Environmental Activity Report

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F-techGroupEnvironmentalReport2016



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Editorialpolicy

Continue to the "F-tech Group Environmental Report 2015", F-tech strives to enhance the report not only the environmental aspects but also the social aspects, with the theme of "Effort status" and "Information sharing" in the global group. One of the topics is focused on " Global development of ISO50001", and the other one is about the report on efforts of group companies that are fulfilling year by year. Selected the two topics to notice the global initiatives. F-tech is trying to report not only about environment, but also about the performance of quality assurance and occupational health safety. F-tech is still on the way to say " Working togetherby all the group employees" . Never the less, the report from each company has steadily raising the level, and the results of information sharing are starting to come out.In addition, F-tech have added" Development of environment considered products" for environmental aspect report and" Biodiversity Initiatives" to revitalize global initiatives further from this year.In this report, F-tech aim to convey as clear aspossible to the stake holders about, initiativesprogress, summary, and the future policies. F-techrefer to the" **Environmental Reporting Guidelines**

(ver.2012) published by Ministry of the Environment ' s. In this report, F-tech Group will be wrote F-tech Group or our group, and F-tech INC.will be wrote Ftech or our company.

- ReportingPeriod
- Achievements of fiscal 2015(April 2015 ~ March 2016) and includes some past activities.

About future forecast, plan, and target

In this report, it also includes about the future forecasts of F-tech group (written on the right). These statements are predictions based on the current information so, it is not the determined. Therefore, the results of the future business activities included in this report may differ from the forecast.

ReportTargetOrganization

★Facilities in Japan、 ○Affiliated company in Japan、 ●Affiliatedcompany overseas

F-TECHINC. [3 facilities] ★Head office, KukiPlant [Shobucho, Kuki, Saitama] ★Haga TechnicalCentre [Hagamachi, Tochigi]] ★Kameyama Plant [Kameyama, Mie]

Domestic company/ Affiliatedcompany [4 facilities] OFukudaEngineeringCo., Ltd. (FEG)[Kazo, Saitama] OKyushuF.tech Inc. (QFT)[Yamaga, Kumamoto] OReterraCo., Ltd. (Reterra)[Chichibu, Saitama] OJohnan ManufacturingINC. [Ueda, Nagano]

Subsidiaries in overseas [11companies, 13facilities]

- •F&PMfg., Inc. [Ontario, Canada] (F&P)
- Dyna-Mig,AdivisionofF&PMfg., Inc. [Ontario, Canada] (DYNA-MIG)
- F&PAmericaMfg., Inc. [Ohio, USA] (F&PA)
- •F&PGeorgia,AdivisionofF&PAmericaMfg., Inc. [Georgia, USA] (F&PG)
- F.techR&DNorth Americalnc. [Ohio, USA] (R&DNA)
- FEGdeQueretaro,S.A.de.C.V. [Queretaro Mexico] (FEGQ)
- ●F&Pmfg., DeMexicoS.A.DE.C.V. [Guanajuato Mexico] (FPMX)
- F.tech Zhongshan Inc. [Guangdong, China] (FTZ)
- F.tech Wuhan Inc. [Hubei, China] (FTW)
- F.tech R&D(Guangzhou)Inc.[Guangdong, China](FR&DCH)
- F.tech Philippines Mfg., Inc. [Laguna, Philippines] (FPMI)
- F.tech R&D Philippines Inc. [Laguna, Philippines] (FR&DP)
- F.techMfg. (Thailand) LTD. [Ayutthaya, Thailand] (FMTL)
- PT.F.TECHINDONESIA [KARAWANG INDONESIA] (FTI)

Xantai Fukushin Kimiki Co., Ltd, Michigan Branch Office, and European Branch Office are out of reporting target, because they are not mass production plants and does not have significant environmental impact.



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F-tech will not only strive to achieve its planned goals but also work to strengthen "On-site power" across the entire group.

With the evolution of the energy management process, F-tech has aimed to be an environment top runner.

In the F-tech group, this is the final year of the12th Mid-Term Plan, whose policy was framed with the aim of " Becoming Chassis System Manufacturer with Overwhelming Competitiveness." The 3 pillarsoftheplan " Change to Chassis System Structure," " Evolution of Global Operation," and " Strengthen of Environmental Response Technology" are also makingsteady progress. In the environmental aspect, F-tech were able to achieve the 2015' stargets in the 4 areas of "Production", " Management", "Development/Engineering" and " Corporate Activities" . Sharing the procedures and knowhow about the effective efforts of the entire group in the" F-tech Global Environmental Conference", which is held every once a year, is one of the factors responsible for the achievement of the 2015' s target. Inparticular, based on the energy management system of the Kameyama Plant, which acquired ISO50001 certification, F-tech issued a group-wide system "G_Ftech EnMS*" including F-tech' s energy saving know- how in 2014, and starting expanding horizontally to domestic and oversea groups, which was an important event for the next step. In order to thorough "Energy Management Evolution" as a group , the environmental policy has also been revised. In fiscal 2015, F-tech completed their introduction into the North America mass production base and expanded to 2 mass production bases in China in 2016. In addition, expansion into the Asia Pacific region baseis also being planned in FY2017.

*G_Ftech EnMS : Global Ftech Energy Management System

Collecting and sharing technical information such as weight reduction and resource saving in all groups.

Even in product development, while fuel efficiency regulations are being strengthened globally, striving to collect and share state?of?theart information throughout the entire group including the German EU branch. For example, adoption of high tensile materials and aluminum materials, which contribute to weight reduction, and development of new processing technology. Furthermore, F-tech is aiming to realize light weight, high function and resource-saving design by unique analysis technology that simulates the performance of not only single parts but also the entire vehicle. (P13) Apart from the efforts rendered by the global group, we are also promoting " Green Procurement " and " Management of Chemical Substances Contained in Products." In addition, we are continuing to strengthen our social aspects, such as " Quality Assurance" and " Occupational Safety and Health." With respect to quality assurance, we received numerous awards from automobile manufacturer customers across North America and many other areas of the world. In occupational health and safety, we are sharing information with different regions of the world, and developing important measures to be implemented horizontally across the entire F-tech group. (P14,P15,P16)

As a corporate citizen, we will evolve our efforts globally in social contribution activities, also.

Social contribution activities, in coordination with local communities, became active since 2014. They focused on biodiversity initiatives within the F-tech group by issuing the "F-tech Group Biodiversity Guideline." Many initiatives, inspired by the activities reported from other bases in the Global Environmental Conference, have been launched, and competition awareness has begun to grow within the group. In FY 2015, in order to accelerate this trend, we started the " Biodiversity Annual Reporting System" to share all such initiatives. (P.17)

In the future, we hope to be a company where the employee can demonstrate "creative skills" in every field and enhance "on -site power" to challenge to create new value as well as enhancing policies and measures.

Augst, 2016

President & CEO

Company Principle

From a global perspective, we strive to contribute to our society and to improve the quality of life through manufacturing of highest quality products with ambition and sincerity.

Our action guidelines

Compliance with laws and ordinances

We will always give top priority to ethically appropriate actions in all of our activities. We will always comply with the laws, ordinances, and the rules. Each of us will act with common sense as a responsible member of society, so as to ensure a high level of legal compliance at the company.

Compliance with company regulations and rules

With appropriate understanding of the purpose of establishing company regulations and rules, which have been established for ensuring a working environment in which every one of the associates can work together with equal rights and opportunities, we will always act in compliance with these company regulations and rules.

Traffic safety

As people engaged in production of automotive parts, we will always be in compliance with traffic rules, and we will always strive for exemplary safe driving with a readiness to give way to others on the road.

Conservation of the environment

Based on an understanding that the Earth is an invaluable asset to the whole of humankind, we will strive to minimize, and ensure optimum disposal or treatment for, any waste related to manufacturing, and to utilize natural resources and energy in more efficient ways.

Increase in the corporate value

With an understanding that the continued survival of a company relies on the creation of values, we will strive to raise the corporate value as a company winning recognition from the general public, trying to continue securing profit on a long-term basis.

