

Sony's Environmental Activities

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Sony's Business Domains











Financial Services

Environmental Vision "Road to Zero"



Sony strives to achieve a zero environmental footprint throughout the lifecycle of its products and business activities.





Addressing the entire product lifecycle





2015 targets set by backcasting from 2050



Operations

- 30% reduction in greenhouse gas emissions from Sony sites*
- 50% reduction in waste generation*
- Increase of waste recycle ratio to 99% or more
- 30% reduction in water consumption*
- 14% reduction in total CO2 emissions associated with all transportation and logistics **
- Assessment of impact of resource procurement and facility construction on biodiversity, and promotion of biodiversity programs such as groundwater cultivation



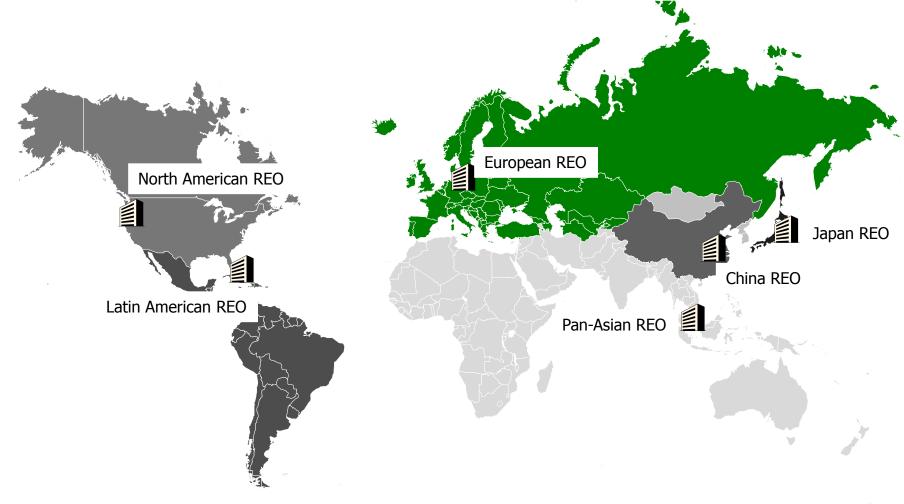
Products

- 30% reduction in annual energy consumption of products **
- 10% reduction in product mass **
- 5% reduction in utilization ratio of virgin oil-based plastics in products **
- Minimization of the risk of chemical substances through preventive measures; reduction in use of specific chemicals defined by Sony; and promotion of use of alternative materials



Sony's Regional Environmental Offices (REOs)







Environmental Affairs Europe = European Regional Environmental Office for the area of "Europe, Turkey, Russia and former Soviet bloc countries"

Environmental Affairs Europe (EAE)



EAE, located in Stuttgart, Germany, acts as Regional Environmental Office (REO) of the Sony Corporation.

- Environmental compliance of Sony products
 e.g. RoHS, ErP directives, REACH regulation + market requirements
- Environmental, occupational health and safety compliance of Sony group operations
- Take back & recycling (end-of-life products, batteries and packaging)





GEMS & Sony Group Sites in Europe

Major Sony group sites in Europe

Global Environmental Management

System (GEMS)

- Since 2004, Sony has a Global Environmental Management System that is certified and audited by an external party according to the International Standard ISO14001.
- Globally all sites*, the HQ functions = and its regional arms are audited.
- In Europe in FY09 34 sites were within scope.

GEMS/ISO14001 Certifed Site = GEMS in implementation phase =



	Sony Europe Manufacturing / Distribution / Service	3 >
16	ALS-TEC (Alsace/France)	
17	GDL-TEC (Godollo/Hungary)	
18	Sony Distribution Center (Tilburg/Netherlands)	
19	BCN-TEC (Barcelona/Spain)	
20	UK TEC (Pencoed/UK)	
21	Customer Satisfaction Europe (Belgium)	

Sony Computer Entertainment Europe		
22	SCEE - Central Office (UK)	
23	SCEE - Guerrilla Studio (Netherlands)	
24	SCEE - London Studio (UK)	
25	SCEE - Liverpool Studio (UK)	
26	SCEE - 13 GMS Studio (UK)	
27	SCEE - Evolution Studio (UK)	
28	SCEE - Cambridge Studion (UK)	

