



# 当纳利中国 环保与可持续之路

Environment and  
Sustainability  
at RR Donnelley

Apr.24<sup>th</sup>,2018

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## Companywide Initiatives

- RR Donnelley Corporate Social Responsibility Report
- Green Procurement (Paper, Ink, Adhesive, etc)
- Energy Conservation
- Waste Minimization/Recycling

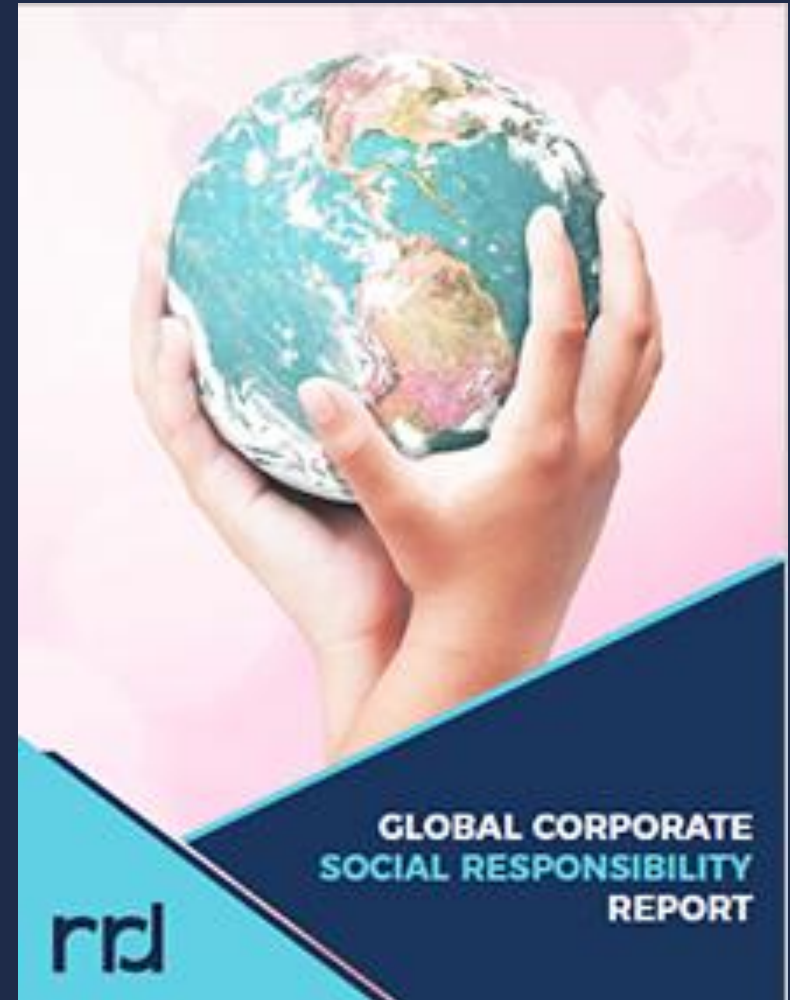
## China Initiatives

- Environmental
- External Certifications
- Paper Recycling
- Product Safety Process / Vendor Qualifications
- 3 R's
- Wastewater / Air Emissions
- Solid Waste Management

# Corporate Social Responsibility Commitments

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- Environmental, Health & Safety
- Differentiation through Sustainability
- Diversity and Inclusion
- Ethics and Compliance
- External Affairs/Community Relations
- Wellness Programs
- See our report on-line at [www.rrdonnelley.com](http://www.rrdonnelley.com)



# Example Of Green Procurement At RR Donnelley

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## Paper – Forest Stewardship Council (FSC)

- FSC is a not-for-profit international organization that has developed a system for identifying and labeling products from well-managed forests.
- Their system has ten principles that define good forest management. These principles are global - they can apply to any forest anywhere in world.
- RR Donnelley obtains Chain of Custody (CoC) certification from Scientific Certification Systems (SCS), an independent, *third party* evaluation and certification service.
- Offers RR Donnelley and our customers an opportunity to demonstrate our commitment to the environment.



# Example Of Green Procurement At RR Donnelley

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## Inks, Solvents, Adhesives, and other Raw Materials –

- RR Donnelley has specified Environmental Conditions for materials we purchase
- All materials must conform to the lowest permitted content of heavy metals, as outlined in the *Coalition of Northeast Governors (CONEG) Toxic Law*.
- These metals include:
  - Lead, Cadmium, Mercury and Hexavalent Chromium
- We also require no additions of these toxic heavy metals in the manufacturing processes of any materials sold to RR Donnelley
- Additionally, as part of our commitment to the environment and our customers, it is our policy that no product manufactured by RR Donnelley will contain or be manufactured with a regulated Ozone Depleting Substance

# Examples Of Energy Conservation At RR Donnelley

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RRD is pursuing energy efficiency programs involving several different technologies that we are installing in our plants worldwide. including lighting upgrades, improved compressed air systems, efficient emission control devices and heat recovery installations.