Information and public disclosure of information

We will make clear distinctions between private or confidential information and information to be disclosed to the public, and we will strive to provide accurate information that is useful to our customers, and to disclose information that should be made public in a timely and appropriate manner.

Fair business transactions

We will not engage in any unreasonable or irrational business practices and we will not provide benefits or preferential treatment to anyone beyond common sense or generally accepted ideas, always evaluating various conditions based on comparisons in an impartial manner and conducting business transactions that are sound and fair.

Environmental Principle

In order to become the top runner in the area of the environment in the automotive industry, we will make the utmost effort to establish a future with rich nature and low carbon by having each of our associate's extending their understanding of global environmental issues and proactively engaging in the continuous preservation of the environment in all areas of our corporate activities.

Basicpolicies

- Reducing environmental impact through product life cycle
- •Reducing CO2when a vehicle running by reducing its weight
- Conduct reservation of resources and energy in all business activities
- •Continue to produce zero waste in all business activities
- Work on social contribution activities that lead to preservation of biodiversity
- Comply laws and regulations of environment
- Conduct continuous improvement of Environmental Management System and prevent pollution
- •Set environmental purposes and objectives and review regularly

•Develop high environmental consciousness human through energy conservation activities and environmental conservation activities.



Start of ISO50001Global* 1DeploymentNorth America benchmarkbaseinstallationwascompletedin2015

The F-tech group is working to achieve the 2020 Global Environmental Targets. The slogan " Realization of the Environmental Top Runner by the Evolution of Energy Management" was raised at the 12th Mid-Term Environmental Plan (2014 ~ 2016) as a symbolic representation of the group's efforts. The Kameyama Plant acquired ISO50001 certification as a domestic auto parts' specialized manufacturer in October 2013. In March 2015, the group's common energy management system "Global Ftech Energy" Management System" (G_Ftech EnMS) was issued, and the horizontal development of the Energy Management System(EnMS* 2) across domestic and overseas groups has started. In FY2015, the completion of the introduction of ISO50001 in F&P AMERICA MFG., INC. (F&PA) in Ohio, USA, marked the start of benchmark development in North America.

*1 ISO50001 : EnMS was internationalized in 2011. Establishing and implementing the systems and processes required by the standard led to a reduction in greenhouse gas emissions and energy costs *2 G_Ftech EnMS : Group common EnMS, which was formulated based on the EnMS of the Kameyama Plant, including the ISO50001 family standard and energy saving know - how of F-tech.

ISO50001 was kicked off at F&PA in July 2015

EnMS team members, including the president, factory director, department manager, department personnel, and four support members of F-tech gathered to confirm the purpose "Reducing energy costs by utilizing EnMS" again. Thereafter, the activities started.

Since the F&PA'S energy management system was installed in one part, we could not grasp the energy usage of individual processes/ facility's. Therefore, we filled in the facility management register, which is one of the mechanisms of G_Ftech EnMS, by main process/ equipment, and organized the focus points for

energy saving to grasp how much energy is being used by the process/ facilities.



Introduced based on G_Ftech EnMS

ISO50001 is a standard highly consistent with ISO 14001.F&PA, which had already obtained ISO14001 certification, integrated the existing Environmental Management System (EMS) and G_Ftech EnMS, which is a common EnMS across groups, and arranged according to the structure of F&PA. We think the most important part of ISO50001 is energy review* 3 (energy saving diagnosis). Therefore, we first conducted an energy saving diagnosis, where we analyzed energy usage in each process / equipment.

We also clarified energy-saving management standards by formulating a "manual that shows the management standard value and operation of equipment so that anyone can keep energy usage at the minimum."

Standardization of operational standards can also be used as hand over materials when the person in charge changes or as an education text for



trading energy technology.

Specified 18 measures by energy saving diagnosis, and about 310,000 US\$ of energy cost was reduced per year

F-tech provided "Energy Diagnosis Basic training"to F&PA EnMS team members. In the training, energy saving point of processes and facilities related to F& PA were summarized inorder for them to be easily understood. The F-tech members served asenergysaving diagnosticians and conducted hearings and field checks in each division to extract energy saving measures.

They identified 18 measures to improve electricity and natural gas consumption, and US \$ 314,718 is expected to besaved. The 18 measures identified were classified into 4 major items: "annualreduction cost,"" necessary period,""investment collection period,"" impact on environment, safety,quality,"which were based on the priority standard table of G_Ftech EnMS and decided the priority. In FY 2015, F&PA implemented 6 high priority measures of electricity and natural gas.

Self Declaration was carried out in February 2016

In February 2016, an internal auditor team was formed by F-tech support members and F&PA to conduct an internal audit.





The team intended to examine, whether the EnMS, developed mainly by F&PA, conforms to the ISO50001 standard and the compliance status of energy management standard, which was developed by the department. Finally, we self-evaluated using the management review mechanism and completed self-declaration * 4 . The aim of issuing G_Ftech EnMS is to tackle energy saving conservation activities on their own at a high level. At F&PA, they will continue to reduce environmental burden and energy cost by using this activity, so they will be the sample in North America base.

Expand our global expansion to China benchmark base in FY 2016

In FY 2016, we will expand to the China benchmark base following North America. We are planning to work on two mass production bases, Zhongshan Inc. (FTZ) in Zhongshan City, Guangdong, and Wuhan Inc. (FTW) in Wuhan City, Hubei. FTZ was kicked off in January 2016, and FTW kicked off in March 2016. There are plans to expand the activity to Asia and Oceania by 2017.

- *3 Energy Review : Determining the organization's energy performance leads to the identification of opportunities for improvement based on data and other information. (Quoted from JIS Q 50001:2011, .3terms and definitions)
- *4 Self-Declaration : Unlike third party certification, which confirms standard by third party institutions, it is a way to self declare compliance with the standard by self assessment.

F-tech Kameyama Plant received CEM Energy Management Insight Award

The F-tech Kameyama Plant received CEM Energy Management Insight Award in May 2016 . This award's aim is to disseminate ISO50001 certification by awarding the companies and organizations that achieved energy efficiency improvement and cost reduction. Energy Management Working Group*5 implemented activities to promote the dissemination of ISO 50001 certification, an initiative under Clean Energy Ministerial Meeting*6, ranging from judging to award, and 2016 was the first recruitment.

F-tech Kameyama Plant received ISO 50001 certification in October 2013 and was awarded for its excellent energy efficiency improvement and cost reduction achievement.

Based on this achievement, F-tech will endeavor to accelerate the global expansion of ISO50001.

*5 Energy Management Working Group (EMWG): One of the initiatives under CEM that promotes dissemination of ISO50001 certification. The participants are Australia, Canada, Chile, China (Observer), European Commission, India, Indonesia, Japan, South Korea, Mexico, South Africa, Sweden and the United States.
*6 Clean Energy Ministerial Meeting (CEM: Clean Energy Ministerial): International meeting attended by the representatives of 23 major countries and regions in the world to promote the dissemination of clean energy.



Secondyear of the mid- termplan (environmental field) alsoachieved the target.

Wewill strengthen our effortstowardthefinal year.

F-tech Group are developing activities by setting targets in 4 areas," Production", "Management", "Development/ Engineering^{*}", and" Corporate Activities" with the slogan" Realizing Environment Top Runner by Evolving Energy Management". In the production area, we were able to achieve the target for FY2015 by successfully sharing effective measures within the group at the Global Environmental Conference, and implementing it. In the management area, we began full-scale group deployment of ISO50001, and completed introduction to North American benchmark base (F&PA). Continue to expand to China benchmark bases in FY2016. (P.5, P.12) In the development/ engineering area, highly evaluated by our customers in the weight reduction technology and F-tech' s own processing technology, which is the strengths of F-tech. (P.13) In the corporate activities area, started specific efforts at each site to contribute to local communities and activities of biodiversity. (Some are introduced in P.17, P.18~P.23)

*Refrain from announcing the goal of " development/ engineering" from the viewpoint of confidential information.

