

Introduction

In March 2020, a study of 2,000 U.S. consumers was commissioned by Two Sides and conducted online by independent research firm Toluna.

The survey sought to explore and understand consumer preferences, perceptions and attitudes toward packaging.



Phil Riebel
President,
Two Sides North America, Inc

"Packaging is receiving more attention than ever as society tries to achieve a more circular economy. Consumers are becoming more aware of available packaging choices for the items they buy, which in turn is influencing packaging decisions by businesses – particularly in the retail sector. The culture of "make, use, dispose" is gradually changing.

We conducted this research to better understand consumer perceptions when it comes to packaging. Results show that paper-based packaging is the preferred choice of consumers for its environmental attributes, such as recyclability and compostability, as well as many practical factors, such as ease of storage. Glass is preferred for factors such as reusability and product protection. Plastic did not rank highest for any attribute.

The survey also found that consumers throughout the United States are willing to change their behavior in order to shop more sustainably. Many are willing to spend more on products that are packaged in sustainable materials and more than a third would avoid retailers who are not taking steps to reduce their environmental footprint.

These changing shopper habits emphasize the need for retailers to more effectively promote their environmental efforts, as well as a broader need to increase awareness of environmental labels and certifications.

We hope you find this report informative and useful."

Contents

- 3. Key Findings
- 4. Packaging Preferences
- 6. The Importance of Environmental Labels
- 8. Packaging Behaviors
- 9. Perceptions of Retailers' Efforts
- 10. Perceived Recycling Rates
- 11. The Shopping Bag
- 13. Closing Summary
- 14. Contact

About Two Sides

Two Sides North America is an independent, non-profit organization, and is part of the Two Sides global network which includes more than 600 member companies across North America, South America, Europe, Australia and South Africa.

Our member companies span the Graphic Communications and Paper-based Packaging industry, including forestry, pulp, paper, paper-based packaging, chemicals and inks, pre-press, press, finishing, printing, publishing, envelopes and postal operations.

Contact Two Sides

If you would like to learn more about this report or find out more about the many other tools and resources Two Sides provides, please get in touch.

1-800-855-896-7433 Info@twosidesna.org

www.twosidesna.org

Key Findings

Packaging Preferences

- Paper and cardboard packaging rank highest with consumers for many sustainability attributes including home compostability (69%), better for the environment (66%) and easier to recycle (51%).
- Glass packaging is the preferred choice for attributes including reusability (36%), and better protection of products (29%).

Consumer Behavior

- 57% of consumers are actively taking steps to reduce their use of plastic packaging.
- 36% of consumers would avoid retailers that are not actively trying to reduce their use of non-recyclable plastic packaging.
- 44% of Americans believe non-recyclable packaging should be discouraged through taxation.

Online Shopping

- 57% of consumers prefer products ordered online to be delivered in paper packaging rather than plastic packaging.
- 70% of consumers prefer products ordered online to be delivered in fitting packaging, i.e., not too big for the size of the product inside.

Recycling Perceptions

- Paper/cardboard packaging is considered to be the most recycled material, with 41% of consumers believing the U.S. recycling rate to be over 50%. In fact, the recycling rates are 73% for paper packaging and 88% for cardboard packaging.*
- 20% of consumers believe glass packaging has a recycling rate in excess of 50%. The actual recycling rate of glass packaging is 34%.*
- 24% of consumers believe metal packaging has a recycling rate in excess of 50%. In fact, steel packaging has a recycling rate of 73% and aluminum packaging, 49%.*
- Plastic is considered by consumers to be the least recycled packaging material, although 30% overestimate the recycling rate of plastic, believing it to be over 50%. In fact, plastic packaging has a recycling rate of 13%* in the United States.

Environmental Labels

- 54% of American consumers are aware of the Sustainable Forestry Initiative® (SFI®) label; 45% are aware of the Forest Stewardship Council® (FSC®) label, and 42% are aware of the Programme for the Endorsement of Forest Certification™(PEFC™) label. U.S. consumers consider SFI® slightly more important than FSC® and PEFC™.
- The Mobius Loop (recyclable) is the most recognized label in the United States, with 90% aware of it. It is also rated the most important label by consumers.

