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Sustainable Graphic Design in Ireland - Identifying and overcoming obstacles and misconceptions in practice

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SUSTAINABLE GRAPHIC DESIGN IN IRELAND

**Identifying and overcoming obstacles and
misconceptions in practice**

Lisa Zimmermann
Submitted: September 9th, 2015

A dissertation submitted in partial fulfilment of the requirements
for the degree of Master of Arts in Design Practice

Dublin Institute of Technology
School of Art, Design and Printing
Supervised by Órla Keane

DECLARATION

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ABSTRACT

This is an analysis of environmental ethics in current graphic design practice in Ireland. It investigates the most common obstacles, challenges and misconceptions that are presently being cited by Irish designers for not practising sustainably.

A mixed method approach of a survey and a series of semi-structured interviews, accompanied by a small scale case study of a best practice design studio led to the result that designers in Ireland are very interested in sustainability but certain obstacles hinder them from implementing sustainable solutions in their work practice. Recommendations are made based on the findings for methods to be explored that may help to resolve said obstacles, master the challenges and overcome misconceptions.

ABBREVIATIONS

ACA – Accelerated Capital Allowance
AIGA – American Institute of Graphic Arts
CPD – Continued Professional Education
EMAS – European Union’s Eco-Management and Audit Scheme
EMS – Environmental Management Systems
EPA – Environmental Protection Agency
EU – European Union
FSC – Forest Stewardship Council
GH – Green Hat design studio
HPSUs – High Potential Start-up Companies
HTTP – Hypertext Transfer Protocol
ID2015 – Irish Design 2015
IDI – Institute of Designers Ireland
LEED AP – Leadership in Energy and Environmental Design Accredited Professional
LEED GA – Leadership in Energy and Environmental Design Green Associate
MSDS – Material Safety Data Sheet
NEEAP 3 – Third National Energy Efficiency Action Plan
NFQ – National Framework of Qualifications
PCF – Processed Chlorine Free
PCW – Post Consumer
PEFC – Programme for the Endorsement of Forest Certification
PhD – Doctor of Philosophy
ROI – Republic of Ireland
SEO – Search Engine Optimisation
SFI – Sustainable Forestry Initiative
SME – Small and Medium Enterprises
SRD – Society for Responsible Design
TCF – Totally Chlorine Free
UN – United Nations
UNFCCC – United Nations Framework Convention on Climate Change
USP – Unique Selling Proposition
VOCs – Volatile Organic Compounds Abstract
non-ETS – non-Emission Trading Scheme

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INTRODUCTION: SUSTAINABLE GRAPHIC DESIGN

The most commonly cited definition of sustainability (Tonkinwise 2008) derives from the Brundtland Commission, formally known as the World Commission on Environment and Development (WCED). It unites countries to pursue sustainable development together. According to the Brundtland Commission's report from 1987, sustainability is defined as "allowing for the needs of all people to be met without preventing those same needs from being met by future generations".

This definition however can be interpreted in various ways, and has therefore not helped the prevention of misuse of the term "sustainability". The term has become very popular over the last decade, and as Douglas King, who has been ranked amongst the most influential figures in sustainable construction in the UK, would argue, should be banned completely (King 2013). But instead of proscribing a concept for which there seems to be no better suitable term, the definition and intention behind the concept should be taken more seriously.

Brian Dougherty, one of the leading experts in Sustainable Graphic Design (SGD), defines "sustainability" in a more palpable manner: "The word 'sustainable' can apply to any action that does not degrade the systems supporting it and therefore can persist indefinitely." (Dougherty 2008, 28)

Victor Papanek states in his groundbreaking *Design for the real world – Human Ecology and Social Change*, that mankind is unique among animals in its attempt to alloplastically adapt to the environment (Papanek 1971, 220). Industrialisation might be one of humanity's major attempts to reshape its environs. But the protection of the environment itself was never part of the consideration at the time the Industrial Revolution took place. The way we make everything today is based on the idea that there is an unlimited supply of natural resources. But there is not. The job of reshaping has become the designer's responsibility. The designer, by implication, plays a decisive role in developing the change for sustainability. Impacts and characteristics of materials and resources, as well as their origins, have to be considered when we reshape and create. However, sustainable practice does not end with materiality; instead the whole design thinking process, as well as the business practice have to be rethought.

„Advertising design, in persuading people to buy things they don't need, with money they don't have in order to impress others who don't care, it is probably the phoniest field in existence today“ (IX) says designer and educator Victor Papanek (1971) and standing alone, this statement sounds like ethical graphic design was an inherent oxymoron. But Papanek also stated, that “design has become the most powerful tool with which man shapes his tools and environments (and, by extension, society and himself)“. (1971, IX)

“Sustainability”, as a term, is often controverted for its ambiguity. Some experts therefore prefer terms like “Green Design” or “Green Graphic Design”, but as the author of *Sustainable Graphic Design*, Wendy Jedlička (2010) argues, the adjective ‚Green‘ indicates environmental consciousness, but leaves out economic and social aspects. Only if they go hand in hand and are respected in equal balance, sustainability can be achieved. This principle is called the Triple Bottom Line, a phrase coined by John Elkington in 1994. It incorporates economics, sociology, and ecology (Jedlička 2010, 28).

In traditional business accounting and common usage, the “bottom line” refers to either the “profit” or “loss”, which is usually recorded at the very bottom line on a statement of revenue and expenses. The Cost-Benefit analysis of any business has to trace direct and indirect costs. This is also called Environmental full-cost accounting or Environmental Management Accounting (EMA), as described by economist Christine Jasch and many others (Jasch 2003).

Dougherty (2008, 8ff.) explains a designer's responsibility with the metaphor of an avocado:

There are three distinct ways of thinking about a graphic designer's role: designer as manipulator of stuff; designer as message maker; and designer as agent of change.

I like to think of design as a big, ripe avocado. The outer layer of this avocado represents the physical world of paper and print. This is the obvious part of design that we immediately see - the layer of stuff.

Yet if we peel back the skin of the avocado, we discover the meat. This is the realm of brand and information. All of that stuff on the exterior really exists in order to convey information and deliver messages.

If we dive still deeper into the design avocado, we find one more layer-the seed at the center. This seed represents the central challenge around which all of the messages and stuff of design revolve: effecting change.

Here, Dougherty believes that every design task, be it a process, product or service, consists of these three layers. The “effected change” will in most cases equate with changing

consumer behaviour. And whether this power is used for “trivial purposes, which contribute little or nothing to our national prosperity” (Garland 1964) or for more worthwhile purposes, is part of a designers responsibility.

Environmental Ethics in Visual Communications: Values and moral responsibilities

For the last millennia, so Papanek, mankind’s basic needs have been described as food, shelter and clothing, thus taking clean air and pure water for granted. But this is changing now, because what has been taken for granted is not always available anymore. As an influential industry, the design field is co-responsible for that. The social and moral judgement must be brought into play long before the designer starts to design. They have to make an a priori judgement, whether their “design will be on the side of the social good or not” (Papanek 1971,55). Aaris Sherin, a New Yorker designer and author of the books *SustainAble*, published in 2007, and *Sustainable Thinking - Ethical approaches to design and design management* from 2013, explains that it is thanks to philosophers in design, such as Victor Papanek or Buckminster Fuller, that designers today are being trained to understand the concerns of stakeholders and consumers while retaining concern for the ethical consequences of their work. They act like a hub between different interest groups, like public and government sectors, non-governmental organisations (NGOs), businesses and consumers and can therefore mediate between those groups (Sherin 2013, 11).

