netherlands, Iceland, United Kingdom, among the second, Switzerland and Japan.

4. Programs supporting inclusive innovation

4.1 Smart Specialization Strategies (S3): S3 is an European Union (EU) strategic regional approach to regional economic development through targeted support for research, innovation and entrepreneurship towards regional innovation strategies (RIS) [19,20,21]. E-Resater project is to develop innovation networks about e-Health and e-Inclusion [22]. The VITLAB space is the core of the project with a set of local applications related to telemedicine, health and social care, at different regions of the Southwestern Europe.

The Smart Specialization Platform on Energy (S3PEnergy) led by Andalucia (ES) and North Great Plain (HU). Sixty regions have been working through five interregional partnerships on bio-energy, solar energy, marine renewable energy, smart grids and sustainable buildings.

4.2 Innovation vouchers: Innovation vouchers are small lines of credit provided by governments to Small and Medium Enterprises (SMEs) to purchase services from public knowledge providers with a view to introduce innovations (new products, processes or services) in their business operations [23].

The main purpose of an innovation voucher is to build new relationships between SMEs and public research institutions which will stimulate knowledge transfer and act as a catalyst for the formation of longer-term more in-depth relationships. Some of the Innovation Voucher Projects (IVP) are related to inclusive innovation.

Axxium UK has developed a "smart door locks" that could be remotely unlocked via a mobile device, enabling people with reduced mobility to move more freely.

Voucher programme of the United Kingdom the company hired the University of Hertfordshire to develop the electronic locking mechanism. The lock is currently being launched to the mass market,

Veg of Lund's Sweden aims to develop nourishing, allergen-free and plant-based products that are customized to needs of elderly consumers [24].

The products are also healthy and rich in Omega-3, as well as nourishing and filling. Potato and rapeseed oil had everything we need. The challenge was to mix these two (like oil and water). They developed their product named My Foodie® by Veg of Lund and got a patent.

Aquanis US reduces the cost of wind energy by improving the aerodynamic performance of wind turbines [25].The blade-mounted plasma actuators extend the turbine's service life and enable the design of larger, more efficient turbines, by countering unsteady.

Plasma actuator is an electric bladeless fan, a solid-state electrical device that consists of a thin layer of insulating material (a dielectric) separating a pair of offset electrodes. The implementation has the potential to dramatically improve the efficiency of windmills by making their blades more efficient.

4.3 Telecentres movement: The telecentres movement started as "telecottage" and "Electronic Village Halls" in Denmark and as Community Technology Centers (CTCs) in the United States in the 1980s when computers were not yet a common household good, public access to computers emerged as a solution [26]. Their objective is to afford information access via the Internet and to improve quality of life for residents of low-income communities through active participation in the digital revolution. Telecentre Women is a global initiative of Telecentre.org Foundation and the International Telecommunications Union of the United Nations to empower women through ICT. The bringing of

disadvantaged women into the mainstream of the digital revolution empowers them with access, information, choices, opportunities, and options they never had before.

4.4 Open Living Labs: Open Living Labs are focused on the "democratization of innovation" [27]. They are governed by a public-private partnership which involves relevant regional stakeholders. The EU has promoted the European Network of Open Living Labs (ENOLL), giving an opportunity to users to act as sources of ideas. The European Network of Open Living Labs (ENOLL) has 340 Living Labs acting in issues such as smart cities, education, cross border and cross sectors cooperation, creative industries, climate and big data, future internet and design [28].

5. Inclusive innovation trends

Zeschky et al (2014) characterize three categories of inclusive innovation: Cost, Good-Enough and Grassroots innovation [29]. Cost innovation offers comparative functionalities of an item at a lower cost. New sensors, distributed computing and the Internet of Things (IoT) empower bringing down preparing cost and enhancing productivity. Smart frameworks foresee upkeep needs and decrease repair costs. Business to Customer (B2C) good enough innovation proposes to clients, items with fewer applications at a lower cost.

Business to Business (B2B) good enough innovation re-builds devices as components of a system at a lower cost. It requires concentrating in central features and higher convenience.