The Shopping Bag

- Consumers ranked paper bags highest for environmental attributes such as recyclability (57%), compostability (53%) and made with recycled content (46%).
- Cotton/canvas bags were ranked highest on physical characteristics such as premium feel (65%), durability (62%) and attractiveness (62%).

Packaging Preferences

Packaging plays an extremely important part in consumer purchasing decisions because it displays vital product information, preserves product quality and in many cases, enhances product appeal. Packaging comes in a wide variety of forms, and the packaging industry is always innovating to meet the demands of consumers.

Interest in sustainable packaging continues to gain momentum as consumers become more aware of how various packaging materials impact the environment. How packaging is made, used and disposed of is becoming a factor in consumer buying behavior. This survey looks at how consumers view the environmental attributes of various types of packaging, such as recyclability and compostability.

In addition, respondents were asked to select which materials best fit a variety of practical and visual attributes, such as product protection and ease of opening/closing.

We asked respondents about four different packaging materials: paper/cardboard, glass, plastic and metal. Looking at 15 different attributes, respondents were asked to match the material that they thought best suited each one. Of the 15 attributes, paper/cardboard was the favorite for 11, glass for 3 and metal for 1. Plastic was not selected first for any attribute, but was the second choice for 7 attributes.

Paper/cardboard is the preferred material for the following 11 attributes



BETTER FOR THE ENVIRONMENT

• 66% chose paper/cardboard. Glass is the next highest at 15%.

HOME COMPOSTABLE 69%

53%

49%

46%

- **69%** chose paper/cardboard.
- Plastic is the next highest at 8%.

51%

EASIER TO RECYCLE

• 51% chose paper/cardboard.

Plastic is next highest at 20%.

LESS EXPENSIVE

53% chose paper/cardboard.

Plastic is next highest at 27%.

LIGHTER WEIGHT

• 51% chose paper/cardboard.

Plastic is next highest at 37%.

SAFER TO USE

49% chose paper/cardboard.

Glass is next highest at 19%.



51%

EASIER TO OPEN/CLOSE

• 47% chose paper/cardboard.

• Plastic is next highest at 22%.

MORE PRACTICAL

46% chose paper/cardboard.

Plastic is next highest at 27%.

BETTER PRODUCT INFORMATION

36%

- 36% chose paper/cardboard.
- Glass and plastic are next highest, both at 16%.

BETTER BRAND IMAGE

33%

- **33%** chose paper/cardboard.
- Glass is next highest at 26%.

EASIER TO STORE

32%

- 32% chose paper/cardboard.
- Plastic is next highest at 28%.

Glass is the preferred material for the following 3 attributes

REUSABLE

36%

- 36% chose glass.
- Paper is next highest at 25%.

PREFER LOOK AND FEEL

2%

- 32% chose glass.
- Paper is next highest at 29%.

BETTER PROTECTION

29%

- 29% of consumers chose glass.
- Plastic is the next highest at 24%.

Metal is the preferred material for the following attribute

STRONGER/MORE ROBUST

47%

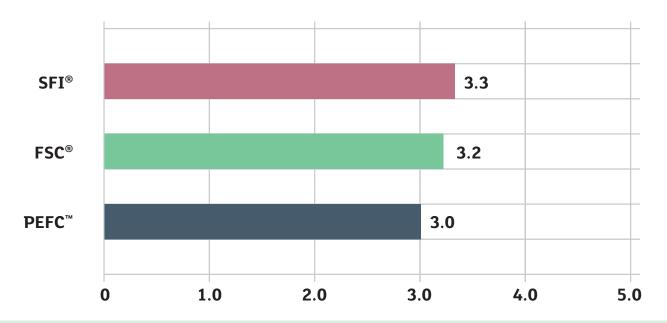
- 47% of consumers chose metal.
- Glass is next highest at 15%.