In *GOOD: an Introduction to Ethics in Graphic Design* Lucienne Roberts (2006, 32) explains, that “as individual freedom has increased so has individual responsibility.” But when she asks Anthony Grayling, Professor of Philosophy at Birkbeck College, University of London in an interview, whether there could be some sort of ethical code for Designers, he advises to show designers positive examples of well-intentioned projects or people, instead of giving them “thou shalt” and “thou shalt not” guidelines. (Roberts 2006, 36)

Suggested by this author’s own practice, it is common practice for designers to get inspired by each other’s work on a daily basis, but it is questionable that effective change in work practice and rethinking of all elements of the design process can be learned by just

looking at other design work. Projects that promote environmental concerns can be very inspiring, but Sustainable Design is a systematic implementation of considerations in the design process, while the end product can have the same look and feel to an unsustainable counterpart. In order to get inspired by each other's Sustainable Designs, designers would have to read case studies of best practice examples, which a studio usually would not have resources to produce for each product. An alternative appeal could be to encourage the discussion between graphic designers.

Proclamations like the *First Things First Manifesto* by Ken Garland from 1964, 2000 and 2014 show that moral codes in the design and advertising realm are difficult to issue. The manifesto is relatively vague, due to its all-embracing nature. The undersigned "propos[e] a reversal of priorities in favour of the more useful and more lasting forms of communication" (Garland 1964). *1000 Words: A Manifesto for Sustainability in Design* by magazine editor Allan Chochinov specifically calls on designers to work sustainably. He does so by giving informal instructions, which seem so trivial that one wonders why it is necessary to publish them in the first place. But this study aims to show that graphic designers are often unaware of the positive impact their work and work process could have.

The age of Eco-Modernism: The Sustainable Graphic Design movement

When Aaris Sherin examines "how we got here" in her book *SustainAble* (2007, 16), she acknowledges Rachel Carson's 1962 book *Silent Spring* as having been the catalyst of the modern day environmental movement. William McDonough and Michael Braungart expand in *Cradle to Cradle* that up until then "environmentalism meant protesting the obvious damage" (2002, 47), but Carson imagined a dystopian world, destroyed by a toxic chemical commonly used then, and her words ultimately led to the banning of them in the United States and Germany about a decade later. In the 1960s and 70s more and more environmental organisations were formed, as stated by McDonough and Braungart. Their aim was no longer to just preserve, but to monitor toxins also. Environmentalists

like Paul Ehrlich and Fritz Schumacher raised their voices to warn about the consequences of overpopulation and mass consumption.

Victor Papanek, a follower and ally of environmentalist and philosopher Buckminster Fuller, was the first to address the designer's environmental responsibility, when he wrote *Design for the real world - Human Ecology and Social Change* in 1971. The book's groundbreaking ideas and uncompromising critique of contemporary design culture initially divided the design community. The first handbook for graphic designers, aiming to promote environmentally friendly working and printing, was that of British designer Anne Chick, called *Graphic Designer's GreenBook: Environmental Concerns of the Design and Print Industries*, published in 1992. It took another ten years until the next environmentalists addressed designers. William McDonough and Michael Braungart published their sustainability bible *Cradle to Cradle: Remaking the way we make things* in 2002. Since then designer and educator Eric Benson has declared the present as the time of "Eco-Modernism", an ecology-based Modernism, that combines the most successful aspects of the "Outlaw Designers" of the 1960s and 70s (Jay Baldwin, Buckminster Fuller and Stewart Brand) with the hopeful pragmatism of the Modernists (Benson and Fine 2011).

From Brian Dougherty's perspective, sustainability is one of those waves, comparable to the rise of modernism in the 1930s. Such waves, so explains Dougherty, change nearly every aspect of our society -and every design industry. In his book *Green Graphic Design*, published in 2008, he predicts that within the next 10 years every graphic designer would be a green designer to some degree (Dougherty 2008). The lack of literature on sustainable graphic design that has been written to this date, especially from a European perspective, tells a different story – one that will be assessed throughout this study.

Research Questions

The following research questions have evolved in order to assess the status quo and scope for Sustainable Graphic Design in Ireland:

- What is the level of awareness and interest of Irish designers and design businesses towards managing their business sustainably?

- Are environmental issues addressed in third level education or approached by companies or individuals in their design Practice?
- Which sustainable solutions are practicable and applicable in Ireland?
- How could sustainable solutions become more appealing for business owners?

Rationale for the research

This study seeks to establish what benefits exist for the visual communications sector in Ireland for integrating environmentally sustainable business strategies in their everyday work practice. Therefore the study starts by establishing an overview of the sector in order to frame the research. This is achieved through desk research and reviewing the current literature relevant to the field of Sustainable Graphic Design.

Researching sustainable development in connection with graphic design is important, because as the United Nations affirms, Global Warming will have an immense impact on every part of the globe. That humanity's emissions of greenhouse gases contribute to climate change is no longer in dispute ("United Nations and Climate" 2015). A graphic designer's impact is even bigger than that of the individual, since the designer's role brings with it the responsibility to influence or change consumer behaviour on a bigger scale, and also to decide on materials and media used to perform such behavioural change.

In order to decide whether sustainable business practice needs to be encouraged in the visual communications sector in Ireland, this study aims to examine the status quo and scope for further development.

Sustainable Design practice can enhance a business's competitiveness of any scale, nationally and internationally. This research will benefit designers interested in sustainable business practice, employers of designers, educators of the visual communications and government bodies, aiming to attain environmental goals and supporting the Irish design industry. As mentioned before, Brian Dougherty expected sustainable practice to be part of every graphic designer's day-to-day business by 2018, which was probably too optimistic. Other experts agree however, that there can only be a future where sustainability is integrated in all sectors.

To the time of this thesis being written, there are no official guidelines provided to graphic designers in Ireland which would advise them on sustainable practice. There are

also, to the best knowledge of the author, no modules on sustainability offered in the curricula of visual communication or graphic design courses in Ireland. Furthermore, the official design bodies in Ireland have not held any options for training courses for graphic designers in this area, which is in stark contrast to the training and guidance that is provided in many other design disciplines, such as architecture, interior design and product design. Why is graphic design being left behind in the Irish green movement? Even though the objective of this research is to examine whether sustainable practice needs encouragement, the aim is to also better inform designers. One of the most effective ways of educating both student and professional designers is by training them at both an academic and professional level; the relevant Irish design industry bodies and academic institutions have a responsibility to inform and educate on a topic of such importance. This study takes an interpretative perspective of the literature on Sustainable Graphic Design best practice, and explores possible sustainability strategies that could be implemented in the Irish visual communications industry. The case study that has been selected is also examined from a hypothetical stance in regards to its ease of application within the Irish industry.

Aims and Objectives

The aim of this research is to investigate the advancement of the sustainable graphic design movement in the Republic of Ireland.

Research will be undertaken to identify the awareness of environmental ethics in the visual communications sector, ascertain initiated actions of individual professionals and companies and evaluate future possibilities.

As a means of answering the research question and addressing the overall aims of the project, this research will:

- Define the terms visual communications/graphic design and Sustainable Graphic Design
- Identify the obstacles of integrating sustainable solutions in everyday business practice
- Investigate how far the sustainability movement has progressed in visual communications businesses

- Evaluate how far established propositions by SGD experts could be implemented in Ireland
- Identify positive effects sustainable practice could have on Irish design businesses
- Research Irish government policies on sustainable business practice
- Analyse this information and make recommendations where applicable for the visual communications sector

CHAPTER 1: THE VISUAL COMMUNICATIONS INDUSTRY IN IRELAND

The term visual communication and graphic design are easily confused and often used interchangeably. This chapter will provide a definition of the terms and will explain in which context they will be used throughout the thesis. Further, an overview of the design sector in Ireland will allow for assumptions about industry growth and trends and about the scope for Sustainable Design implementations.