29 DADC Austria (Anif) 30 DACD Austria (Thalgau)	
30 DACD Austria (Thalgau)	
31 DADC UK	
32 DADC Logistic France	
33 DADC Logistic Germany	
34 DADC Logistic Spain	
35 DADC Logistic Sweden	
36 DADC Logistic UK	

	Sony Music
37	Sony Music France
38	Sony Music Germany
39	Sony Music Italy
40	Sony Music Spain
41	Sony Music UK

	Sony Pictures
42	SPE (Moscow/Russia)
43	SPE (Gdinia/Poland)
44	SPE (Munich/Germany)
45	SPE (London/UK)
46	SPE (Budapest/Hungary)







^{*} Sony Group companies with sites with 100 or more employees are required to implement GEMS. GEMS is certified by BVC according to ISO14001:2004 standard.

Site Green House Gas (GHG) Reductions





Sony GM2015 Target: Reduce site emitted GHG 30% from FY2000 levels by FY2015

Between FY2000 and FY2009 annual CO2 emissions from Sony's European GEMS sites* have decreased by $\sim 93\%$ or ~ 118.000 tonnes

1. Energy Saving Measures have Priority

Over the period FY2005 - FY2009 several energy efficiency measures have been implemented by the European manufacturing sites accumulating to an energy consumption reduction of ~21.400.000 kWh in FY09

2. Application of Renewable Energy

From FY2008 onwards all European sites** were powered by electricity from **100% renewable resources**

^{*} Sony Group companies with sites with 100 or more employees are required to implement GEMS. GEMS is certified by BVC according to ISO14001:2004 standard.

^{** - 34} European sites under Sony Global Environmental Management System (GEMS), certified by Bureau Veritas Certification for FY08 and for FY09.

Managing Chemical Substances in Products



The target of Sony is to be in compliance with

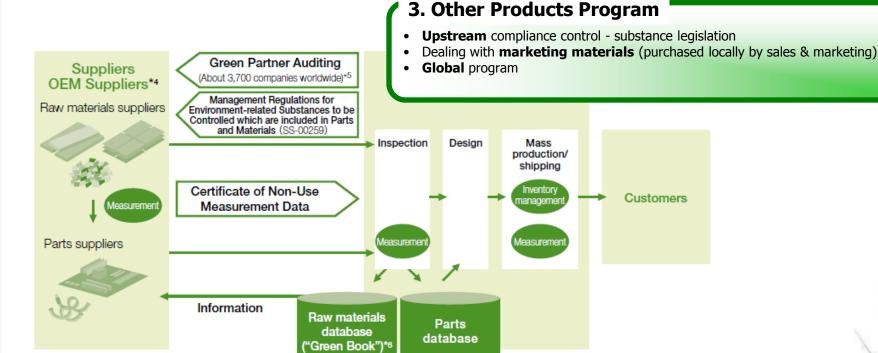
- Legal requirements
- Major Stakeholder requirements
- Sony own requirements (GM2015, Sony Standards etc.)

1. Green Partner Program

- **Upstream** compliance control substance legislation & Sony restrictions
- Dealing with Sony parts and OEM product suppliers
- Global program

2. Green Program

- Safety net substance legislation & Sony restrictions
- Dealing with **finished goods** (at warehouse level)
- European program



Product Achievements: VAIO notebooks

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- Energy Star 5.0 compliance for all current VAIO models
- Luminance sensor for automatic screen brightness adaptation e.g. VAIO A
- "Display OFF" button e.g. VAIO CR
- Mercury free LED screen e.g. VAIO TX
- Bromine-free flame retardants housings and main PWBs for VAIO notebooks
- PVC-free internal wiring and casings for VAIO notebooks
- Eco-conscious packaging material
 - Vegetable oil based ink
 - No colour print
 - No coloured foils
 - Made from recycled material
- Reduced printed manual (on HDD as PDF manual)
- Use of recycled plastics (crushed CDs/DVDs) e.g. VAIO W Series











Sony Europe has been awarded the European Commissions Eco-Label for 95% of 2009 models and 99% of 2010 models

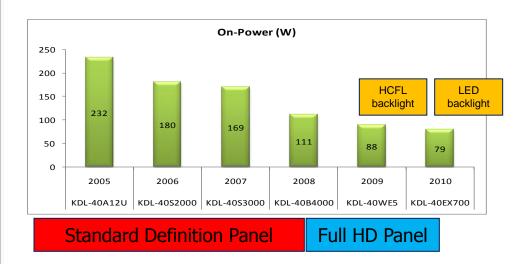
The label provides consumers across Europe a broad spectrum of size and feature television certified as environmentally conscious product by an independent organization.