The Importance of Environmental Labels

Environmental labels let consumers know that packaging has certain attributes such as recyclability or compostability, or that it meets certain environmental standards, such as forest certification standards. Respondents were asked how they perceived the importance of 9 environmental labels using a rating scale of 1 to 5 (1 being least important and 5 being most important). "Unaware of this label" was also an option.

The first three labels relate to common forest certification standards: The Sustainable Forestry Initiative® (SFI®) standard, the Forest Stewardship Council® (FSC®) standard and the Programme for the Endorsement of Forest Certification™ (PEFC™) standard. These labels let consumers know that the wood fiber used as raw material in paper and paper-based packaging is sourced from sustainably managed forests. PEFC is a global alliance of national forest certification standards. Because SFI is endorsed by PEFC, the PEFC label does not appear on U.S. products, but it can be found on products imported to the U.S. from other PEFC-endorsed countries.

Average ranking of importance for the SFI®, FSC® and PEFC™ labels by Americans



Sustainable Forestry Initiative® (SFI®)

The survey found that 54% of U.S. consumers are aware of the SFI® label. Respondents aware of the SFI label gave it an average score of 3.3/5 for importance. Of those respondents, 9% ranked it as most important.



Forest Stewardship Council® (FSC®)

The survey found that 45% of U.S. consumers are aware of the Forest Stewardship Council® label. Respondents aware of the FSC label gave it an average score of 3.2/5 for importance. Of those respondents, 7% ranked it as most important.



Programme for the Endorsement of Forest Certification™ (PEFC™)

The survey found that 42% of U.S. consumers are aware of this label. Respondents aware of the PEFC label gave it an average score of 3.0/5 for importance. Of those respondents, 5% ranked it as most important.



Mobius Loop

This label indicates that an object is capable of being recycled, not that the object has been recycled or will be accepted in all recycling collection systems.

Source: Recycle Now

90% of consumers are aware of this label and 40% ranked it as most important with a score of 5/5. Overall, respondents aware of the Mobius Loop gave it an average score of 4/5 for importance. This suggests that they are aware of and place importance on the recyclability of packaging, regardless of the material.

Biodegradable Products Institute – Certified Compostable

BPI is North America's leading certifier of compostable products and packaging. This label ensures that products and packaging displaying the BPI label have been independently tested and verified according to scientifically based standards.

Source: BPI

55% of survey respondents are aware of this label. Of those respondents, 10% ranked it as most important. Respondents aware of this label gave it an average score of 3.4/5 for importance.

Corrugated Recycles

Placing this label on a corrugated container does not indicate that the container is made from recycled material. Rather, it simply means that the container can and should be recycled.

Source: International Corrugated Case Association

The survey found that 68% of survey respondents are aware of this label, with 17% ranking it as most important. Respondents aware of this label gave it an average score of 3.6/5 for importance.

100% Recycled Paperboard

The 100% recycled paperboard label communicates to consumers that 100% recycled paperboard is used in the products they purchase.

Source: Recycled Paperboard Alliance

The survey found that 61% of respondents are aware of this label, with 14% ranking it as most important. Respondents aware of this label gave it an average score of 3.4/5 for importance.

Green Seal

The Green Seal Certified Mark on products or services is an indicator that they have met or exceeded leadership-level, life-cycle-based criteria for sustainability.

Source: Green Seal

44% of survey respondents are aware of this label, with 7% ranking it as most important. Respondents aware of this label gave it an average score of 3.1/5 for importance.

Ecologo

ECOLOGO® indicates that a product has undergone rigorous scientific testing, exhaustive auditing or both, to prove its compliance with stringent, third-party, environmental performance standards.

Source: ECOLOGO

41% of survey respondents are aware of this label, with 6% ranking it as most important. Respondents aware of this label gave it an average score of 3.2/5 for importance.