Term Definition of Graphic Design/Visual Communication

The IDI explain in their brochure *Why Design - A Guide to Studying Design in Ireland* (2008), that graphic design and visual communications are different terms describing the same discipline. “[It] is an immensely broad field of practice in which knowledge and information is communicated in visual form primarily through the use of texts and images” (IDI 2008, 10).

In order to define the field of visual communication and graphic design for this study, the definitions derived from Irish educational institutions curricula, international notions and this study’s research outcomes will be juxtaposed.

When comparing the definitions given in course descriptions by Irish higher-education institutions for either visual communications or graphic design, there are only very subtle differences. Combined, the discipline is described to be a problem-solving practice, working across a variety of media and utilising different communication tools to convey a message or an idea consisting of image and text. According to the institutions’ descriptions, such graphic messages have the power to inform, educate, or persuade a person or audience, while the messages can be personal, cultural or commercial. Graphic design is often seen to be a sub-discipline of visual communications, which include a broad discipline of skills. In addition to graphic design, the key elements usually include typography, illustration, packaging design, photography and image making, digital media. Sometimes, editorial, interface design, exhibition design, motion graphics, interactive design or the moving image are also considered as key elements. This information has been compiled from the institutions’ websites. (National College of Art and Design 2015;

Letterkenny Institute of Technology 2015; Dun Laoghaire Institute of Art, Design and Technology 2015; Cork Institute of Technology 2015; Athlone Institute of Technology 2015; Dublin Institute of Technology 2015)

Individuals working as graphic designers often name several other skills when asked about their profession. For the purpose of this study's survey, designers were asked to tick the appropriate fields of their profession. While 48.6% chose "Communication or Graphic Designer / Art Director", another 15.3% of respondents named another additional field, mainly "Webdesigner" or "Copywriter" (see Appendix E). This shows that designers in the visual communications often are skilled in many related disciplines. It would be inappropriate to describe the professionals examined for the purpose of this study as just graphic designers, since their talents are multifaceted. This study also does not include professionals who exclusively concentrate on single disciplines of the visual communications, such as photographers or illustrators.

This study examines the sustainable solutions that can be implemented when practising graphic design, no matter the description of the individual's profession. This thesis will refer to professionals as designers, meaning only designers working in the field of visual communications and at least partially as graphic designers.

Sustainable Graphic Design, as it appears from the reviewed literature for this study, is an acknowledged part of the Sustainable Design movement in the United States of America. The term is established overseas (Jedlička 2010), and will hence be used throughout this study, even though the discipline of graphic design is mostly referred to as visual communications in the Republic of Ireland, as seen by the educational institutions' course descriptions. (Cork Institute of Technology 2015; Dublin Institute of Technology 2015; National College of Art and Design 2015)

It seems, as from the information above, that both terms, visual communications and graphic design, are not fully interchangeable and will hence both be used in this thesis whenever each term seems applicable to the context. Visual communications will be used especially when referring to the Irish industry sector, graphic design when referring to the Sustainable Graphic Design movement or the sub discipline of graphic design when referring to a designer's everyday work practice.

The Irish Visual Communication Industry: Recent Industry Growth and Trends

Con Kennedy is an Irish communications and graphic designer, member of the Institute of Designers Ireland (IDI), lecturer and PhD candidate (Kennedy 2015). He wrote his Masters thesis about the *Benefits of Continuing Professional Development in the Visual Communications Sector in Ireland* (2009), and has since published an overview of the visual communications sector in Ireland, which he analysed in preparation for his PhD. His research provides the necessary background information for this study and will hence be contemplated in this section.

In his thesis, Kennedy pleads data published by Enterprise Ireland, when stating that back in 1999 there were approximately 400 design consultancies practicing in Ireland, with an average of 10-12 staff each and these companies tended to be owner-run. During 1999 the total turnover of the Irish design sector was €279.34 million (Ir£220 million), whereas 78% of the total income in the sector was from visual communications companies. Of the 3700 employees in the sector, 69% worked in Visual Communications (Kennedy 2009).

When analysing data from Enterprise Ireland from 1999 and Intertrade Ireland from 2009, Kennedy sums up that in that decade, the Irish design sector as a whole has only grown by 12%, while the services sector, so argues Kennedy, grew in excess of 100%. Back in 1999, Enterprise Ireland had expected an increase of 216% for the design sector in terms of value and employment. Kennedy summarises:

The figures suggest that in the previous decade the design sector in Ireland has under performed both in terms of estimated growth and of value. In comparison to the UK, this could potentially be perceived as a serious under performance of the Irish design sector as a whole, especially in light of the unprecedented economic growth witnessed in Ireland in the past decade. (Kennedy 2009, 24)

According to a study carried out by Intertrade Ireland in 2009, the design sector had an estimated turn-over of €465 million. There is no newer data for recent years, to the best knowledge of the author. The visual communication sector represents around 70% of the turnover and employment within the design sector as a whole (InterTradeIreland 2009). Con Kennedy's newest research from 2014, provides the following key findings, as published on his website:

- The greatest number of design practices are in Dublin, accounting for 55% of all

practices in Ireland, while Galway & Cork represent 12% of practices in Ireland. The average age of a design practice is 10 years.

- There are currently 394 practices in the Irish visual communications sector, with 63 new design practices formed between 2011-2014, meaning that one in five practices are start-ups.
- 38% of practices are Limited Companies, and a quarter of those engaging in the sector are Sole Traders without registered business names. All but one practice identified would be considered as a Small Business based on turnover.
- Q1 2014 saw a spike in new design business registrations with 4.5% of the current practices being formed.

These numbers allow for the conclusion, that there are a lot of start-ups in the visual communications sector but that the sector is capable of further development. In an article about the feasibility of the goals of Irish Design 2015 (ID2015), Con Kennedy compares the Irish market internationally. According to the design researcher, the visual communication sector in the UK is outperforming the Irish by a factor of 6.3 times. These figures account for the number of visual communication designers as a percentage of total number of employees in the workforce when compared with the ratio of industry turnover. While the Irish visual communications sector generates around €465m annually, the UK sector's annual turnover is €8.9bn, with only 3 times as many designers as the Irish sector.

In this context, the ID2015 programme does not come as a surprise. It aims to win new markets and jobs for Irish designers. TD Ged Nash, Minister for Business and Employment, announced on July 3rd 2015, that a new €250,000 fund will support the creation of design-based start-up companies. The "Competitive Start Fund – Design" will be delivered by Enterprise Ireland as part of the ID2015 programme. The Design Fund is a core component of Enterprise Ireland's strategy for increasing the number and quality of High Potential Start-Up Companies (HPSUs) that have the potential to employ more than 10 persons and achieve €1 million in export sales within 3 years. Minister Nash explains:

Design is the missing link in Ireland's innovation agenda. I am satisfied that the fantastic response to ID2015 programmes and events to date will redress that deficit by promoting the work of talented Irish designers on the international stage, strengthening the capability of the Irish design sector and promoting collaboration between the Irish design sector and the wider business sector. I believe that we are well on the way to achieving the objectives of creating new

design companies, achieving additional exports of design-based products and services and creating 1800 design-based jobs across the regions of Ireland. (Enterprise Ireland 2015)

ID2015 emerged as an idea from the Global Irish Economic Forum in 2013 which the government supported. The initiative, according to its own website (ID 2015 2015), which has been included in the Government's 2015 Action Plan for Jobs, aims to:

- Create 1800 jobs over three years through sales of design-led products and services
- Generate an additional €10m in design-based exports
- Generate 200 new design-led business start-ups
- Facilitate more than 300 companies in international trade missions and design based trade events
- Engage with an audience of over 3 million at home and abroad

Con Kennedy however doubts that those goals are feasible. He argues that the visual communications sector could not achieve a significant level of job creation during the Celtic Tiger boom years and hence is it unlikely that those numbers could be achieved now.