Frugal innovations are specifically developed for businesses which can't manage the cost of current items and services and for BoP clients. They could buy less modern items at a lower cost [29-30]. Grassroots innovation is the initiative of businessmen with a specific end goal is to react to the neighborhood needs and find good solution at a low cost [31].

5.1 Cost innovation B2C: The investment for cost innovation has developed in light of the expanding disparity [32] communicated by developing youth joblessness and maturing population requiring social care, health, and annuity costs, putting extra weight on open segment spending plans.

5.1.1 Low cost airlines: The progression of air transportation in the U.S in 1971 presented the idea of minimal cost through Southwest Airlines [33].
They have fewer team individuals and less services. In Europe, the change occurred with the Schengen Agreement in 1997 opening the outskirts and the sky in the EU to aircraft businesses.

Tourists started taking medium distance trips to avail of short pauses in cities and to benefit from tourist attractions [34]. Low costs expanded the quantity of youth from and to Europe.

The Low Cost Companies (LCC) in 1994 gave under 10 percent of all short-pull flights, the greater part of which U.S. Southwest flew. Today, LCCs fly right around 30 percent of short-pull flights [35].

Southwest Airlines, operates in the United States, the Irish Ryanair and the British Easy Jet in Europe. Cost-sparing incorporates working at optional air terminals, flying a solitary plane compose, expanding plane use, depending on coordinate deals, and keeping work costs low. EasyJet uses high-cost airports in most cases. It concentrates on existing leisure and business. Ryanair focuses mostly on costs and not on the markets.

5.1.2 Low-cost refrigerators, Haier: Haier touched base in the U.S. in 1999 with small fridges [36]. After a year it put resources into a South Carolina manufacturing plant. The Chinese brand that manufactured U.S. notoriety from offering school dormitory fridges. Most Americans are likely comfortable with its minimal fridges, climate control systems, compact clothes washers, and low-valued TVs.

In 2016, Haier Group paid $5.4 billion, for GE electric machines procurement and ended up one of a primary pioneer in the electric apparatuses market [37].

It presently offers washers, dryers, full-measure iceboxes, TVs, and single-room climate control systems in the U.S. also, the fundamental contender of Whirlpool Corp. in the US market.

5.1.3 Stowaway cosmetics: Beauty care products startup Stowaway motivated in February 2015 in New York City, a line of undersize beautifying agents intended to go wherever the occupied, present day lady goes [38]. A policy of nuts and bolts "minimal dark dress of excellence" offers for $75. Stowaway Cosmetics is headquartered in New York.

Every one of the items is somewhat bigger than test measure; however, the advantages go more remote than simply estimate [39]. Conservative, light, protected and less waste are the upper hand proposed by the organization.

5.2 Cost innovation B2B: Olga Malinkiewicz, established a novel technology for the generation of the low-temperature technology of ultra-thin and adaptable perovskite-based photovoltaic cells [40]**.** Not at all like crystalline silicon, have perovskites performed well under low-light illumination.

In 2014 Saule Technologies was established and ended up one of the principal businesses on the planet to prevail with regards to building up a working model for the business utilization of perovskites. In 2015 Saule Technologies consented to the venture policy with Hideo Sawada, a Japanese businessperson. Piotr Krych and Artur Kupczunas, two experienced businesspeople who have helped Saule Technologies develop all inclusive. The perovskite boards are delivered by utilizing an inkjet printing policy, permitting the plan of freestyle perovskite sun oriented modules with ease. Adaptable perovskite sun-powered board collects more sunlight-based energy contrasted with regular silicon sun oriented wafer boards and are lighter, a vital preferred standpoint in building veneers, development and aviation areas.

5.3 Good enough innovation, B2C

5.3.1 IKEA "lagom" (just enough) and "fika" (coffee break) products

Sweden with IKEA, is drifting with social ideas, for example, "lagom" (simply enough) and "fika" (recess). Sweden is frequently observed as a nation where individuals are populist, rich and cheerful [41].