Environmental Area 12th Mid-term Plan (FY 2014 ~ FY 2016) Target: F-tech Group (7 domestic sites, 14 overseas sites)

A *** *	Europeien Contente	Plan		Period	
Area	Expansion Contents	Result	FY 2014	FY 2015	FY 2016
		Plan	[Improve4% (Compared to FY2010)]	[Improve5% (ComparedtoFY2010)]	[Improve6% (ComparedtoFY2010)]
	GHG emission rate reduction	Result	Improved 13%	Improved 15%	
			0	0	
生		Plan	[Improve4% (ComparedtoFY2010)]	[Improve5% (ComparedtoFY2010)]	[Improve6% (ComparedtoFY2010)]
	Water resource consumption rate reduction	Result	Improved 8%	Improved 6%	
産		Evaluation	0	0	
		Plan	[Improvement of GHG data accuracy]	[Reduction Preparation]	[Improvement of actual data grasping rate]
	Value chain management strengthening	Result	Improved GHG data accuracy	Prepared to reduce	
		Evaluation	0	0	
		Plan	[Start Overseas Deployment]	[Complete North Ameica]	[Complete China]
	Overseas benchmark bases ISO50001 compliance	Result	Issued G_Ftech EnMS	Completed North America	
			0	0	
マネ	マ ネ		[System Construction]	[System construction /Acquire Certification]	[Acquire Certification]
ジメ	• Acquisition of ISO14001	Result	Constructed System	Constructed System	
			Constructed Cystem	Contractica Cyctom	
ŕ	(2015 revised version) certification	Evaluation	0	0	
ŕ	(2015 revised version) certification	Evaluation Plan	[System Construction]	[System construction/ Acquire Certification]	[Acquire Certification]
7	ISO14001 certification at newly launched mass production base	Evaluation Plan Result	[System Construction] System construction preparation	[System construction/ Acquire Certification] Consturcted System	[Acquire Certification]
ř	• ISO14001 certification at newly launched mass production base	Evaluation Plan Result Evaluation	[System Construction] System construction preparation	[System construction/ Acquire Certification] Consturcted System	[Acquire Certification]
۲ ۲	• ISO14001 certification at newly launched mass production base	Evaluation Plan Result Evaluation Plan	[System Construction] System construction preparation [Sharing Infomation]	[System construction/ Acquire Certification] Consturcted System [HorizontalDevelopment]	[Acquire Certification]
7	(2015 revised version) certification ISO14001 certification at newly launched mass production base Contribution activities to the local community	Evaluation Plan Result Evaluation Plan Result	[System Construction] System construction preparation [Sharing Infomation] Information sharing at Global Environmental Conference	System construction/ Acquire Certification] Consturcted System [HorizontalDevelopment] Horizontal Development in the group	[Acquire Certification]
「ト」	• ISO14001 certification at newly launched mass production base • Contribution activities to the local community	Evaluation Plan Result Evaluation Plan Result Evaluation	Constructed Cystem Construction [System Construction preparation Construction preparation [Sharing Information] Information sharing at Global Environmental Conference O	[System construction/ Acquire Certification] Consturcted System [HorizontalDevelopment] Horizontal Development in the group	[Acquire Certification]
ント	(2015 revised version) certification ISO14001 certification at newly launched mass production base Contribution activities to the local community	Evaluation Plan Result Evaluation Plan Result Evaluation Plan	Construction of the second secon	[System construction/ Acquire Certification] Consturcted System [HorizontalDevelopment] Horizontal Development in the group O [Develop Activity]	[Acquire Certification] [Cont inuos Development] [Continuos Development]
2ト 企業活動	(2015 revised version) certification (2015 revised version) certifica	Evaluation Plan Result Evaluation Result Evaluation Plan Result	Constructed Cystem Construction [System Construction preparation O [Sharing Infomation] Information sharing at Global Environmental Conference O [Guideline Establishment] Guideline Establishment,issue	[System construction/ Acquire Certification] Consturcted System [HorizontalDevelopment] HorizontalDevelopment in the group O [Develop Activity]	[Acquire Certification] [Acquire Certification] [Cont inuos Development] [Continuos Development]

○: Target Achieved,∆: Achieved more than 70% less than 100%, ×: Achievement degree less than 70%,-: Excluded

FY 2020 Global Environmental Targets

F-tech Group set CO2 emission rate and water consumption rate as the "Global Environmental Targets for FY 2020", and entire group is working together to reduce environmental impact. We are checking the progress status in the Global Environmental Conference, held every year.

■3 sites in Japan*1 Plan/Result

Area	Item	FY2015 targets	FY2015 Result	Evaluation	FY2016 Target
		CO2 emission base unit*2 Improve more than 2% (Compared with FY 2013)	Improved 5.3%	0	CO2 emission base unit Improve more than 3% (Compared with FY 2013)
生産	CO2 emission reduction	CO2 reduction by measures*3 Kuki Plant 45.0 t-CO2 reduction	151.3t-CO₂	0	CO2 reduction by measure Kuki Plant 45.0t-CO2
領域	Target:Head office/Kuki Plant ,Kameyama Plant, Haga T/C	CO2 reduction by measure Kameyama Plant 50.1 t-CO2	138.8t-CO₂	0	CO2 reduction by measure Kameyama Plant 50.1 t-CO2
	CO2 reduction by measure Haga Plant 14.9 t-CO2	20.1t-CO ₂	0	CO2 reduction by measure Haga Plant 14.9t-CO ₂	
_	Evolution of	ISO50001 Overseas development Complete North American Benchmark base	Completed North American Benchmark base(F&PA)	0	Complete China Benchmark Base (FTZ,FTW)
マ キ Energy management ジ メ ン	Energy Diagnostician Training Total 10People	Tranned 16 people	0	-* 4	
	Compliance with international standards	-	-	_	Acquire Certification ISO14001: 2015
企業活動	Performing social	Contribution activities to the local comunity Participation rate over 20 %/ Each site regular employee (Total number of people)	Kuki: 122% Kameyama: 630% Haga: 159%	0	Contribution activities to the local comunityParticipation rate over 20%/ Each site regular employee (Total number of people)
	Implement F-tech forestry activities	Implemented activity	0	-* 4	

◦ : Target Achieved,≙ : Achieved more than 70% less than 100%、× : Achievement degree less than 70%, - ∶ Excluded

*1 3domestic office: Head office/Kuki Plant, Kameyama Plant, Haga T/C

*2 CO2 emission base unit: CO2 emission per one million NET sales (t-CO2)

*3 CO2 reduction by measures: Evaluate based on the amount that could be reduced by measures, regardless of the actual emissions

*4 Energy diagnosticians and implementing F-tech forestry activities are excluded from the targets of FY 2015 because it has been established and standardized



Working to reduce environmental impact by sharing issues and counter measures throughout the F-tech group

CO2 emissions

CO2 emissions are on an increase trend as the number of production increases, but CO2 emission per sales is improving year by year. Looking by region, North America region's ratio increased 7% compared to the previous year, and it was the highest, because of the full scale operation of Mexico's new plant. In China region, production volume has increased, but by implementing environmental measures exceeding the increase of production, they have reduced 4% compared to the previous year. In Asia Pacific region, CO2 emission increased by 6% compared to the previous year, because of the introduction of facilities in the aluminum die casting process and the increase of the number of production. In Japan region. CO2 emission has remained almost flat with an increase of 2% compared to the previous year.

Water resource consumption

Water resource usage is also on an increase trend because of the increase of production volume. Water consumption base unit per sales is slightly worse than the previous year. In North America, water consumption is also increasing due to increase of production. In Asia-Pacific region, usage temporarily increased due to the breakdown of drain pipes and valves.

Other region, Japan and China's emissions are almost flat compared with the previous vear.

Waste emissions

Waste emissions and emissions base unit have $_{\rm 16,000}^{\rm ton}$ also increases for five years since 2011. Looking by region, North America's emissions increased by 31% compared with the previous year, which accounts for 67% of the entire group 10,000 . 16% increased in China, also. In Japan region, emissions have increased by 8% due to maintenance defects in the painting process at domestic site. As for this, we have already investigated the cause, and completed measures to prevent recurrence. In the Asia Pacific region, it is remaining almost flat.

In the future, reduction of waste emissions due to the increase of production is an important issue, especially in North America. Direct landfill waste volume and direct landfill rate have been decreasing for the fifth consecutive year.