Between 2011 and 2014 there were however 63 new design practices formed, that accounts for 16% of the industry and Q1 2014 saw a spike in new design business registrations, with 4.5% of practices being formed between January and April. (Kennedy 2015)

But Kennedy concedes at the end of his article:

[ID2015 will certainly] create a greater awareness of design and the value that it can bring to Irish Business and society. The legacy of ID2015 will live beyond a simple calendar year and it will contribute to the culture and discourse for many years to come. (Kennedy 2015)

Conclusively, it can be said, that the industry sector has a lot of potential. Compared to other countries, the Irish design and visual communication sector is very small, but with a lot of new start-ups in the recent years. Initiatives like ID2015 and the new Competitive Start Fund of €250,000 show the Government's willingness to support the sector.

Continued Professional Development (CPD) in Visual Communication

Con Kennedy thoroughly assesses the benefits and obstacles of CPD in the visual communication sector in his thesis *Benefits of Continued Professional Development in the Visual Communications* in 2009. He identifies skill deficits that are mostly related to professional skills, such as poor project management or business skills, as well as a lack of understanding of marketing and poor communication skills. He also recognises that other industry sectors seem to have developed and implemented CPD programmes that benefit both the industry and individuals, while the design industry is lacking thereof. Lack of understanding the value and purpose of CPD seems to be the greatest barrier for employers and employees. Kennedy's conclusions suggest, that organisations like the Design, Print and Packaging Skillnet (DPP Skillnet) would be the appropriate body to offer necessary CPD. He also suggests that the National Framework of Qualifications (NFQ) is a positive step toward accreditation and certification of CPD programmes.

Is there scope in Ireland for a SGD movement based on the above?

Kennedy (2009, 2015) asserts, that the Irish visual communication sector has underperformed in the noughties, since there had not been as much growth as in other sectors during the Celtic Tiger years. The numbers of design studios in Ireland have remained relatively stable, with a good number of start-ups in the last years. Based on the information that was exposed in the previous excerpts, there is a lot of room for the industry to grow, as it is relatively weak in terms of size and turnover compared to other European countries. But Kennedy's research and conclusions confirm the necessity for an extension of CPDs and general up-skilling but also indicate that awareness of this necessity is lacking. ID 2015 and the Competitive Start Fund show the Government's interest to support the design industry.

CHAPTER 2: VISUAL COMMUNICATIONS & ENVIRONMENTAL POLICY: LAWS AND REGULATIONS IN IRELAND

Ireland is committed to accept its responsibility as an industrial nation towards the environment. As an influential industry, the visual communication design sector has to bear responsibility and take action. This chapter will assess Ireland's environmental obligations and governmental plans that aim to meet them. Governmental and non-governmental initiatives that fund or support sustainable business practice will be evaluated and eco labels and certifications relevant for graphic designers introduced.

Ireland's Environmental Obligations

The Kyoto Protocol was negotiated in 1997 by the United Nations (UN) as an amendment to the United Nations Framework Convention on Climate Change (UNFCCC), an international treaty with the intention to bind countries to take action against global warming. The provisions of the Kyoto Protocol are legally binding. As ratifying countries, the EU member states, including Ireland, agreed to reduce emissions of the six greenhouse gases that contribute to global warming by at least 5% compared to their emissions of 1990 in the first period of the protocol, between 2008 and 2012. In 2013, the second commitment period started, according to the UNFCCC's website.

The greenhouse gas emission projections, annually published by the Irish Environmental Protection Agency (EPA) are compiled to meet European Union (EU) reporting obligations and also to inform national policy development. Ireland's 2020 target is to achieve a 20% reduction of non-Emission Trading Scheme (non-ETS) sector emissions (i.e. agriculture, transport, the built environment, waste and non-energy intensive industry) on 2005 levels with annual binding limits set for each year over the period 2013-2020 ("Ireland's Greenhouse Gas Emission Projections 2014-2035" 2015).

Figure 2.1 shows projected emission levels for non-ETS sector emissions under the With Measures (worst case) and With Additional Measures (best case) scenarios. In addition, it shows the annual compliance/non-compliance in relation to the annual emission limits:

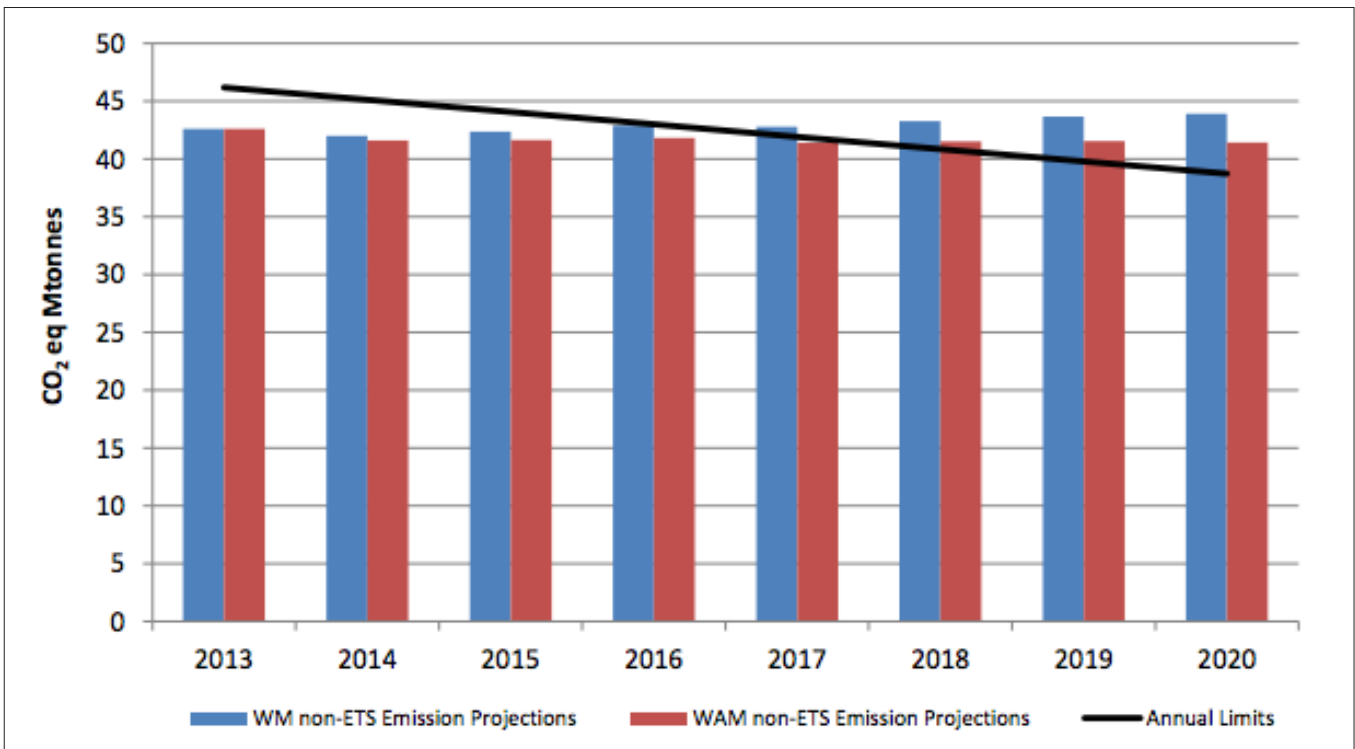


Figure 2.1 With Measures and With Additional Measures greenhouse gas emissions projections and comparison with the linear reduction pathway required between 2013 and 2020; (Source: Ireland’s Greenhouse Gas Emission Projections 2014-2035, 2015)

This outlook suggests, that Ireland will not meet the planned emission reduction of 20% until 2020. The visual communication design sector certainly does not account for a big percentage of Ireland’s overall greenhouse gas emissions, but it should be in the interest of every business to adjust to new measures. What is more is that the nature of the designer’s job makes for a change in consumer behaviour, which inevitably impacts all industry sectors and individuals.