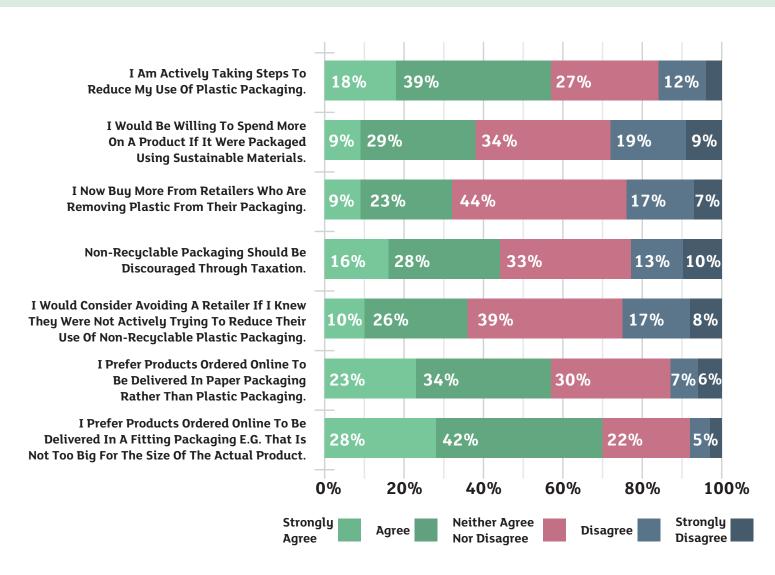


Consumer Packaging Behaviors

Consumer awareness of how packaging is impacting the planet is increasing, in part due to informative documentaries such as David Attenborough's Blue Planet 2 and global efforts such as National Geographic's Planet or Plastic initiative to reduce the amount of single use plastics that enter the ocean. As a result, the sustainability of packaging is playing a growing role in governmental policies around the globe and is now a familiar topic in the media, corporate boardrooms and public conversation.

The increasing number of environmentally conscious consumers combined with public policies on reducing waste is causing retailers and producers to rethink their packaging decisions and improve their green credentials.

Survey respondents were asked to what extent they agree with the following series of statements



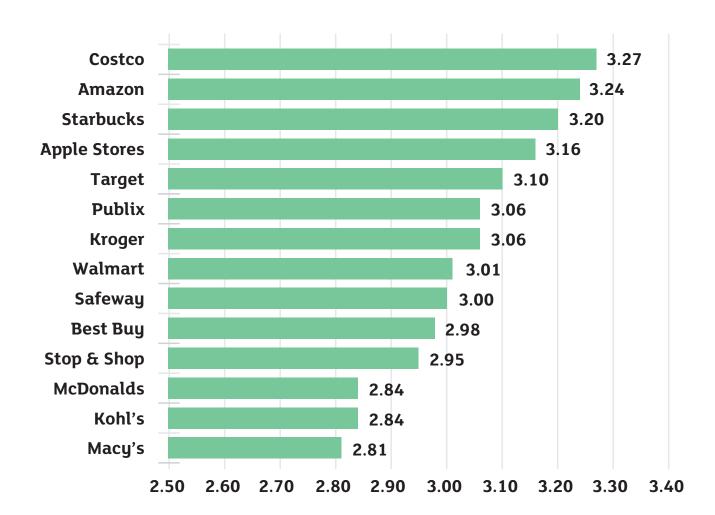
Perceptions of Retailers' Efforts

We asked respondents which retailers they perceive to be doing the most to increase their use of environmentally friendly packaging. As established in the Consumer Packaging Behaviors portion of the survey, this is important to consumers with more than one third stating they would consider avoiding a retailer if they are not taking steps to reduce their use of non-recyclable plastic packaging.

Overall, an average of 45% of respondents are unsure of the efforts retailers are making to increase their use of environmentally friendly packaging.

We asked consumers to rank retailers using a scale of 1-5 (1 being least effort, 5 being most effort) to establish which ones they believe to be making the most effort to increase their use of environmentally friendly packaging.