Lagom is a vital idea in Swedish culture and it's firmly fixing to something many refer to as "jantelagen", which is an unwritten law that implies that individuals ought to never see themselves as better than others.

Honeycomb LACK items are extremely illustrative of this comprehensive reasoning. By setting honeycomb design inside the structure, the tables are fortified as the six-sided shapes go about as help pillars under the heaviness of more than 100kg (ideahome website). A table or retire book is more grounded, less expensive and lighter. Ikea's new age of furniture can be gathered up to 80 percent speedier, totally without screws or the Ikea-torque. Furniture pieces associate with small handles (called wedge dowels) that snap into pre-bored gaps (nordic.businessinsider website).

IKEA put resources in 2004 into Scottish organization, Design LED Products making super thin, super light printed light "tiles" out of Light Emiting Diode (LEDs), sufficient and less exorbitant helping (designled.com website). Ikea lights don't have singular LED knobs yet be made out of the thing and adaptable boards. In 2012, IKEA put resources into El Seed, a startup that makes LEDs that deliver light far nearer to daylight and brilliant light low energy utilization than rivalry and contain no mercury (elseed website).

EL-Seed established the Kamiyama LED; the world's first solid white LED structure creates light with a shading quality near that delivered by brilliant lights and daylight on Earth. The Kamiyama LED consolidates the specific low energy utilization of LED light sources with a high shading quality – like that of halogen lighting.

Since lighting is a gigantic piece of Ikea's the same old thing, Ikea offers tremendous measures of batteries for its remote lights nearby which clarifies its first venture Alelion Batteries, the creator of lithium press phosphate batteries—which are lighter, smaller, more tough, and less inefficient. In time, these might be the batteries you get from the canisters in the checkout line.

5.3.2 Formule 1(F1), Accor Ibis: Accor is a lodging network with a portfolio that envelops extravagance and upscale brands and midscale and economic ones.
Its low-end inn Ibis Budget began as Formule 1 in the 1980s, a moderate settlement for voyaging sales representatives [42].

The motivation to begin the spending in network was the absence of an appropriate answer for the low-end clients principally youth, students, new couples and families yet in addition for dealers and other businesspeople taking a shot at their own particular index or for small businesses. Voyaging business people have a restricted spending plan and particular prerequisites, for example, simple access to the lodging even at late hours and a room setup that guarantees an ideal rest. The low cost of the lodgings was accomplished by a strict spotlight on the key prerequisites of this client group. The lodgings were set at movement intersections and offered basic however great quality decorations. Administrations of less significance for business people were supplanted by minimal effort choices, including a 24-hours registration machine rather than an individual assistant.

Expenses were spared through an institutionalization of rooms, which empowered the industrialized generation of decorations, quick cleaning and support procedures, and quality confirmation. In 2017 Accor sold the 62 F1 hotels to the Samu social, a humanitarian emergency service operating in several cities across the country [43]. The SAMU Social was already periodically using the hotels to house emergency guests, but the fact that these people were housed alongside paying guests sometimes caused problems. The hotels will now focus solely on emergency accommodation for anyone in need, regardless of their residency status, nationality, age, gender or family situation.

5.3.3 Airbnb: Airbnb began when Brian Chesky and Joe Gebbia chose to transform their home into quaint small inn amid the mechanical planner occasion in San Francisco in October 2007 [44,45,46,47].

Airbnb is a C2C stage enabling purchasers to both lease and lease property. Airbnb works as an exchange facilitator between these two groups, and taxes visitors 6-12% of the booking expense notwithstanding charging has a 3% benefit charge for each reserving.

Airbnb is a troublesome development in the cabin business, rivaling inns and new contenders hoping to duplicate the Airbnb demonstrate. In the hotel business just Marriott has a higher valuation than Airbnb's $31 billion, at $39 billion [48].

Airbnb has homes in 65,000 urban communities in excess of 190 nations. Home proprietors can list their property for nothing. Hosts policy their property's online schedule and that way they can control the accessibility.