Improving energy efficiency is another fundamental part of Ireland’s environmental goals. The Nation’s third National Energy Efficiency Action Plan (NEEAP 3) reaffirmed Ireland’s commitment to delivering a 20% reduction in energy demand across the whole of the economy by 2020, along with a 33% reduction in public sector energy use, as the Department of Communications, Energy and Natural Resources states on their website (“NEEAP” 2015).

These goals show how relevant laws and regulations are, especially for industries. The following will examine the different certifications that are available and relevant for Irish graphic designers, since they can play a vital role in motivating businesses and individuals to work more sustainably.

Eco labels and Certifications for graphic design products

Paper and Product Certifications



Fig. 2.2

© The Forest Stewardship Council (FSC) serves as an international Certification system determining the crucial elements or rules of environmentally appropriate, socially beneficial and economically viable forest management. The FSC offers certification for forest management, chain of custody and controlled wood.

See Appendix B for the full list of criteria for certification. FSC is the most important certification for paper internationally. The Council also offers certification for printers and publishers, that are then listed in their FCS Certificate Search. The vendors are eligible to print the FSC logo on products if desired by the customer. No Irish printers are listed however.

The Programme for the Endorsement of Forest Certification (PEFC) encourages local or national certification systems to be developed independently and come together in PEFC. Both, PEFC and FSC have similar guidelines for a chain of custody certification, but have different guidelines for forest management certification.



Fig. 2.3



Fig. 2.4

The EU Ecolabel covers a wide range of products, and includes copying and graphic paper, but also includes paper products. The criteria involve material, manufacturing and usage: all aspects of a life-cycle-assessment. The daily management of the EU Ecolabel is carried out by the European Commission together

with bodies from the member states and other stakeholders.

Unfortunately, those three are the only commonly known certifications for graphic design products in Ireland, to the best knowledge of the author. There are various other certifications and eco labels which are only available in other countries. The FSC, PEFC and EU Ecolabel appear to be seldom used, a conundrum this thesis will address in the following chapters. There are however other certifications that Irish businesses of all industry sectors can avail of; and these will be introduced in the following excerpt.

Environmental Management System (EMS) Certification

ISO14001 “is a suite of standards and guidance documents on a range of topics relevant to the environmental management of industrial processes and products.” (Envirocentre

2015). It serves the accreditation of a companies' environmental management system (EMS), which allows a company to formulate a policy and objectives, taking into account legal requirements and information about environmental impacts. It applies to those environmental aspects which the company can control and it specifies environmental targets or goals. The ISO14001's EMS requirements are very similar and an integral part of the European Union's Eco-Management and Audit Scheme (EMAS).

Irish printers list some general certifications they achieved in the Print and Packaging Directory, published on Enterprise Ireland's website. Amongst other ISO certifications that assess quality management, one printer also names ISO14001. But the ISO14001 or EMAS certification applies to all organisations and covers all sectors if there are environmental aspects that the organisation can control and influence in a positive way (British Assessment 2015).

The Carbon Trust Standard is an independent certification scheme by the London-based Carbon Trust, that aims to certify positive achievements in regards to energy usage and greenhouse gas emissions, water usage, management and effluent, as well as waste management and disposal (Carbon Trust 2015).

Apart from certifications, the following organisations can help with planning and funding of sustainable business practice:

Schemes and Initiatives supporting Sustainable Businesses

The Network for Responsible Business helps companies to develop, manage and measure their CSR and sustainability strategies. It is a national non-profit organisation, founded in 2000. As their website explains, they work with 60 of the largest companies in Ireland. The Network provides a Business Working Responsibly Mark, which can be achieved through an evaluation stage (questionnaire) and an audit stage. According to their website, it is the only certification in Ireland for responsible and sustainable business practice. The fees for the certification are €11,100, which makes the certification unattractive for SME's.

The Sustainable Energy Authority of Ireland (SEAI) however provides a support centre specifically for SME's. The SME Support Centre provides advice and training for busines-

ses that wish to reduce their energy bills to up to 20%. These services are free of charge, and could be of great use to design studios, that tend to be SME's (see Chapter 1).

Also interesting is the Accelerated Capital Allowance (ACA), which encourages companies to purchase energy efficient equipment in order to improve the overall energy efficiency of Irish companies and in turn assist Ireland in meeting its EU targets for energy savings and the reduction of carbon emissions. The ACA offers a tax incentive by allowing companies to deduct the full cost of such energy efficient equipment from taxable profits in the year of purchase -rather than over the usual eight year period (DCENR 2015). This scheme could be attractive for businesses of any size.

Governmental Incentives for Greener Businesses

Good for Business, Good for the Community - Ireland's National Plan on Corporate Social Responsibility 2014-2016 is Ireland's answer to the EU Commission's call to promote CSR in every EU member state. The plan includes an environmental pillar, which is divided into resource efficiency, environmental protection, respect for biodiversity and climate change mitigation. The suggestions made by the Department for Jobs, Enterprise and Innovation endeavour businesses to not only comply with legislation, but to voluntarily exercise responsibility to further negate their environmental impact. For the full list of suggestions listed in the plan, see Appendix C. On the whole, this document encourages sustainable development, but it seems questionable to the author, for whom these suggestions could help.

The report *Our Sustainable Future - A Framework for Sustainable Development for Ireland* was published by the Department of the Environment, Community and Local Government in 2010, in times when a lot of looking back took place, and sustainability must have seemed like the necessary change, especially in economic regards. The report is an extensive guideline for all sectors, which makes it too broad to take much out of it for application in businesses. But the report acknowledges education, communication and behaviour change as some of the key challenges for sustainable development, and the objectives in that regard seem reasonable. When they become more accurately defined in the follow-up report from 2014 (Environment, Community and Local Government 2014), they seem to solely centre on up-skilling unemployed individuals for them to become

sustainable development experts. The objectives to raise awareness in businesses or train existing industry bodies and professionals are not included.

These Governmental incentives seem to be encouraging to whomever reads their publications. But there appears to be no practical approach to support sustainable development in SME's of various sectors.

Design bodies and environmental policies

According to this author's research, non of the Irish design bodies have environmental policies for their members. The Designers Accord however was created as an international 5-year project, lasting from 2007-2012, but continues on until the present day. Its aim is for all members of the creative community to get into a dialogue about the integration of sustainability principles in their practice and production. The project counts 362 Graphic Design firms and individuals, of which 3 are based in Ireland. The directory is accessible as part of the Core77 design directory (Core 77 2015).