The requirement of EU Flower symbol includes a take-back policy for recycling after use, reduced energy consumption during use and standby, and limiting harmful substances.













~ 65% reduction on power consumption since 2005

BRAVIA - Hard OFF Switch

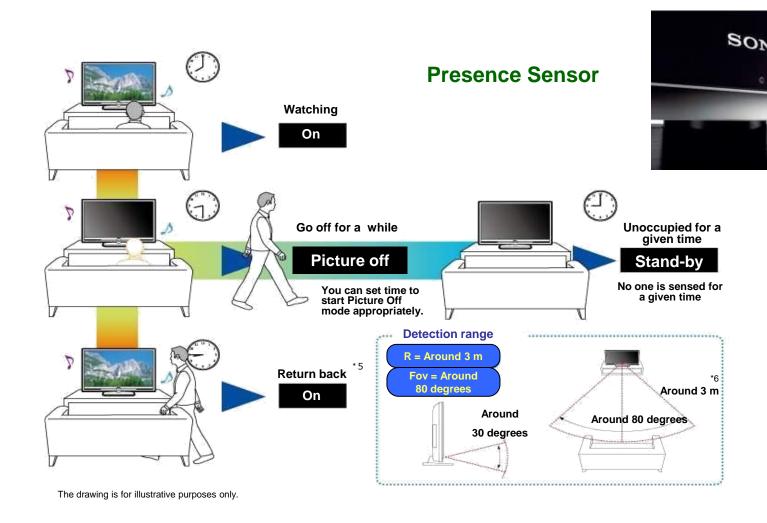
Reduce the energy consumption by turning off your BRAVIA

- TV in standby = < 0.25 W for vast majority of our TVs
- Hard Off Switch cuts power to ~0W











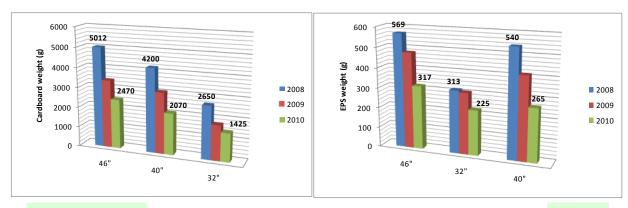
Can save energy depending on consumer habits!

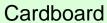




Packaging

- Large size TV shipped without stands attached
- 37% carton volume reduction for 40" compared with 2008
- 2008 volume $0.22m^3 = 288$ TVs per truck
- 2010 volume $0.138m^3 = 576$ TVs per truck
 - Double qty TV's per truck
- Transportation savings = fuel and CO2





Average Reductions









Take Back & Recycling in Europe



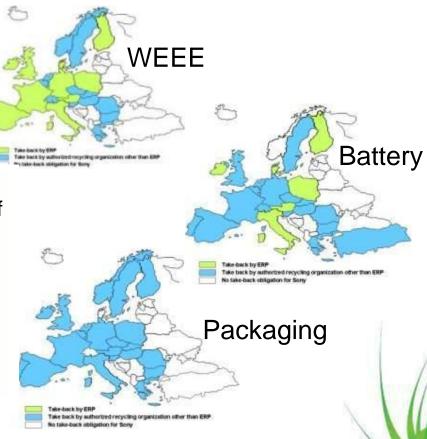
Sony is in Europe member of several schemes financing Waste Electronic and Electronic Equipment (WEEE), batteries and packaging take-back and recycling. For example in CY09, around **56,000 tons** of electronic waste were collected and recycled on behalf of Sony Europe.



In 2002 Sony founded together with Braun, HP & Electrolux the first pan European WEEE compliance scheme called **Europan Recycling Platform** (ERP). ERP actually expands its scope to batteries and packaging.

ERP's Mission

- Deliver compliance & quality incl. prevention of illegal WEEE shipments by
 - Regular onsite audits of contracted recyclers
 - High treatment and recycling standards
- Educate European citizen with focus on young generation to increase awareness
- Deliver competitive services



3P – Product, Process, Planet



Environmental Communication



Environmental Info

Sony Europe is constantly rethinking and re-evaluating its products, processes and potential impact on the planet.