As a factor of improvement, aggressive efforts to reduce the amount of landfill waste in the North America region have been shown as a result. We will continue our efforts at each site so that we can maintain improvements in the future.



※温室効果 ガスは、江場、研究所等で使用されたエネルギー及び物流で使用されたエネルギーを対象としています。 ※日本には、久喜事業所、亀山事業所、芳賀テクニカルセンターの他、国内子会社、関連会社のデータが含まれています。



※日本には. 久喜事業所、亀山事業所、芳賀テクニカルセンターの他、国内子会社、関連会社のデータが含まれています。





※日本には、 久喜事業所、亀山事業所、芳賀テクニカルセンターの他、 国内子会社、関連会社のデータが含まれています。

In all of the process, all of the sites, strive to "Visualization" of environmental impact.



• CO2 emission in OUTPUT was calculated multiplying the amount of energy consumption in INPUT by CO2 conversion factor.

• Referred calculation method of CO2 issued by Ministry of Economy, Trade and Industry and WRI/WBCSD " The Greenhouse Gas Protocol "

 \cdot Power consumption in Japan was calculated based on the latest factor of each power company

 \cdot Reported data period: April 2015 \sim March 2016

Focused on developing human resources, related to the energy diagnosis for the energy management group development.

All F-tech Environmental Management System

In Japan, we have begun initiating efforts to acquire ISO14001 certification since 1998, as for the F-tech Group has decided addressing environmental issues by company as a top priority. Even at the overseas production bases, acquired certification in 2009 and have established an environmental management system with All F-tech. Also at the Mexico's new production base established in FY 2013, began working on obtaining certification, and plan to acquire certification in FY 2016.

Organizational Structure

Since 2008, our group has started to build an All Ftech Environmental Management System. To improve the All F-tech Environmental Organization structure, set practical person in charge at each bases, and the general manager as a responsible person.

Compliance

Environmental laws and regulations are vary greatly and huge, depending by the country and region. In some overseas bases, we have consultant contracts with external specialized agencies to ensure compliance with laws and regulations.

At F-tech, we introduced an electronic manifest system to improve the level of management of waste disposal. In addition, at the company wide environmental conference held once every three months, we check the status of notifications and regulations to ensure

compliance with laws and regulations.

Environmental Education

The Iso14001 basic course is registered as essential subject of company, and in addition, we carry out energy saving training and internal auditor training etc, and focusing on environmental education for employees. Also in FY 2015, we focused on nurturing human resources capable of energy diagnosis at the energy review of ISO 50001, opened the "Energy Diagnostic Basic Course", and 16 employees took the course. This course is registered as a necessary item of the company and plan to continue education in the future.

As a part of employee environmental education, the group organizes social contribution activities and biodiversity activities and actively participate the employees. In addition, we are conduction environmental education that devised at each branch overseas. At the Philippine base, they create Christmas objects and nest boxes using waste materials and install them in the premises to raise environmental awareness among employees through environmental activities.

Internal Environmental Audit

The group regularly implements internal environmental audits based on the environmental management system of each site to ensure the compatibility of the environmental management system.

In order to conduct effective audits, we regularly hold internal environmental auditor courses and continually strive to expand auditors. We are working to conduct a fair audit by auditors from various divisions participate in the audit. In the internal audit of FY 2015, 42 auditors participated in the internal audit.



|| Ftech Environmental Management Organization

6th F-tech Group Global Environmental Conference held Grand Prize:FPMX "Reuse of wastewater treatment sludge utilizing earthworms"

In F-tech Group, environmental officials gather from domestic and overseas group every year since 2009 and holds Global Environmental Conference. FY 2015 was held at Kameyama Plant (Kameyama city, Mie prefecture) from October 6th to 8th. We have checked the progress of group environmental goals and shared environmental effective measures as we conduct every time, and in addition, as for other companies tour, we visited Honda Motor Co., Ltd. Suzuka Factory, Mie University and Sharp Kameyama Plant which are working on energy conservation, and deepened our understanding.

At the Global Environmental Conference, we honor excellent environmental measures to develop measures horizontally. This time, FPMX's(Mexico) "Reuse of wastewater treatment sludge utilizing earthworms" attracted attendees' attention and received the Grand Prize.

• Frist Prize for Environmental Action: FPMX(Mexico)

"Reuse of wastewater treatment sludge utilizing earthworms"

Awards for Excellent Environmental Action:FPMI(Philippines)

"Object creation contest for Christmas decorationsfrom waste materials"

- Awards for Environmental Good Idea:F&PG(USA)
- "Metal sheeting of welding curtain"
- CSRAward (Newly established)
- "F-techforestcreation"







FPMX



F&PG

FPMI



Kuki Plant

Energy Management

At F-tech group, we promote the introduction of ISO 50001* and put emphasis on energy management. The Kameyama Plant, in October 2013, acquired ISO50001 the first in domestic auto parts specialized manufacturer. In March 2015, we issued the Global_ F-tech Energy Management System(G_Ftech EnMS). This G_Ftech EnMS is a group common energy management system formulated based on the energy management system of the Kameyama Plant, including the requirements of the ISO50001 family standard and the energy saving knowhow of F-tech.Domestic energy management began at the Kameyama Plant, and gradually introduced from 2014 at Kuki Plant, from 2015 at Haga Technical Center, and in April 2016 we began operating the common system at three Plants.

Alsofrom FY 2015,we beganhorizontallydevelopingG_ FtehcEnMSand energysavingknow-howthat wehavecultivated at 3 domestic plants tooverseas group. In February 2016,the introduction to theNorth America benchmark base was completed. (see •P5, 6) We will expand to the China benchmark base and the Asia Oceania benchmark base in the future, and we will aim to improve corporate competitiveness by reducing greenhouse gas emissions and reduce energy cost by evolving energy management throughout the group.

*ISO50001 : A global standard called an energy management system that sets up a mechanism for an organization to implement systematic management regarding energy use. It can lead to reduction of greenhouse gas emissions and energy costs.









We will continue to respond to the demands of society and our customers while the global fuel efficiency regulation is strengthening

While reducing energy consumption and CO2 emissions is being said, the movement towards strengthening is proceeding not only in developed countries but also in emerging countries under the fuel efficiency regulations of automobiles. Therefore in the automobile industry, in order to satisfy the regulations of each country/ region, development such as weight reduction of vehicles and parts, improvement of engine efficiency, reduction of air resistance, etc are strongly promoted.

エンジン効率の向上



Actively adopt high-tension materials* and aluminum materials, contributing to weight saving

Our company adopts aluminum material for a wide range of products ranging from small pedals to large subframes. Recently we have started mass production of aluminum pedal arm of Honda NSX and subframe of new type fuel cell vehicle CLARITY FUEL CELL. Aluminum recruitment is one of the indispensable ways in clearing the North America's 2025 fuel efficiency regulation value. In addition, we are also involved in the development of materials for high -ten materials, by cooperating with automobile manufacturers and steelmakers. We have already reduced the sheet thickness while maintaining strength by aggressively adopting high tension materials also in F-tech main products such as subframe and axle beam. It contributes to improvement of fuel economy by realizing weight saving.

We are enhancing F-tech's unique analysis technology

In designing, we make full use of our proprietary optimization simulation and mechanism simulation in order to respond to customer's strength endurance and vehicle performance improvement needs.



Optimization simulation is a method of examining product shape without waste. Mechanism simulation is a method to examine the performance of the entire vehicle by calculating not only the parts but also the basic structure and the movement of the vehicle itself. In addition, our company also adopts paint simulation for electro deposition painting. We have also made it possible to preliminarily examine the main parts of the paint test which we had been relying on verification with real products so far. In addition, by conducting simulation of yield optimization in parallel, we are striving to conserve resource by minimizing material waste while being lightest and highly functional. Products designed in this way are widely adopted as Honda global strategic vehicles such as CIVIC and the CR-V, and representative models such as GM's Equinox and Chevrolet Camaro.

Sending the world's top level technical information on 4poles/ 24hours

In the F-tech group, it is possible to develop 24hours a day by development center in Japan, North America/ Europe, Asia cooperate together. The newest office, the German EU branch European Branch Office, catches the world's most advanced technology trends, including the adoption of resin parts. In addition, we have set up technical themes from the engineering team and materials to production technology, and are promoting weight saving from a long-term perspective.