To conclude this chapter about policies, governmental incentives and certifications, it can be said that Ireland has high goals to meet in the next years, and although there are encouraging programmes and incentives for many industry bodies, there does not seem to be much support available for sustainable development in an SME like a design studio. There are however very interesting certification schemes like the EMS certifications (e.g. ISO14001) that designers can avail of, and the certifications for products and paper have great potential, if they just got more attention. The SME Support Centre of the SEAI as well as the ACA are schemes that responsible design studios should become aware of, as they offer free support and tax reduction opportunities for energy efficient equipment. There is room for design bodies to engage in sustainable development. Organisations like the IDI and DDP Skillnet should consider encouraging designers to take on their responsibility. The IDI has taken a first step by including a sustainability category in their annual awards.

CHAPTER 3: LITERATURE REVIEW

Introduction

Most sources used for this thesis are written by practicing designers or lecturers of the visual communications. The key sources and their authors will be introduced, followed by a thematically organised review of the named literature.

The key experts in Sustainable Graphic Design include Brian Dougherty, the author of *Green Graphic Design* (2008), a compact and consequential guide with thought-provoking impulse, as well as Aaris Sherin, who wrote *SustainAble*, published in 2007, a deeper examination of materials and applications for Graphic Designers.

Wendy Jedlička analyses in *Sustainable Graphic Design* (2010) the relation between marketing and business strategies with systematic thinking and sustainable development. She gives in-depth information about implementations and also about materials.

Anna Gerber is from Paris via Los Angeles and has been writing about and teaching graphic design at the Central Saint Martins and The Royal College of Art, UK for the past ten years. She wrote a three part series of articles for the British Design Journal Creative Review, called *Design & Sustainability*, which were published in three issues of the Journal from November 2008 to January 2009. In these articles, Gerber discusses how designers can become more environmentally responsible and how this responsibility can be integrated in the design process.

For the purpose of this study, Anna Gerber's articles will be examined and compared with other experts opinions, because they seem to touch on some key obstacles of the implementation of sustainable solutions in every day work practice.

Ethics

Applied Environmental Ethics are best introduced by the pioneers of Sustainable Design: chemist Michael Braungart and architect William McDonough, the authors of *Cradle to Cradle: Remaking the Way We Make Things*. Published in 2002, the book could not be less outdated. Their approach: "let's not be stupid" rather than "be ethical", because people

make mistakes, and ethical questions are off-putting. “If you don’t want to be an idiot your instinct is to do what you can to combat the greenhouse effect. Don’t make it an ethical problem, make it a quality-of-life problem. Whatever you do, look at the quality of what you do. When we make it an ethical problem, we will not solve it.” (Braungart and McDonough 2002, 12)

The appropriate approach however is controversial and comes down to whom authors address. Mainly cited in this thesis are books, some of which are addressed to the general public, like Braungart and McDonough’s *Cradle to Cradle*. Lucienne Roberts’ *GOOD: an Introduction to Ethics in Graphic Design* for example belongs however to the category of recommended reading in design colleges, and addresses designers. Ethics are the main focus of the book and environmental considerations are part of it. Eric Benson, one of the leading experts in Sustainable Graphic Design would also frequently put environmental issues under the roof of ethics, but his articles and websites address graphic designers and those concerned with the graphic design curriculum.

Conclusively, it seems appropriate to name ethical issues as such, when addressed to students of visual communications, since they should be confronted with ethical considerations from an early stage. Practicing designers on the other hand, as well as members of the public, who are not all familiar with the concept of sustainability might still have to be addressed with caution, in order not to be put off with possibly inflicting terms.

It should be mentioned however, that there is no prevailing data that would motivate an analysis of the relationship between visual communication designers and environmental ethics to the knowledge of the author, which is a gap this study aims to partially fill with regards to the Irish sector.

Education

In the first article of a series of three, the author Anna Gerber demonstrates the designer’s responsibilities towards environmental concerns. Gerber quotes Allan Chochinov’s *1000 Words: A Manifesto for Design and Sustainability* from 2007 on teaching sustainability early. In the Manifesto, Allan Chochinov, who is editor of the popular online design magazine Core77, identifies that many design colleges have understood the “potentials,

opportunities and obligations of design, while others continue to teach students how to churn out pretty pieces of garbage” (Chochinov 2007, 2)

Chochinov focuses on industrial design, and so does his manifesto, but his propositions are applicable to all disciplines of design, including graphic design.

An expert of the Sustainable Graphic Design movement, who has published articles in journals and on websites, is Eric Benson, who was mentioned in the introduction of this chapter. He is an assistant professor of graphic design at the University of Illinois and founder of the website www.re-nourish.com, which educates designers regarding sustainable business practice. Benson is a task force member at the American Institute of Graphic Arts’ (AIGA) Center for Sustainable Design and author of various correlating journal articles. In his article *Sustainable Design Education Rethought: The Case for Eco-modernism*, which he wrote with Peter Fine for the Journal *Design Principles & Practices* in 2011, the authors make the case, that teaching design history, criticism and theory is vital for an improvement of existing curricula. Lecturers should return to a reform minded approach to design and focus on design as a mediator between design and production. The authors of the article wish for teaching bodies to encourage more discussion of contemporary issues within the design classroom and beyond, but additionally point out, that creativity and innovation outside of the artifact are key to the looser framework where new ideas can thrive, enabling the necessary change to happen. Underlining this argument, the designers quote physicist Albert Einstein, who once said: “We can’t solve problems by using the same kind of thinking we used when we created them.” (Benson and Fine 2011, 15)

The bigger question however appears to be, how sustainability should be integrated in the curriculum. Anna Gerber (2008) suggests, that either independent programmes would need to be introduced, or sustainability should be integrated into existing curricula. Underlining her argument that sustainable design should be the norm, Gerber recommends the latter option. However, Benson and Napier reflect in their article *Connecting Values: Teaching Sustainability to Communication Designers* (published in 2012 by *Design and Culture: The Journal of a Design Studies Forum*) that sustainability is not necessarily included in the student’s values, even if it is in that of the educator. When they first attempted to integrate sustainability in their own classrooms, for their students it felt like negative propaganda, because it seemed like the educators way of thinking was imposed upon them. Instead, the american designers and educators Benson and Napier

tried out different techniques, each with their own classes and documented their experiences in the article. They asked their students about their values and expectations, and the students in return voiced concerns about wanting to make meaningful work and had the desire to be heard and seen because of their talents. They seemed to connect the dots more easily after associating their values with the facts presented by sustainable experts who guest-lectured in their classes. Inviting design practitioners in for critique proved that there are possible careers for those who embrace sustainability into their creation process, and after these experiences, students seemed prepared to tackle more thought-provoking assignments.

It needs to be mentioned however, that through the research that has been done for this study, it can be asserted that to the date of this thesis being written, there is not enough graphic designers in Ireland who are experienced with and fully educated about sustainable work practice, so that adapting the idea of sustainability experts as guest-lectures might be troublesome. If sustainable work practice shall become the norm, as Anna Gerber suggests, there has to be a shift for the educators themselves, so that they can naturally teach what should be the norm. Benson and Napier's approach sounds intriguing and conform with this author's personal experience in higher education. To encourage students to think about their values and ethical beliefs, while giving them an introduction to environmental ethics seems like a promising incentive that could be adapted by Irish educators.

Materials

“What if we were to advocate not designing anything material?” asks Anna Gerber in her first article for the Creative Review (Gerber 2008a, 21). She proposes, after an idea of John Thackara, author of *In The Bubble* (2006), that rather than “stuff”, we should start designing systems. System design has the idea of using, instead of owning, which is a concept also promoted by Core 77-editor Chochinov, who calls it “Systems before Artifacts” (Chochinov 2007, 1-2).