Retailers considered to be doing the most to increase their use of environmentally friendly packaging

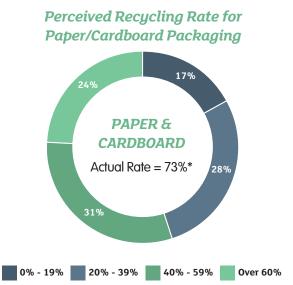


The average score for each retailer was between 2.8 and 3.2 out of 5. No retailers scored above 3.3/5 showing that consumers do not rate any of these retailers highly when it comes to their efforts to increase their use of environmentally friendly packaging.

Perceived Recycling Rates

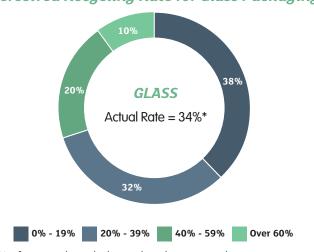
Packaging that is irresponsibly disposed of has a negative impact on the natural environment. For example, every year, about 8 million metric tons of plastic litter ends up in the ocean where it can harm fish and wildlife, and once it enters the food chain, threaten human health (World Resources Institute, 2019).

Recycling packaging extends the life of a valuable natural resource, reduces the amount of waste sent to landfills and avoids the release of greenhouse gases that occur when packaging decomposes in landfills. In the United States, 50% of packaging across all material types is recycled.*



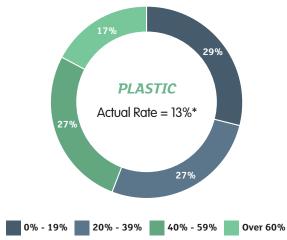
The survey revealed that U.S. consumers consider paper/cardboard packaging to be the most recycled material, but only 24% of respondents believe that the recycling rate is over 60%. In fact, 73% of all paper and cardboard packaging in the United States is recycled and 88% of cardboard packaging is recycled.*

Perceived Recycling Rate for Glass Packaging



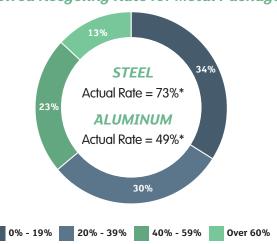
10% of respondents believe glass has a recycling rate over 60%. 34% of glass packaging is recycled in The United States.*

Perceived Recycling Rate for Plastic Packaging



Overall, survey respondents believe plastic to be the second most recycled packaging material, although most respondents significantly overestimate the plastic packaging recycling rate, believing it to be between two and more than five times the actual rate. The actual rate of plastic packaging recycling is 13% in the United States.*

Perceived Recycling Rate for Metal Packaging



13% of consumers believe metal has a recycling rate over 60%. 73% of steel packaging and 49% of aluminum packaging (beverage cans) is recycled in the United States*.

*U.S. Environmental Protection Agency, 2017.

The Shopping Bag

As retailers have come under pressure to reduce their use of single-use plastics and after-purchase shopping bags in particular, many now also offer paper and cotton/canvas options. To understand consumer perceptions about the types of bags available at checkout, we asked which type of shopping bags best fit a variety of attributes.

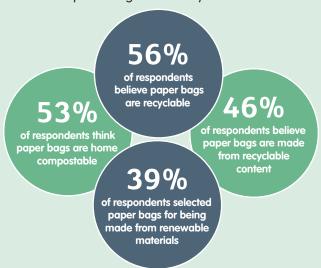
Consumers were asked their opinions on cotton/canvas, brown paper, white paper, lightweight plastic, lightweight compostable plastic and heavyweight plastic bags.

While cotton/canvas bags ranked highest for attractiveness, durability and quality, when it comes to its impact on the environment, consumers favored paper bags for being recyclable, compostable and made from renewable and recycled materials.

Out of the 10 attributes, cotton/canvas bags are perceived as the best fit for 6, paper bags are perceived as the best fit for 4 and plastic bags the best fit for none.