# Examples Of Energy Conservation At RR Donnelley

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## Variable Volume Flow Control (VVC)

- Employing proprietary technology to run cooling fans based on the amount of air they need to move, rather than just running them continuously

## Lighting Retrofits

- Installing lighting systems that maximize energy efficiency in our domestic and international facilities



This 665,000 sq ft Fulfillment Center Features Intelligent Lighting. When No One Is In A Section Of The Warehouse, The Lights Go Off Automatically And Come Back On In Response To Motion

# Examples Of Recycling At RR Donnelley

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- Paper
  - Non printable End Roll paper
  - Paper from trimming
  - Add Roll paper trim
- Cardboard
- Plastic wrap
- Aluminum printing plates
- Compact Discs (shredded)
- Paper roll cores
- Carbon interleave
- Bound and stapled waste
- Film Negatives
- Plastic wrap
- Office Recycling Programs
  - Office paper
  - Aluminum
  - Plastic





# China Environmental – General

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- From having facilities achieve ISO 14001 certifications, to complying with strict regulations in China, to continuous improvement in sustainability, to pursuing SFI chain-of-custody certification, the company continues to pursue initiatives that reflect a commitment to sustainability.
- Enhancing sustainability means finding lasting reductions in consumption, emissions and waste. RR Donnelley China is pursuing a broad range of programs to minimize emissions, save energy and reduce costs.



深圳外置式RTO,2013年安装  
Shenzhen External,2013

## China FSC/SFI/PEFC Status

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At RR Donnelley, we know that many of our customers are becoming increasingly concerned about environmental issues, e.g., that paper originates from sustainable, responsibly managed resources.

In keeping with our long-standing commitment to proper environmental practices, RR Donnelley Asia has expanded our FSC (Forest Stewardship Council), Sustainable Forestry Initiative (SFI) and Programme for the Endorsement of Forest Certification (PEFC) Chain-of-Custody Certification to all of our China facilities.



# China Paper Recycling

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Paper is collected / sorted into 4 classifications:

1. White (strip) paper
2. Paper with ink
3. Packaging materials such as kraft paper, carton, reels
4. Other used paper

# China Product Safety Process

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- Prevent purchases of banned substances – Vendor approval process
- Adhere to relevant laws and regulations, including International Standards (e.g., CPSIA)
- Protect environment and reduce impact on eco-system and human health
- Three specific Procedures in place:
  1. Product Safety Procedure
  2. Material Safety Specifications
  3. Database of material content

## China Vendor Qualifications (type of ink used, paper procurement practices)

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- Screen vendors to verify integration of environmental compliance
- Inks used similar composition to U.S. / Europe
- Solvents used similar composition to U.S. / Europe
- Paper from approved forest resource
- ROHS / CPSA / CPSIA / EU compliance
- Environmental clause – process for compliance with raw materials

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# China 3Rs (Reduce, Reuse and Recycle)

## 1. Reduce

- Alcohol reduction in printing dampening system
- Energy reduce via transducers
- Hazardous wastes

## 2. Reuse

- General containers

## 3. Recycle

- Paper / metals / plastics / etc.

集中润版液系统应用

Concentrated fountain solution system application on Offset



# China Wastewater / Air Emissions Management

- Wastewater – all facilities have permits regulating wastewater disposal
- Air Emissions – all facilities have permits



深圳污水处理站,2004年建成  
Shenzhen Industrial Waste Water  
Disposal Center,2004



上海外置式RTO,2002年安装  
Shanghai External,2002



# China Solid Waste Management

## Hazardous Waste

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1. Characterization:
  - New chemicals purchased are identified by EHS
  - Constituents analyzed according to China regulations
  - Handling process is implemented
2. Handling:
  - Employees are trained (type of waste / hazards / handling practices, etc.)
  - Designate person to supervise process
  - Waste inventories
  - Conduct periodic internal audits
  - 3rd party annual audits
3. General Solid Waste
  - Recyclable Materials – Segregate, collect and store waste paper, wood pallet, plastics and metals

**THANK YOU,**  
For listening.

**rrd**  
COMMUNICATIONS  
ENABLED