*High tension material(high tensile strength steel): Strength improved steel material compared to the ordinary steel materials by adding alloy components and control of structure.

Ensure the non- inclusion guarantee of hazardous chemical substances in accordance with common rules defined by G-FQS

F-tech Group Green Purchasing Concept

F-tech Group has established the basic philosophy of green procurement as "F-tech Green Purchasing Guidelines" to purchase environmentally friendly parts, materials and products with priority.

Formulation of green purchasing guidelines

"F-tech Green purchasing Guidelines" currently ask our suppliers in Japan and abroad the "Establish of environmental management system", "Compliance with environmental laws and regulations", " Implementation of management of chemical substances contained in products", "Greenhouse gas emissions grasping and reducing". F-tech delivered to approximately 70 suppliers in July 2013, at our overseas bases they begin to request suppliers in overseas, and by March 2014 delivered Green Purchasing Guidelines to about 130 suppliers. We strive to continuously preserve the global environment by pursuing green purchasing along with our suppliers in accordance with the Green Purchasing Guidelines.



Grasping greenhouse gas emissions in the value chain

In the "GHG Protocol" which is the worldwide common greenhouse gas calculation guideline, it is recommended not only the greenhouse gas emissions from the group's business activities, but also to identify the reduction opportunities and risk related to greenhouse gases in the value chain. In accordance with this guideline, our group started grasping supplier's greenhouse gas emissions from FY 2011, and established a grasping system in all regions in 2013. In FY 2016, we aim to improve grasping ratio and data accuracy worldwide by our supplier's cooperation. In the future, we will strive to suppress global warming including the value chain.

Management of chemical substances in products

Our group established a management system at each site and carry out IMDS surveys and other measures to respond to the regulations on chemical substances contained in products that are established in various countries and the requirements of customers. We strictly prohibit the use of substances, by stipulating in "F-tech Chemical Substance Management Standards", which are harmful to people and the environment, and prohibited or regulated by law. We are also working to eliminate the target substances through green purchasing activities and offer products that do not contain these substances. In addition, for substances of concern about hazards are similarly stipulated in the same standard documents and comply with the regulations of chemical substances contained in each country. Since FY 2013, we have begun operating supplier management and survey of chemical substance contained in products by establishing group common rule in the Global F-tech Quality Standard (G-FQS). Regarding new supplier, we confirm the management system of chemical substance in products during the quality system audit. In addition, in order to respond to the diversification of customers throughout the group, we have conducted follow-up for survey methods etc. from our quality department to group bases. Our group is aiming to evolve from single parts to chassis system maker. Along with that, in the future it is expected that changes will also be made in parts from payment to self-procurement, and management of chemical substances contained in products will become more important. We will conduct quality system audit of the entire group according to the common rules established by the existing G-FQS, and will continue to ensure assurance of non-inclusion of hazardous chemical substances.

Steadily promoting "Achieving high quality level" throughout the group

Received customer's "Quality Award" at North America base

In FY 2015, we tried to develop "Quality Improvement Support" to the target sites from mother bases in Japan and North America, centering on North America bases. As a result, we were able to realize substantial quality improvement and receive quality awards from customers, which was the target. We will continue to develop "Quality Improvement Support" in FY 2016, based on the improvement plan for the entire group.

We will expand "New/ Quality 7 Measures" to the group

In order to eliminate the regional disparity at global bases, we will implement "mid-term quality assurance plan" from FY 2016.

As the main measures, we intend to develop the " New/ Quality 7 measure" listed below at all bases. We will aim "high quality level achievement" throughout the entire group by managing with evaluation index such as index point (GQI), in-process defect rate (PPM), scrap cost, etc.

In FY 2018, we hope to realize the target "single index"* and receive "Quality Award" from major customers in each region.

*Single Index: Make the monthly index point one digit (within 6 points/ per month).

"New Quality 7 measures"

①Fix QMC activities leading to prevention of recurrence and prevention.

O Recruitment reduction deployment (scrap cost/ recruitment " zero")

③Thorough equipment inspection and maintenance

(4) Thorough education and training

S Securing the adequacy of the inspection and implementing it properly

6 Monitoring performance status by self-assessment

(internal audit, quality patrol, 5S deployment, etc.)

⑦Eradicate important quality problems by IPAS deployment

HONDA

TOYOTA Certificate of Achievenue DYNA-MIO A Diversity of PAP Mays, in DYNA-MIO A Diversity of PAP Mays, in Construction of PAP Mays,



"Global Quality Joint Meeting" was held on the 29th of June, 2015

From June 2nd ~ 4th 2015, the staff of 10 bases in Japan and overseas gathered and held the "29th Global Quality Joint Meeting" in Kuki city (Japan). At the conference, we shared information about the quality situation and the countermeasures to deal with problems at each site, and also "policies and measures" for FY 2015. We confirmed the consistency of the target values for the new fiscal year. At the end, we unified the vector to achieve the company policy of the F-tech group's 12th mid-term business plan, Becoming a chassis system manufacturer with overwhelming competitiveness". In addition, we visited the "Honda Motor Co., Ltd. Quality Reform Center Tochigi," where quality information around the world is shared, and were able to be a part of meaningful talks concerning the occurrence of problems and the countermeasures to deal with them, as well as the issue of market complaints. It was a very useful reference, which complemented our efforts to prevent recurrence of problems in the future.



Various awards received from automobile manufacturers

We have awarded each award from various customers in a wide range of areas by thoroughly implementing high-level mass production management and stable supply of high quality parts.

FY 2015 Award

※Inside of () is the awarded base

North America Region

- · HONDAExcellenceinQuality Award (F&PG)
- TOYOTA Certificate of Achievement Award (DYNA-MIG)
- · GM Certificate of Excellence "Platinum" (F&P)
- HONDA Excellence in Delivery and Quality Award (F&P)
- HONDA Excellence in Delivery and Quality Award (F&PA)
- China Region
- DHEC (Dongfeng Honda Engine Co.,Ltd.) Quality Stable Contribution Award (FTZ)
- Asia-Pacific Region
- Mitsubishi Motors Product Excellence Award (FPMI)

Following North America, the 1st China Regional Safety Officer Conference was also held in China

In accordance with the 12th mid-term business plan, the F-tech group continues to set occupational safety and health policies at each of the sites every year to tackle the occurrence of disasters, with the goal of "0 accident injuries". In FY 2015, the company-wide safety and health committee, consisting of domestic occupational safety and health that oversees 4 business sites* and FEG members, worked based on the policy "Rein force the establishment of risk assessment based on three actual and prevention of occupational accidents" from the background of the review of the personnel through business structural reform. Following the previous fiscal year, we are posting hazard maps and promoting compliance with rules by patrolling on-site regularly and creating a non-disaster environment by risk assessment. We also established safety and health committees at other domestic bases, and formulated and promoted safety and health plans based on our policies. At overseas bases, we have established safety and health committees at each region and are currently working on it. In North America, the seven bases' secretariat of safety and health committee gather annually at the North America Safety Officer Conference and share information. In China, 2 bases gathered in December 2015 and held the 1st China Regional Safety Conference.

*Headquarters •Kuki Plant, Kameyama Plant, Haga T/C, Equipment Center

In "F-tech Safety Voice" also known measures to prevent recurrence

Our group has been working on sharing disaster occurrence information within the group and preventing similar disasters. But from FY 2015, we began "F-tech Safety Voice" to raise the level a notch higher. Group safety division, established at the headquarters, selects actual disasters that occurred within the group and shares disaster information along with the countermeasures with each site. The site director and the safety personnel confirm the internal situation based on the content received and implement countermeasures as necessary. The results are reported to the group safety division.

Deployment of domestic improvement to all groups

In F-tech, in order to eliminate "sandwich" accidents caused

by stationary spot welding machines, we investigated fundamental counter measures, and fixed the jig and changed it to dual hand activation.