Designers in the visual communications however naturally don't produce “stuff”, but “stuff” that advertises other “stuff”. But advertisement is naturally not a materialised product, it is a process, which can be seen as a system itself. Consequently, adapting

Thackara's proposition to graphic design, results in changing the design process itself, not just the end product.

Wendy Jedlička (2010) exemplifies this thought through examining the debate around plastic or paper. She illustrates, that eco-minded businesses, communities and even whole countries are banning plastic bags with increasing frequency, and often the use of paper bags is widely celebrated as to be more environmentally friendly. But, states Jedlička, "when the question of paper versus plastic comes up, careful examination of the 'facts' are in order" (250). She analyses different studies that have been made to assess the life-cycle of plastic and paper bags, with the result, that location and scope of the studies and whoever funded the studies can result in drastically different conclusions. Jedlička conclusively recommends, that "when the question is paper or plastic for a product with very limited use life, the answer is, should be, and should have always been: Neither" (252).

This example might seem trivial and at the same time too general, yet can it have a decisive impact if designers advise their clients against the product/medium of their choice, if they find it might not be the most efficient. The apparent triviality of decisions can make them easy to neglect in everyday work practice; an obstacle that will be addressed later in this thesis, when a survey and a series of interviews will inspect how Irish designers tackle such challenges in their work practice.

Design Work

In her second article of the series *Design & Sustainability* for the British journal *Creative Review*, Anna Gerber picks up on changing the design process itself as well. Gerber states, that designers need to reconnect their design process with the production process: The production process needs to be re-integrated into their design process. She suggests, that designers "challenge [their] soya ink, recycled paper environmentally responsible default setting and move into its place the idea of the 'designer as producer'" (Gerber 2008b, 32).

Gerber quotes poet Johann Wolfgang Goethe, who "once said that in order to judge a craft one must understand the mechanical side of it", and that one "couldn't conclude

that a piece of design is good without knowing how it was made” (33). For Gerber, this is an analogy about re-integrating the making process into the design process.

While Gerber analyses where designers position themselves, and in which direction they should thrive, Benson and Fine concentrate on the way designers solve problems.

As a response to William McDonough, who asked designers to “embrace the challenge of being not efficient but effective with respect to a rich mix of considerations and desires” (2002, 72), Benson and Fine (2011) introduce the idea, to responding to design problems, instead of reacting. According to Benson and Fine, a standard design solution would be a reaction to a problem, whereas “a thoughtful response attempting to discover a meaningful and appropriate” solution that “attempts to minimize negative social and environmental impacts” would be one that designers “going forward” should try to achieve (9).

Educating the Public

According to Chochinov, the relationship between the people who own things and the people who make them has broken down, which is because most of the products that we use can not be opened or repaired anymore. They are designed as subassemblies to be discarded upon failure or obsolescence. This results in a disconnection between user and product, and people not understanding how their built artefacts and environments work or what role and impact they have on the world (Chochinov 2007, 3).

In Anna Gerber’s third article of *Design & Sustainability* (Gerber 2009), she expands on this statement, saying that not only should designers question where things come from and how they are made, but make use of their role as storytellers, in which role they can help make the invisible visible. “We can illuminate the consequences of our purchasing decisions by making consumers aware of the histories of the products we choose to buy” (22). Gerber recalls Victor Papanek’s *Design for the Real World* (1984): “Educate the public, our audience”, and the words of designer Arlene Birt, who wrote in her thesis: “Visual communication can connect consumers with the unseen backgrounds of a product or service.” If on the other hand, these connections are not made visible, “we become disengaged, disconnected and ultimately, disinterested.”(23)

However, making processes visible brings with it a bulk of unforeseeable consequences.

In most circumstances, consumers do not want to be educated about the negative impacts of the products they buy, neither do they want to buy products with a bitter after taste. The designer's job is to sell products and services, most of which are not flawless. Turning down 99% of their jobs would be the result, and impracticable. This is just to name the most obvious obstacles of this idea. It is unclear to the author how teaching the public about processes could be successfully integrated in a designer's day-to-day job, promoting the re-connection of consumer and product however seems to be a necessary but complicated task.

As Jedlička (2010, 83) puts it: "...our buying choices do have a direct impact on how industry shapes our world", but buyers/consumers are so disconnected to how their products were made, that they don't feel responsible for their production when buying them. Another problem, which designers can help to diminish is that the true cost of production is not represented in the cost of many modern products (85). Another obstacle, which this research will show, is that designers are usually busy educating their clients.

Working along other specialisms

She also argues that there is a need to understand how information is actually acquired. The need to harvest accurate data becomes key. But since designers are no scientists, states Gerber, "it becomes essential that [they] work alongside these other specialisms" (22).

According to Gerber, a designer does not have the resources to engage in extended life-cycle analysis, and therefore suggests defining boundaries. One should decide either to communicate select details, or indicate to a general big-picture.

Anna Gerber closes her argument stating that "processes are complex and intensive research needs to be carried out before design decisions are made" (22), but she adds, that it is up to the designer to determine what level of detail they need to retain in order to stay faithful to the information.

"Ultimately, to make the invisible visible means that designers need to engage with content." (22) By content she means whatever surrounds us, the content of the page, the

screen, the desk. In order to gain a better understanding of the stories designers need to be telling/showing, they have to work more closely with other specialisms, so Gerber. She introduces the term eco-literacy, a term that was coined by the co-founder of the California-based Center for Ecoliteracy, Fritjof Capra in 1995. Eco-literacy aims for a better understanding of networks of relationships and connections that exist between varied systems. Those networks can be examined on a microscopic or macroscopic scale, so Gerber.

Benson and Fine (2011) also suggest collaborations, especially for integrating Sustainability in the curriculum. Small groups of designers together with experts of relevant disciplines could, according to the researchers Benson and Fine, have good chances to tackle large and complicated issues such as the implementation of eco-responsible work practice in college-education. Uniting college departments, and organise joint modules, for example for business-, environment- and design-courses could enrich the educational value of all students involved.

Cost effectiveness

Most books focusing on Sustainability in the Visual Communications have to cover the aspect of costs at some point or another, as it is often named to be the biggest obstacle when trying to convince designers or clients.

Some authors, like Aaris Sherin, who published *SustainAble* in 2007, focus on best practice businesses; design studios that successfully work as “certified green businesses” (2007, 15) and have like-minded organisations as their clients, support social causes and yet manage to “pay the bills”.

Jedlička discusses the subject with the assessment of a study by Innovest Strategic Value Advisors from 2007. *The Carbon Beta and Equity Performance study* “evaluates the relationship among climate change, companies’ ability to manage the associated risks and opportunities, and their financial performance” (2010, 36). The study provides a review of 1.500 companies and there seems to be a strong and positive correlation between industrial companies’ sustainability (especially when focusing on climate change) and their competitiveness and financial performance. This study can merely provide the idea of a tendency, since it is, to the time of this thesis being written, outdated, as it is almost

eight years old, and the assessment of US-American companies of various sectors. It can be said, however, that there is a general tendency for companies to save money when saving energy and resources. Sustainable Design involves rethinking processes in order to make them more effective and worthwhile, which includes economic considerations. Another relevant assumption that can be drawn from this is, that Corporate Social Responsibility (CSR) reports, as well as annual reports focusing on companies' sustainability become increasingly more popular. Sustainable development has progressed immensely in Ireland as well in recent years, as reports like the *Our Sustainable Future - A Framework for Sustainable Development for Ireland* from 2010 and its *Progress Report* from 2014 show. With increasing roundly attention on sustainability comes a new responsible target group, and with it new clients and vendors to cooperate with.