On environmental criteria, paper bags (brown paper bags and white paper bags combined) rank the highest for 4 attributes:

- Recyclable 56% of respondents perceive paper bags as the best fit for this attribute. 27% said plastic bags are the best fit while 16% cited cotton/canvas bags as the best fit.
- Compostable Paper bags are perceived as the best fit for this attribute by 53% of respondents. 33% believe plastic to be the best fit, with cotton/canvas bags last at 13%.
- Made with recycled content 46% of those surveyed believe paper bags are the best fit for this attribute, followed by plastic bags cited by 28% and cotton/ canvas bags selected by 25%.
- Made with renewable materials 39% of respondents selected paper bags as the best fit for this attribute, with cotton/canvas bags selected by 37% and plastic bags selected by 24%.



Cotton/canvas bags rank the highest for 6 attributes:

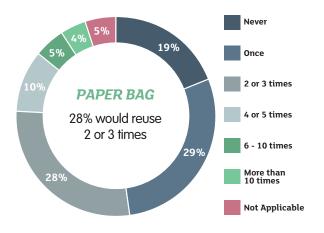
- High quality/premium feel 65% believe cotton/ canvas bags are the best fit for this attribute. Paper bags are selected by 16% of consumers for this attribute.
- Reusable 65% identify cotton/canvas bags as the best fit for this attribute. Plastic bags and paper bags are chosen by 18% and 17% of consumers, respectively.
- Durable (e.g. strong/unlikely to break) 62% selected cotton/canvas bags as the best fit for this attribute.
 Plastic bags are selected by 24% of consumers and paper bags by 14%.
- Attractive (e.g. colors/branding) 62% believe cotton/canvas bags are the best fit for this attribute.
 In comparison, plastic bags are chosen by 20% of consumers and paper bags are chosen by 18%.
- Enhances the quality of the purchased goods carried with the bag 55% select cotton/canvas bags as the best fit for this attribute Paper bags are selected by 22% and plastic bags by 21%.
- 'I prefer this type of bag' 53% simply prefer cotton/canvas bags. 26% prefer plastic bags and 21% prefer paper bags.
- Low carbon footprint 50% perceive cotton/canvas bags to have a low carbon footprint. Paper bags are selected by 32% for this attribute.

Plastic bags (lightweight plastic, compostable plastic and heavyweight plastic combined) are not considered the best fit for any of the attributes surveyed.

The Shopping Bag (Continued)

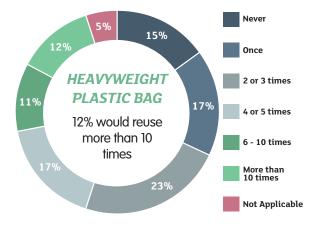
Consumers were also asked how often they re-use each type of shopping bag. The number of times that paper and plastic bags are re-used varies. Consumers claim to re-use cotton/canvas bags the most (more than 10 times).

Number of times a U.S. consumer reuses a paper shopping bag



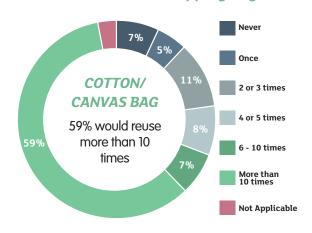
29% of respondents said they would use a paper bag once; 28% said they would use a paper bag 2 or 3 times.

Number of times a U.S. consumer reuses a heavyweight plastic shopping bag



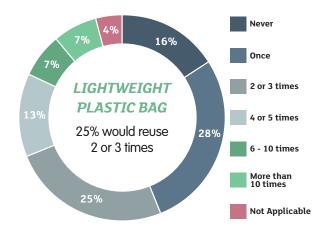
23% of respondents said they would use a heavyweight plastic bag 2 or 3 times. 17% said they would use a heavyweight plastic bag 4 or 5 times. 12% would use a heavyweight plastic bag more than 10 times.