In addition, we developed in-house know-how, especially for production bases inemerging countries, which help inproducing a wide variety of products on a single welding machine. We willstrive to reduce occupational accident risks by developing the accident information that can be shared with all groups.



Both handed spot welding machine

Examples of initiatives in North America

In North America region, tackled to "securing further safety of pedestrians and forklifts" in FY 2015. In order to prevent contact accidents at corners where bad visibility is an issue, we installed large curved mirrors on the ceiling and walls. It was, however, difficult to see because the mounting position was very high and cleaning the mirror was cumbersome. In American, F&PG installed a human sensor at the corner, so that when a forklift or a pedestrian approached the intersection, the red LED lights

flashed on. F&P in Canada are also considering introducing a system, whereby the forklift automatically decelerates when the forklift, fitted with a main sensor, approaches a worker, who carries a pocket sensor (sub sensor) in his fluorescent vest. The sub-pocket sensor then emits an alarm

China region held a

technical exchange meeting on safety

China's production bases, F.tech Zhongshan Inc. (FTZ) and F.tech Wuhan Inc. (FTW), held a technical exchange meeting on safety on December 7th ~ 8th , 2015.

At the 2 bases, we have held technical exchange meetings to exchange information about improved production activities, but in 2015, we focused on safety measures for stationary spotwelding machines. In addition, we talked the management of restricted entry areas. Post-2016, we will hold technical exchange meetings and proceed with activities in accordance with the execution plan prepared in consultation with themanufacturing departments of both sites.

In FY 2015, we aimed to participate as much as possible in overseas bases, and over 20% of employees in Japan.

In F-tech, "Biodiversity Guideline" was issued in January 2015. Based on the guideline, we have activated activity within the group. In FY 2015, more than 20% of domestic employees, about 450 people, participated in the activities, and overseas, the participation is gradually increasing.

Started the "Biodiversity Annual Reporting System within the group"

Activity report of each base has been limited, only a few reports have been selected for the Global Environmental Conference that is held once a year, but from this fiscal year, we reported activities of biodiversity conducted in one year at the beginning of the fiscal year and started to share information within the group, by the each sites cooperation.



Implementation of the 1st tree planting activity at F.tech Zhongshan Inc. [Guangdong, China] (FTZ)

F.tech Zhongshan Inc. (FTZ) conducted the1st tree planting programs under the guidance of the agricultural center staff in 2015. 65 people,

including employees and their families,participated.Two hundred trees were planted inspite of bad weather.Thetrigger to this forestation activity was the "F-tech Forest Creation" of Kuki Plant that was reported in the Global Environmental Conference, held in October2015.



and bats Dyna-Mig (Canada) In recent years, the decrease in the number of

Tackling problems relating to bees

bees has become an issue of concern in Canada. Dyna-Mig donated 92 honeycombs to a Canadian environmental protection organization. It is said that bees are involved in the pollination of about one-third of the plants we eat. As a result , it is a high priority problem for human beings. Bat ecosystems are also being threatened by strange diseases in Canada. A disease called " White Nose Syndrome" is caused by bacteria

inhabiting caves. Bats eat a lot of insects, equivalent to two-thirds of their own weight per day. These insects cause great damage to the crops. So, Dyna-Mig has created a nest box, where bats can rest.





F-tech Group Biodiversity Guideline January 2015 issued

①Aim: The biodiversity Guideline is the guideline for F-tech group initiatives for biodiversity.

②Basic Idea: F-tech' s mission statement is "From a global perspective, we strive to contribute to our society and to improve the quality of life through manufacturing of highest quality products with ambition and sincerity". Based on this principle, we strive to "preserve biodiversity*1,2" and "builda sustainable, affluent society". Moreover, we are continually aware that our business is benefitted and impacted by biodiversity and we act as a company always with this in mind.

③Priority measures
 3.1 Contributions to society:We shall actively contribute to society through activities which leads to the conservation of biodiversity, with the goal of building an sustainable affluent society.
 3.2Contributions through technology:We will strive to preserve the ecosystem by reducing the environmenta limpact of the market by the evolution of environmental technology and weight reduction of the product, to maintain the global environmentally aware: Through in-company training and our contributions to society, we shall work to deepen each and every one of ouremployees' awareness of the importance of biodiversity, and engender in them a strong awareness ofthe environment.
 3.4Informationdisclosure:To improve societal awareness about biodiversity, we will actively disclose the

Definition of words

*1Biodiversity: The abundant variety of living organisms that exist on earth. It indicates the rich individuality and connection among living organisms.

results of the activities conducted in the F-tech Group.

- * 2Diversity: Eco system Diversity: Various types of natural environments such as forests, rivers, grass lands, tide lands, and coral reefs.
 - Species Diversity: Variouslivingorganismsrangingfromplantsandanimals downtomicrobial organisms suchasgerms.
 GeneDiversity:Diverse uniqueness of shape, pattern, eco system among as a mespecies resulting from the presence of variation in their genes.

Kuki Plant (Kuki, Saitama Prefecture)

Reduce gasconsumption by theoptimization of boiler start-up time

In the painting process, we use a steam boiler to raise the temperature of the chemical used in the pre-treatment process. To start production at the same time as the opening, the boiler starts automatically by a timer. Previously, we set the timer at 90minutes earlier than the opening to raise the chemical' s temperature, by the facility officer' s experience. So, we examined the change in chemical temperature until the rise stabilized and found that it took 60minutes to raise the temperature. From the result, we figured we could delay the boiler star t -up time by 30minutes and reduce gas consumption by 4,644m^s, 9.7t-Co2, in a year. We are considering horizontal development to the drying furnace start-up time in the future.

Kameyama Plant(Kameyama, MiePrefecture)

Continuing energy savingwaigaya activities

In KameyamaPlant, we are continuing "Energy savingwaigaya" sincethetimeit received ISO50001 certification. "Energy saving waigaya" activities are conducted to eliminate the energy waste by investigating the waste and changing points of the target department's energy management system data, which the proposing team configured with the help of the environment of ficerand expert of the facility management department. Currently, 2groups propose 2reports once in 3months .The purpose of this activity is to find the hidden waste, which is difficult to locate by a department, and also the waste that is missed because the department thinks " it can't be helped" by another department.

s skills by way of determining the changing point and waste from the energy management system. and it would be a chance to get a notice of improvement point of their own department by proposing to other departments.



Optimum pattern until the boilers tart-up



58 proposal had been proposed since activity started 3years ago, and 24 proposal became motivated to improve.

Haga Technical Center(Haga-machi, Haga-gun, Tochigi Prefecture)

Operationreview of the compressor for the laser processing machine

The air supplied from the dedicated compressor to the threedimensional laser processing machine is 0.9 MPa, which is needed for the assist gas to process aluminum material. We use the air for operating, which is reduced to 0.5 MPa. However, at the time of iron machining, which takes up 80% of the processing time, the assist gas is not air but liquefied oxygen. Waste is generated by reducing the pressure to 0.5 MPa from 0.9 MPa. So , at the time of processing iron material, we use inverter type compressor' s 0.6 MPa air, rather than using the dedicated compressor. Due to this measure, we were able to reduce 15, 200 kWh of electricity, 5,75t-Co2, in a year. But the investment was only for plumbery, so the payback will be less than a year. In the future, we will take advantage of the power monitoring system, which was introduced in 2015, to promote more energysaving measures.



Trial laser processing machine compressor operation review measures



FEG Co.,Ltd. (Kazo, Saitama Prefecture)

Power saving of illumination

The FEG's power usage has been increasing because of the initiation of the PV test, and increase in mold production. In order to reduce the power consumption of the entire FEG, we changed the lighting of the factory and office building to LED to save power and make the area brighter.

The ceiling of the factory has 36 metal halide lights, which use 1 kW. By changing to 400 w LED, not only did we save 21.6 kW of power but also increased the illuminance. In addition, the amount of heat generated from the light also reduced, so we could improve the air conditioner's efficiency in the summer, and because of the reduction of the warm-up time to turn on, we could reduce power by turning the lights off frequently. We also changed the lights that are turned on all the time in the office building to LED, in order to reduce power. As a result, we reduced power usage by 17, 840 kWH, 9t-Co2 of Co2. In the future, we are going to consider changing street lights to LED.