5.3.4 Uber: Uber empowers clients to book drivers utilizing their own autos, a Customer to Customer (C2C) benefit [49]. It was established by Travis Kalanick and Garrett Camp in 2009 with the application discharged in June 2010. In 2010 Uber dispatches its application in San Francisco and in 2011 in New York City. By 2017 the aggregate number of Uber drivers overall passed 1.5 million [50].

5.3.5 Telecare systems: The greying market needs easy-to-use products due to certain constraints in terms of health, abilities and wealth [51]. They are ready to purchase a product or a service with less (but good enough) performance if they could get it easier and at a lower price.

New York State has developed the Regional Health Information Organization (RHIO)/Health Information Exchange (HIE) developed by Stony Brook Medical Center at Stony Brook University, Stony Brook, New York [52].

Elderly people are one of the main target groups for telecare technologies, as many devices are for people with chronic health conditions or made for people with limited mobility [53]. The devices grant elderly to maintain their autonomy through a better management of their condition or to have easier access to health care.

5.4 Good enough innovation, B2B

5.4.1 Mettler Toledo weight solutions: Mettler Toledo, a worldwide supplier of top of the line answers for measure weight, was progressively assaulted by ease contenders [54]. As a result, Mettler Toledo chose to build up a section level product offering with fewer highlights and a less complex outline than the established Excellence and Classic lines.

In spite of the distinctions, the three developed lines demonstrate clear similitudes with regards to style and quality yet with fewer capacities, for example, PC for weight estimation or refined products [55].

5.4.2 Siemens Multix Select DR, a digital X-Ray: Siemens Multix Select DR X-Ray was developed and fabricated in China for establishments around the globe, at a value that is around 30% lower that the classic XRay. The Multix Select DR empowers small clinics and imaging focuses on restricted spending plans and area to shed the weights of the film [56].

5.4.3 Brivo CT: Launched in March 2010, the Brivo Computed Tomography (CT) series are designed by China Research and Development (R&D) team to meet China's healthcare need for a cost-efficient CT solution [57].
The Brivo CT series deliver high imaging quality and reliability at low operating and maintenance costs.

In recognition of the significant upfront investment required for CT scanners, GE Healthcare provided flexible financing solutions for medium and small hospitals, especially in remote areas, to help them obtain funding to install CT scanners. Brivo XR 515/575 is the first flat-panel digital x-ray system for rural healthcare.

5.4.4 Refurbished systems: The restored medical gear market fathoms societal difficulties by lessening waste and preserving assets, by expanding access to health care in BOP markets and by making new employment.
The restored framework is sold at a generously lower value contrasted with new gear. OEMs regularly give an administration guarantee to end-clients for revamped gear, similar to new hardware [58].

A wide assortment of Diamond Advance program, Philips contributions incorporates ultrasound, CT, MR, sub-atomic imaging, and interventional X-ray.
The GE Healthcare GoldSeal repair program gives a quality framework requiring small to no effort and high value. There are around 15,000 GoldSeal frameworks to benefit the world over.

GoldSeal technology portfolio incorporates Ultrasound CT, Magnetic Resonance (MR) X-ray (Radiography and Mammography) Interventional X-ray Molecular Imaging, Bone Mineral Densitometry (BMD) Surgery.

5.5 Frugal innovation B2C: Frugal innovation is the relevant solution developed for a local need at an affordable cost. In the long run, it can transform into a requirement for new worldwide customers segment.

5.5.1 Danone Lubella: "Association for Health"("Partnerstwo dla Zdrowia") is a joint activity between three businesses, Biedronka, Danone, and Lubella and a logical establishment (Institute of Mother and Child), which means to handle issues identified with the unequal eating regimen of Polish kids and its emotional consequences for health and society [59]. The "Smooth Start" ("Mleczny Start"), a milk porridge is the consequence of this participation. The point is to redress youth lack of healthy food [60].

5.5.2 Grand Challenge breast tumor: Launched in 2003 by the Bill & Melinda Gates Foundation as Grand Challenges in Global Health, this initiative initially focused on scientific challenges that, if solved, could lead to key advances in preventing, treating, and curing diseases of the developing world.