Product: Sony is committed to ensuring its products continue to use less energy – we aim to reduce the average power consumption of our products by 30% by the end of EV2015*

Process: Our processes throughout the supply chain are as environmentally conscious as possible, from product creation to waste disposal – we aim to reduce CO2 emissions from Sony Group sites by 30% by the end of FY2015**

Planet: Sony is determined that its practices as a business should be environmentally responsible – our long term goal is to achieve a zero environmental footprint throughout the lifecycle of Sony's products and business activities

Please refer to www.sony.eu/eco for more information on Sony's environmental activities

- *Compared to the level of the fiscal year ended March 31, 2009
- ** Compared to the level of the fiscal year ended March 31, 200

Energy Saving Tips to Consumers





Online Product Information

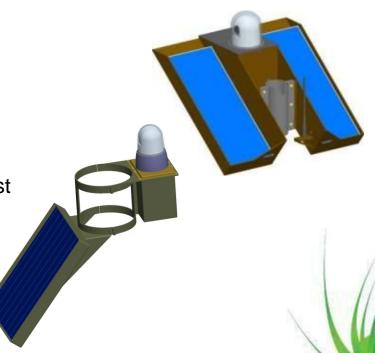


Sony & Forest Guard Project

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- Sony partnered with Lego to host the Children's Climate Call, a worldwide innovation challenge engaging children from 49 countries to create climate change solutions through the use of technology.
- Sony awarded the Sony Climate Change Innovation
 Prize to the 'Forest Guard' team who created a
 wildfire detection system that is based on solar powered CCTV cameras and power of the internet to
 solve a climate change problem that impacts
 communities around the world.
- Sony Europe engineers invited the Forest Guard team to the R&D labs in June to progress their concept further.
- Sony engineers worked with the team to concept test the idea and field testing has now begun.





Sony & Open Planet Ideas Project







"Crowdsourcing" project

- A digital platform which invites anyone to suggest their ideas for how to use Sony technology to combat an environmental issue www.openplanetideas.com
- Sony offers its know-how and R&D as a way to bring people's imaginative ideas to life
- The project is about repurposing existing Sony technology, rather than inventing new 'eco' products
- When: from Sept. 2010 to Jan. 2011

Audiences:

- Designers
- Product engineers
- "Green collar" workers
- Science & technology industries
- Universities students & lectures
- Partners & other stakeholders e.g. WWF
- AND all consumers: Italy, UK, France, Germany & Spain





Partnerships and awards



Sony is a partner of the European Commission's Sustainable Energy Europe campaign since 1. August 2006



Sony won the prestigious **Sustainable Energy Europe Awards 2007** in the category Corporate Commitment for

"... providing concrete energy and environmental information about its products and is committed to improving products energy efficiency through a series of voluntary commitments."





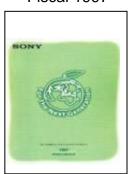
Environmental / CSR Reporting



Environmental Review Fiscal 1994



Environmental Review Fiscal 1997



Environmental Review Fiscal 1999

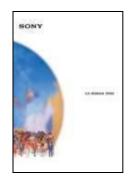


Environmental cost

Environmental Report 2001



Social and Environmental Report 2002



- Third Party Verification
- Consolidate envi. data
- · Cost efficiency

Social activity

Linkage w/webs



Basic Policy

Sony Env. Committee •

From 2003 onwards yearly CSR Report

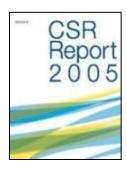
Env. Performance data

Disclosure of Midrange

Action Program



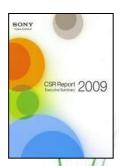












- Corporate governance
- Compliance

More information

General

1. Global page

http://www.sony.net/eco

2. European page

http://www.sony.eu/eco



Road to Zero

1. Sony global press release

http://www.sony.net/SonyInfo/News/Press/201004/1 0-0407E/index.html

2. "Road to Zero" web site

Global:

http://www.sony.net/SonyInfo/csr/eco/RoadTo Zero/

Europe (page within eco hub):

http://www.sony.co.uk/hub/eco/eco-initiatives/3





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