Kyushu F.tech Inc.(Yamaga-shi, Kumamoto Prefecture)

Cooperated internship acceptance

In Kyushu F-tech, we have been accepting students from the Kumamoto Prefectural Kamoto Business and Technical High School as interns on an annual basis since 2015. In July 2015, we accepted one boy for a periodof 5days.Started from the morning commute, the radio gymnastics before the work starts,procedure from the safety check to the field until the engage to the work,so that he can realize the manufacturing field of Kyushu F-tec. In Kyushu F-tech,we will continue to cooperate with the intern ship acceptance,as a part of Corporate Social Responsibility. (CSR).

ReterraCo., Ltd. (Ogan Saitama Prefecture Chichibu District)

In August 2015, the "Energy Conservation Building" was completed

In Chichibu factory, three buildings collapsed because of heavy snow in February 2014. Due to disaster insurance and administrative subsides, and the construction company, which we have related since the factory has established, we could build the final building "L6" in August 2015, and also could restart the work. We decided to build an "energy-saving building," so we installed LED lights and motion sensors in some parts. Reterra is located on a hill, which is part of an industrial park. In order to utilize natural light to the fullest extent and consequently reduce light power, we installed windows in all directions. We were able to reduce about 46% of energy compared with conventional mercury and fluorescent lamps. It led to a total annual reduction of 12,000 kWh and \200,000.





LED phased plant building ceiling lighting



The student's who participate say," I felt how hard the work is, so I will thank the parents again." every year.



L6 buildings are 2-story, the total floor area 1,800 m⁴, IF the visitor's dedicated reception floor, negotiation room, three-dimensional measuring chamber and office floor-room, comfort shipment field, 2F is a product inspection floor, and 40 staff are working in the spacious floor.

Jonan Mfg Inc.(Ueda, Nagano Prefecture)

Changetheresin moldingmachineto theenergy-saving hybrid system

Our company has 27 units of $20 \sim 27$ ton resin molding machine. In 2015, we updated three old hydraulic resin molding machines to the X pump hybrid type. The hybrid type operates at the required rotational speed with the help of the servo motor , so the energy loss is small. It is a very efficient drive system.

The power consumption of the conventional hydraulic 200-ton facility is 5.12 kWh, and the hybrid type is 2.72 kWh. Thus, we could reduce 47% of energy consumption . It also reduced mechanical noise and improved the working environment. We will continue our efforts in the future and work with the whole factory to reduce power consumption and CO2 emission.



X pump hybrid type of resin molding machine

TOPICS Global Efforts

F & P(Ontario, Canada)

Reducewaterusage in the adoption of magnetic filter

We have been reducing the amount of water usage by testing warm water cleaning with a magnetic filter in the painting process. This filter is to remove the metal particles washed from the welded parts, grit, and residue. The removed residues are recycled as metal. Not only can the magnetic filter improve the cleaning efficiency of the hot water cleaning process but also extend the life of the washing water by eliminating the impurities. In addition, the amount of pure water required to maintain the performance of the cleaning process could also be reduced.

Furthermore, we have installed an inverter for the two large exhaust systems and a device that helps reduce power and gas usage. Power usage was reduced by 25% by lowering the frequency of each fan to 45 Hz from 60 Hz.Besides, the 10th tree planting program of F&P Canada was implemented on the 14th of May, 2016, wherein 300 seedlings were planted by employees who volunteered.



Installed magnetic filter in warm water washing process in the coating process

DYNA-MIG (Ontario, Canada)

Won the Save on Energy Award * 1 (section Energy Award) by improving industrial facility

Our efforts to reduce power usage were highly appreciated. We also received incentives * 2 when the program ended. DYNA-MIG earned praise from all quarters for implementing 20 power saving programs in the past 4 years. Few companies have done so in the past. The program consisted of replacing the lights of the production area and mezzanine floor of the factory to LED and installing VFD (variable voltage variable frequency control) in the boiler circulating pump. The change to LED was beneficial in terms of energy conservation.

* 1Prize awarded by Festival Hydro Inc., a power company of the local Stratford, to the company that contributed to the reduction of power consumption or peak power.
* 2A system that amount of money invested in the measure to save energy are paid, and the funds are provided by the Ontario Power Authority and operated by Festival Hydro Corporation.



Pcture of the awads ceremony at Festival Hydro Inc. in 2015.

F&PA (Ohio USA)

Tree planting ceremony held in the forest of the F&P America

In order to recognize the appreciation of society, a special tree planting ceremony was held in the forest of F&P America in November 2015. The purpose of the event was "awarding of the long-service employees," " noise measures for local residents," "beautification of surrounding property and the factory."

Homage was also paid to the employees who have served for long by writing down the names of the 132 employees, who had worked for over 15 years, on a stone monument. All employees who participated in the ceremony reaffirmed that they were the employees of F&P America, and renewed our mind to promote initiatives for the environment as a member of the group.



Stone monument with 132 long-servece employee' s name.



Commemorative photo of the long-service employees

F&PG (Georgia USA)

Reduction of landfill waste by changing the curtain of welding cell

We are working to reduce landfill waste by changing the curtain of the welding cell to the metal sheet. 5,800 square feet used welding curtain becomes landfill garbage, every year. By changing to metal sheet, which we can use for five years, we expect to save \$32,860 per welding cell. Metal sheets can be recycled, so landfill waste will be zero. Also, the illuminance will be 3times compared to the previous curtain.

R&DNA (OhioUSA)

Saving cost, by the 3R initiatives

At R&DNA, we are working on the 3R (Reduce, Reuse, and Recycle) based on the group slogan" Keep defending the global environment." We are planning to reduce not only power, but also the disposal of light bulbs by introducing compound machine and changing fluorescent lights to LED. In addition, we are recycling metal and reusing transport materials. Classificate to wooden box , cardboard box, packing material when we received the various parts and materials, and inspect before reuse whether we can use inshipment. The use of recycled or reused materials has led to cost saving to the tune of 1 million dollars per year.

Classification situation for reuse

FEGQ (QueretaroMexico)

Water resource conservation by changing to anhydrous toilet

Currently, saving water resources is one of the important issues. We need to bring something to action by using the technology. So, we changed all flush toilets to anhydrous toilets. Water used in the flush toilet at one time is about 4 L. On an average, men go to the toilet three times per day. In FEGQ, there are currently 215 male employees. So, as shown in the following table, we saved 800m³ of water, and ¥ 320,000. An hydroustoiletsare,therfore,effectivefor water conservation.

	Male employees	Average usage	Amountof watere used at onc	Annual operatingdays	Annualwater reduction	
	215employee	3 times	4 l	312days	804,960l	
The the	Annual wate	rreduction[m ⁹]	804.96m3			
	price per cubicmeter	¥ 405		326,000/year		

FPMX (Guanajuato, Mexico)

Carried out tree planting activities and new energy-saving plant construction

Energy saving initiatives were incorporated in the new plant plan, which was expanded in 2015. Mechanisms were installed to reduce power usage, such as "installation of LED fluorescent lamps" and " installation of sunroof" to utilize natural light. In addition, jet towels and motion sensors were installed in the office toilet to reduce the use of resources and power.

In order to increase environmental awareness, we planted 30 seedlings of jacaranda. About wastewater treatment, we tried to reuse sludge as a fertilizer, but the acquisition of the state authorization didnotgo well, so we are considering other way and contractors. We will aim to make an environment-friendly company, by refereaing the measure of the other sites.





Grown Jacaranda March 2016





Compare of the improvement of welding cell, inside & outside

FPMI (Laguna, Philippines)

Won the Environmental Award from the HCPI(Honda Cars Philippines)

FPMI implemented CO2 emission reduction programs actively and obtained the highest score in the judgement criterion of the greenhouse gas emissions 2015 of Honda, and have been awarded the Environmental Award at 24th Trading Partner Conference of HCPI which was held on the 19th of May, 2016. This award was for the efforts in reducing CO2 emissions by lowering electricity usage, specifically if it was by installing inverter type air compressor and introduction of skylights in the manufacturing sites. These efforts led to a reduced annual electricity usage of 151,113k Wh and 97.5 t0Co2.