Microwave signals like those utilized by business cellphones can be coordinated towards a breast, where they will diffuse when they interface with various kinds of tissue. Breast tumors dissipate more than typical tissues.

A group driven by Professor Stephen Pistorius is utilizing these physical marvels to think of elective techniques for recognizing the nearness of a tumor in the breast [61].

Stephen Pistorius is a Senior Research Scientist at CancerCare Manitoba and the Research Institute in Oncology and Hematology.

5.6 Frugal innovation B2B

5.6.1 GE MAC 400 and 800: MAC 400, General Electric (GE's) first portable Electroencephalography (ECG) designed in India for the fast-growing local market has lower material costs, using less plastic and a smaller LCD screen and cheaper labor costs. Eight of the nine research engineers were based in India [62].

MAC 400 can be easily put into a backpack (it weighs about a kg, far less than standard laptops) and has embedded software that analyses the data collected by the test and interprets them in the printout in English [63].

To cut costs and development time, off-the-shelf components were used as much as possible. For example, the printout is done by the same component used to print a bus ticket. It is manufactured by Wipro GE Healthcare at Whitfield on the outskirts of Bangalore.

The MAC 400, launched in 2008, was at just $1,500, instead of $10,000 for the former generation. While Mac 400, made for India with a QWERTY keyboard, was updated as Mac 800 with cell phone-like texting tools and launched in the US is manufactured in China.

The US$ 500 MAC 500 today (2017) cost less than US$ 360 [64]. GE's portable ECG is now found in some American ambulances [65].

5.6.2 GE Vscan: In 2002, GE introduced its first compact ultrasound machine for US$30,000. After several iterations, GE finally created a model in 2007 that sold for as low as US$15,000 [66]. In 2011, GE established its first global Customer Innovation Center in Chengdu, in China's western regions.

The Center focuses on primary care products for the healthcare systems of emerging markets, and brings product development teams closer to the customers they serve by creating an open, customer-centric innovation ecosystem.
The compact ultrasound was built from scratch in China, although it drew heavily from an existing R&D effort from product-development center in Israel. A revolutionary new architecture, one that shifted most of the muscle inside an ultrasound machine from the hardware to the software was created. Vscan, the compact and portable ultrasound costs just $ 1500. Vscan is successfully sold in the U.S. market as a device for small clinics or ambulance services [67].

5.6.3 GE , Logiq Book ultrasound: When developing the portable ultrasound called Logiq Book, GE addressed this challenge by creating a local team to learn about rural customers and their use requirements. Only after the product requirements were defined could the team draw on GE's internal resources to develop a prototype. GE also set up a designated sales team focused on rural hospitals in China [68].

5.7 Grassroots innovation

This socio-economic innovation base up policy, developed by and for the community, is actualized in UK, Germany, Sweden, Greece, Canada, Italy, Spain, Finland, Japan, Austria, Switzerland, and Denmark.

5.7.1 Community energy, UK

Community energy includes an assortment of maintainable energy hones. In the UK, these incorporate moderately small-scale sustainable power source activities, for example, neighborhood sun-based energy and different activities for the aggregate acquiring of economical energy.

Established in 2011 by The Midcounties Co-agent, Co-operation Energy supplies power and gas to more than 300,000 local clients crosswise over England, Scotland and Wales (helpful energy site). From 2018, the majority of the clients are provided with power sourced from 100% sustainable sources [69].

5.7.2 Solarcomplex AG Supply Chain Bioenergy – Germany

Solarcomplex is a local supplier for sustainable power sources. It was established in 2000 and is sorted out as a "citizens company" with 700 investors [70].

Solarcomplex designs constructs and works sustainable power source offices in the Lake of Constance (Bodensee) Region. Practice Solarcomplex AG incorporates bioenergy, sun-powered power, water-power and twist control in their portfolio.

In excess of 10 MW sun oriented plants were introduced on in excess of 30 areas, with a speculation of around 35 Mio Euros.

In 6 open land, sun oriented stops around 10 MW are produced. The reactivated water control plant produces 650.000 kWh power for every year and supplies around 200 family units. Around 20 wood energy plants convey 9 MW th (megawatt thermic).