Number of times a U.S. consumer reuses a cotton/canvas shopping bag



59% of respondents said they would use a cotton/canvas bag more than 10 times.

Number of times a U.S. consumer reuses a lightweight plastic shopping bag



28% of respondents said they would use a lightweight plastic bag once. 25% said they would use a lightweight plastic bag 2 or 3 times.

Closing Summary

The findings suggest that consumers are becoming more aware of the impact that packaging is having on the environment, particularly single-use and non-recyclable packaging. More than half are actively taking steps to reduce their use of plastic packaging (57%), and they also recognize that paper/cardboard can be a more sustainable option. 66% believe paper/cardboard packaging to be better for the environment, 51% perceive it as being easier to recycle, and 69% recognize that it is home compostable.

There is an increasing level of pressure on retailers to increase their use of environmentally friendly packaging, with 36% of consumers agreeing that they would consider avoiding a retailer if they knew they were not actively trying to reduce their use of non-recyclable packaging. Additionally, 44% of consumers agree that non-recyclable packaging should be discouraged through taxation.

The findings related to recycling rates also suggest paper/cardboard packaging is perceived to be the most recycled packaging material in the United States. However, a significant percentage of consumers still underestimate the recycling rates of paper, glass and metal packaging, meaning more needs to be done by these industries to improve perceptions and understanding.

For more research and reports from Two Sides, please visit www.twosidesna.org.

About Two Sides

Two Sides North America is an independent, non-profit organization, and is part of the Two Sides global network which includes more than 600 member companies across North America, South America, Europe, Australia and South Africa. Our member companies span the Graphic Communications and Paper-based Packaging industry, including forestry, pulp, paper, paper-based packaging, chemicals and inks, pre-press, press, finishing, printing, publishing, envelopes and postal operations.

Contact Two Sides

If you would like to learn more about this report or find out about the many other tools and resources Two Sides provides, please get in touch.

855-896-7433 info@twosidesna.org www.twosidesna.org



TAT

11

Contact

Two Sides International



Two Sides North America

330 North Wabash Avenue Suite 2000 Chicago, Illinois 60611 USA

Please contact Phil Riebel
Telephone: 855-896-7433
Email: phil@twosidesna.org



Two Sides Brazil

Rua Bresser, 2315 São Paulo - São Paulo Brasil CEP 03162-030

Please contact Fabio Mortara Telephone: 55 11 97206-4746 Email: fam@twosides.org.br



Two Sides Australia & New Zealand

Suite 6 151 Barkly Avenue Richmond VIC 3121

Please contact Kellie Northwood Telephone: 03 9421 2209 Email: kellie@thermc.com.au



Two Sides South Africa

575 Lupton Drive Midrand Johannesburg 1682

Please contact Deon Joubert
Email: deon@za.twosides.info



Two Sides UK

iCon Centre Eastern Way Daventry NN11 OQB United Kingdom

Please contact Jonathan Tame
Telephone: +44 (0) 1327 262920
Email: jonathan@twosides.info



Two Sides Germany

Fasanenweg 3 21227 Bendestorf Germany

Please contact Anne-Katrin Kohlmorgen Telephone: +49 (0) 40 4140 639-11 Email: anne@twosides.info



Two Sides Italy

Bastioni di Porta Volta, 7 20121 Milano Italy

Please contact Massimo Ramunni Telephone: +39 02 29003018 Email: massimo@twosides.info



Two Sides France

23-25 rue d'Aumale 75009 Paris France

Please contact Jan Le Moux Telephone: +33 (1) 53 89 24 00 Email: jan@twosides.info



Two Sides Austria

Gumpendorfer Strasse 6 1060 Wien Austria

Please contact Patrick Mader Telephone: +43 1 588 86 273 Email: patrick@twosides.info



Two Sides Nordics

Upplandsgatan 84 113 44 Stockholm Sweden

Please contact Magnus Thorkildsen Telephone: 00 47 97 58 70 85 Email: magnus@twosides.info