Introduced inverter type air compressor

Installed skylights



Won the Environmental Award in the HCPI 24th trading partner conference

FMTL (Ayutthaya, Thailand)

Reduce the LPG usage in the change of surface treatment chemicals

Energy-saving and environmental protection programs are implemented every year. For example, in order to reduce LPG usage, we changed the surface treatment chemicals to improve corrosion resistance in the painting process. We reduced the chemical tempurature to 33°C~37°C from 45°C~50°C. We could reduce 17,914 kg of LPG, 54.5t-Co2 of CO2 emissions, in the second half of 2015, thereby also saving 414,110 THB. In order to deodorize the stench efficiently, we introduced the scrubber deodorizing furnace instead of the direct burning type deodorizing furnace. Other than this, we also worked on energy saving of the welding process line. Previously, the switch of the lights and fans were connected, but then we divided the switch in order to turn off the power frequently.In addition, we are working on donating goodies to the local children on the occasion of Children's Day and engaging in conservation activities such as implementing savings' plans for electric and water bill, 5S.



Scrubber deodorizing furnace



FTI (Karawang, Indonesia)

Participating in the industrial park CSR activity program

In KIIC industrial park (Karawang International Industrial City) where FTI is, have started cooperative CSR program after management started in 2008. For example, in Telaga Desa (agriculture park), many companies are working on vegetable farm, fish farming, compost making, and forest tree seedling cultivation. In addition, as part of the activities of the United Nations stipulated World Environment Day (June 5th), planted the seedlings grown in this program in the same park, which is approximately 1 ha. In the future, we intend to deepen the awareness of the local community, and plant trees in the open space of the company land.





Worked on the planting by 320 employees volunteer

FTW (Hubei, China)

To reduce processing cost lowered the water content of paint sludge in the" sun terrace"

We worked to reduce the sludge disposal cost by reducing the moisture content of the paint sludge in Sun Terrace. Sun Terrace can dry the sludge of a maximum of 44 cans in the sunlight at a time to reduce the water content. The ceiling and walls were covered with tempered glass, so sludge outflow was not a cause of concern. Dehydration by machine reduces moisture content by70%, but Sun Terrace could increase the percentage by an extra 5% (annual average value).

The Sun Terrace construction investment was 95,000 yuan, but it could go on to save 7.5 tons of sludge disposal and 22,000 yuan in 2015. Payback would be in about 4years.

FTZ (Guangdong, China)

Energy-saving effortsby power ON/OFFcontrol

There are 16 flue gas fans in the welding field. Energy is wasted when the fans are not turned off at break time , lunch, or at the end of work. In 2015, we reviewed the control system and added microcomputer control switch to set the ON/OFF time of the power supply in accordance with the working hours of each department

. The investment was 2,300 yuan, but we reduced 49, 000 kWh, and 41,900 yuan worth of electric cost in one year.

The amount of water usage increased when the central air-conditioner was installed in June 2014 to improve the work environment. So from August 2015, we worked to save water resources by reusing the condensed water collected with the help of a pump at a cooling tower. As a result, we collected 5,760 ton of condensed water and saved 190,000 yuan in a year.

Took advantage of the condensed water of central air conditioning in the cooling tower

FR&DCH (Guangdong,China)

Deployed the management standard of

air-conditioning set temperatureto the in-house

We moved to new research building in March 2014 and introduced airconditioning in May 2015. As the result of letting the employees adjust the air-conditioning temperature freely, the temperature was set more than necessary. So, researched the China national standard setting temperature , and created a management standard of air-conditioning set temperature and developed in-house. The temperature was set at 26 °C or more for summer time cooling and 20 °C or less for winter heating.

At the same time, we posted the management standard next to the switch to increase the awareness of employees about energy saving and environmental protection benefits.







Strive to raise corporate ethics and risk management in domestic and overseas

Corporate Governance

The group aims to maximize corporate sustainability and long-term shareholder' s earnings as the basic goal of corporate governance. As such, we are working on the development of a systematic global system to tackle risk management and compliance along with the improvement of the business management organization (Board of Directors, Board of Corporate Auditors). In order to conduct objective monitoring of the business, we introduced an executive officer system and established an outside corporate auditor, and we supervise and audit at the Board of Directors and the Board of Corporate Auditors. Regarding directors, the term of office is set to one year so as to respond swiftly to changes in the business environment.

The Board of Directors consists of 12 directors who take decisions on important executive and legal matters and also supervise business execution. In addition, we appointed one highly independent external director, whose opinions based on extensive experience and sharp insight led to objective monitoring of the business. The Board of Corporate Auditors consists of 4 corporate auditors (including 2outside auditors). Each corporate auditor audits the performance of duties by the attendance at the Board of Directors and business and property, according to audit policy and work sharing established Board of Corporate Auditors. Regarding business execution, we appointed executive officers for each department and have a business headquarters system with 6 divisions and 2 offices. We hold a management meeting consisting of 18 Regional Officers , 12 Directors, and a General Manager, who deliberate on important matters of management, and prior to deliberation on matters to be solved with in the scope of authority delegated by the Board of Directors. In overseas business, we assigned supervisory officers in each region, North America, China, and Asia to achieve auto nomic completion and efficiency of business.

Internal Control

In addition to recognizing the risks related to the major business execution by the division in charge, establishing a management officer from a professional point of view, and hold a meeting and prevent the risk loss beforehand, and 5 Internal Audit Department officer , which is an independent business audit department under the direct control of the president, carries out audits of the business execution status of each department. We submitted an "Internal Control Report" that judges the internal control over financial reporting as of March 31, 2016 is effective.

Corporate Ethics Committee

In October 2004, we established a "Corporate Ethics Committee" (Chairman: Director and Senior Managing Operating Officer, also Compliance Officer) to confirm our compliance situation and develop policies. In addition, about a certain act suspected and against the law and the Articles of Incorporation and social ethics, we established a system in which a whistleblower is protected by establishing "Business Ethics Improvement Proposal Counter " so that the company and any of its subsidiaries' employees can report or consult directly with the company

. We established a dedicated external proposal counter in the law firm in 2015 to create a better environment for the proposer to propose by expanding the proposal window. In November 2004, the company established " Our Action Guidelines" to realize the company policy and management policy, and aiming to ensure throughout the corporate group. In June 2006, the company established " Compliance Regulations" on corporate behavioral ethics based on compliance with laws and regulations.

In FY 2015, it revised the content of "Our Action Guidelines" and distributed the more clear revised brochure "Our Action Guidelines and Business Ethics Improvement Proposal Windows" to all employees again. Also, posted a poster for the proposal window of the corporate ethics committee, and working on educational activities including the domestic and overseas group company.

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Risk Management

In the F-tech group, we developed "Risk Management Regulations" in June 2006. When a risk occurs, an emergency headquarters headed by the President will be set up immediately to correspond to the situation by following the regulations.

Usually, the director who is in charge of risk management officer oversees company-wide, domestic and overseas operations. In addition, each domestic site, subsidiary and overseas group companies carried out an annual selfverification using a checklist that was created in response to the business. They reported the results to the "Risk and Compliance Committee," which was installed in 2014.

The Committee deliberated and verified the results of the group companies. The committee gathers twice a year to develop and strengthen corporate governance and the internal control system. It identifies issues related to risk and compliance across the entire company, follows up risk control, improving the risk of actualization, measures to prevent recurrence, etc.

F-TECH Group will work to supply high-function under body parts, responding to various social request and evolution of the automobile, based on corporate philosophy" From a global perspective, we strive to contribute to our society and to improve the quality of life through manufacturing of highest quality products with ambition and sincerity".

To a global

We are expanding the network to Central South America, China, Asia, Europeled by North America.

Not only production base, as well as to develop are sponsive system to the customer needs by setting up a development sites in each region, and promotein for mation exchange in all aspects such as quality, development, production and the environment, to raise the level of the entire group.



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We aim to be the No.1 of "Chassis system manufacturers" from individual parts.

Responding to the development of automotive technology such as FCV, EV, we are working on building a new system from planning and development to production, to provide chassis system not just only the individual parts.



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Employees by segment





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