5.7.3 Swedish Wind Power Co-operative

The Swedish Wind Power Co-agent started in 1998 and opened its first breeze cultivate in 2000 [71].
The community offers the power it delivers straightforwardly to its individuals in light of an association with Falkenberg Energy, a national power retailer.

The center-right now claims and runs eight turbines all through Sweden of a limit goes between 660 Kilowatt (kW) and 1.5 Megawatt (MW), on the entire delivering 26,000 (Megawatt hour) MWh every year. No more to supply 80% of its 1,300 individuals' energy needs. Power from the community's breeze ranches is sold as offers to individuals in loads of 1,000 kWh for $1,114 (2009).

In Sweden's changing energy market, power costs were driven around rivalry and the policy of hydropower. This, and drop-in feed-in taxes for wind energy challenges the money related reasonability of wind influence. But since the community can offer specifically to its individuals, it has an ensured market, and a settled low cost for the energy it produces.

5.7.4 Danish Wind Turbine Owners Association

In Denmark, the improvement of present day, power delivering wind turbines began in the mid-1970s as a result of the societal clash about the utilization of atomic energy [72,73,74].

Grassroots activists established the Organization for Information about Atomic Power, an across the nation subject's drive to stop atomic power [73].

Today, Denmark has the most abnormal amount of wind control infiltration on the planet and Danish businesses are still among the pioneers in wind control technology [75].

The Tvind Mill venture was started by a group of twist control from the people secondary school at Ulfborg [73].
The prototype made use of various specialized highlights which were later embraced by early producers of wind technology, e.g. the turbine in Ulfborg was furnished with fiberglass edges, turning into the standard plan of mechanically developed breeze turbines.

Danmarks Vindmølleforening (the Danish Wind Turbine Owners Association) is the biggest breeze energy exchange relationship on the planet by the number of individual individuals: 36,500 [76].

The system creates more than one-fourth of its power by wind energy alone, and an aggregate of 43% of Danish power is produced with inexhaustible wellsprings of energy.

CONCLUSION

NIS in developed countries doesn't include any sentence, paragraph or chapter supporting inclusive innovation. The U.S. refers to inclusive innovation for minorities and the European Union for refugees only.

New electric appliances, cellphones, tablets, cars, drugs or medical equipment serve first the wealthier population able to afford for it.

The diffusion of innovation in telecommunications, medicine, transportation or education, takes time and has to confront financial, knowledge and cultural bottlenecks which could be overcome quicker by a relevant inclusive innovation policy.

MNCs and communities are the main active in inclusive innovation for economic and social reasons especially in transportation, energy or health services.

IKEA, GE, Siemens, Airnb, Haier, Southwest Airlines, Ryanair and Easy Jet proved that MNCs can contribute to the inequality gap and also have high financial returns.

Community associations such as and Community Technology Centers (CTCs) in the United States , Community Energy in the UK, Solarcomplex in Germany, the Swedish Wind Power Co-operative and the Danish Wind Turbine Owners Association and Electronic Village Halls, challenge MNCs and provide more efficient services at a lower cost. Academic institutions and governments are missing. The updating of innovation policies by an inclusive innovation policy will contribute to slower inequality trend.

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List of acronyms used:

B2B: Business to Business
B2C: Business to Customer
BMD: Bone Mineral Densitometry
BoP: Bottom of the Pyramid
C2C: Customer to Customer
CT: Computed Tomography
CTCs: Community Technology Centers
EEG: Electroencephalography
GE: General Electric
HIE: Health Information Exchange
ICT: Information and Communication Technology
IoT: Internet of Things
kW: Kilowatt
LCC: Low Cost Companies
LED: Light Emiting Diode
MNCs: Multi-National Corporations.
MR: Magnetic Resonance
MW: Megawatt
MWh: Megawatt hour
NIP: National Innovation Policy
R&D: Research & Development
RHIO: Regional Health Information Organization
SBTC: Skill-Based Technological Change
SMEs: Small and Medium Enterprises
U.K: United Kingdom
U.S: United States

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