Brian Dougherty, author of *Green Graphic Design* explores two problems that come with the common presumption that alternative materials and manufacturing methods “cost too much” (2008, 34). Firstly, according to Dougherty, do environmentally improved materials often cost just as much or less than conventional ones. Secondly, he argues that fixing major problems in the existing system would be more effective than solely focusing on cost. It might ultimately even lead to a cheaper solution.

Dougherty forms a simple equation: “If the cost of something outweighs the value, then we decide that thing is too expensive” (36). But consumers do not always go for the cheapest option, as Dougherty explains, they would otherwise not drive a car or buy a house. We are constantly weighing the cost of an option against its value. And sometimes, added value makes more expensive options the best choice for a situation. (36)

The author illustrates his argument with the example of a simple design job, a mailing that might cost more when printed on environmentally friendly paper, but saves cost through reduction in size and cleaning of the mailing list, which results in a lower number of items, and reduces cost, while increasing effectivity through better design.

Brian Dougherty admits, that “innovation may cost more than the status quo” (40), but there needs to be a shift of the conversation from material cost to total project value. An aspect that will recur in the conclusions chapter.

Sustainable Graphic Design = Norm or USP?

Anna Gerber, in her articles written for the Creative Review (2008a, 2008b, 2009) develops the claim that Graphic Design plays an important role in a rapidly changing world. She explains, that there is talk of a revolution in progress, which has an impact on a political and industry level, on individuals and designers, moreover on buying decisions. Her key argument is that our society needs a major cultural shift in terms of thinking, attitude and practice:

- Firstly, according to Gerber, designers would need to re-engage with the making process and return to the idea of the production process (as a creative tool).
- Secondly, she further argues designers would need to visually communicate what is often complex.

From Gerber's point of view, environmentally responsible Graphic Design does not need to be seen as anything that is out of the ordinary. Instead, it should, industry wide, be seen as the norm. Neither of the other authors directly argues for or against Gerber's statement, whether sustainability should be added or integrated to business practice and design education. Eric Benson however, who paved the way for sustainability to enter the classroom, made the case of incautious implementation in the curriculum being able to have a reverse effect on students (Benson and Fine 2011). To the author's knowledge, how sustainability should find its way into the studios has been scarcely investigated, especially from an Irish point of view. But that the attempt to find solutions in that regard would go beyond the scope of this thesis.

Certification System

An interesting idea originates from Richard Nicholas Gavos, who graduated at Texas A&M University-Commerce in 2012 with his Master of Fine Art thesis *The Sustainable Design Office: LEED-Type Certification For Graphic Design*. His Thesis analyses the implementation of sustainable business practice solutions through the adoption of a certification that is recognised in the United States for architectural businesses, which is called Leadership in Energy and Environmental Design (LEED).

As Gavos explains, there is two different certifications – LEED AP (Accredited Professional) and LEED GA (Green Associate), while the former is well sought after by many

architects. It is added to their title and becomes an additional mark of excellence in their profession. The certifications for graphic designers, which will be assessed in more detail in the following chapter, demand for organisations to apply, undergo an audit of their facilities, and pay an annual fee for the certification. The certification processes that are relevant for graphic designers relate to paper and print manufacturing.

Gavos adapts the Triple-Bottom-Line model of sustainability including economic, social and environment, to his new accreditation system. He transforms it into principles, products and place. Principles are elements such as “attitudes, policies, standards and transparency for design firms, clients and individuals”. The Products area addresses “the production of artifacts and materials usage by graphic design entities”. Finally, “place refers to the physical space where the work activity takes place.” (Gavos 2012, 12)

Gavos puts these elements in a matrix, where they become more detailed and build the base of his certification system.

A certification system could be a step towards Sustainable Design practice being valued and desirable in Ireland. Gavos concludes in his thesis: “If the design profession seeks to raise its level of professionalism, accountability, and sustainability, it must begin the process of certification and best business practices for the global environment and the planet.” (57) This points to an important argument – the image of professionalism for architects is due to their obligation to obey laws and regulations, and the opportunity to be accredited for additional efforts. A more professional image for graphic designers in Ireland should be sought after because it could enhance the chances for designers to invest in CPD’s and give them tools to justify sustainable business practice in front of clients.

CHAPTER 4: SUSTAINABILITY IN DESIGN PRACTICE

Sustainable Design is the balanced use of natural, social, and economic capital with respect to continued health of the planet and future generations. Sometimes this can mean rather to work towards many small goals than living with absolutes, because we have yet to find the perfect way of balancing economic needs and needs of the planet.

Some designers prefer to use similar expressions like “Eco-friendly”, “green”, “eco-design” instead of Sustainable Design, but it needs to be noted that these expressions refer to environmental responsibility only, whereas sustainability also considers the social and economic implications of materials, designs and product processes. (Sherin 2007)

Making a strict distinction between socially and environmentally conscious design is unnecessary, since sustainable practice requires the both. There is however a seemingly greater attention on CSR when examining corporate policies. Corporate Sustainability is an emerging market. More and more large enterprises choose to use environmentally preferable production practices for their annual reports, many additionally to regular annual reports, have a Corporate Social Responsibility (CSR) reports or statements, whereas Corporate Environmental Responsibility (CER) sections are still quite rare. The following chapter will assess what a CER statement or the environmental commitment of a design studio could include. The incentives therefore are accumulated from the expert publications on SGD as well as various online sources and selected for their applicability or relevance in the Irish market.

Design Thinking

Design is going through a period of intellectual expansion. It is adapting to a broader realm than just the traditional professions. Design decisions are now made in a larger context. Therefore designers themselves develop a deeper consciousness about what they do and how they do it, and discover a variety of possibilities. (Chick and Micklethwaite 2011, 37)

The core concept of design thinking is that the design process can be applied in almost any situation where problems need to be solved and involves the participation of various

disciplines. To bring sustainability into the design process means the discharge of linearity. At all stages, the impacts of the design product need to be considered, which can in practice mean that environmental experts' or printers' opinions are retrieved throughout the design practice.

While designers often describe themselves as problem-solvers, their main challenge lies in identifying the problem, and considering a broad spectrum of factors for the solution. This at least is the author's opinion, based on professional experience in design practice.

Business Decisions, Transport and Logistics

The consensus view between experts seems to be that striving to create the greatest visual impact with the least environmental impact is a major goal in sustainable business practice, for economic and environmental benefit. This means to achieve client's needs while limiting potential ecological damage.

Clients should be encouraged to consider the environmental impact of their production, because educated clients are more willing to undertake ecologically sound projects. (SRD 2014)

Local manufacturing and a general consideration of where materials come from is one step to a greener business practice, according to Silver (2014). In Ireland, those materials usually come from Europe however. Since 2005 when Smurfit Kappa closed its mill in Clonskeagh, Dublin, there has not been any paper production in Ireland.

Effective Design

The medium needs to be chosen wisely. Instead of taking orders from clients or co-workers, the medium should be rethought. If a poster is not the most effective way to advertise the product/service, maybe something else is. Good design is effective design and vice versa and this has been pointed out by most SGD experts (e.g. Dougherty 2008; Jedlička 2010). Efficiency saves financial and natural resources. The efficiency of a project must be considered before the product goes into manufacturing. Considerations include fitting the pages on the press sheet to result in the least accumulating waste. To calculate the size of the printing product, tools like the renourish Project Calculator (Renourish,

2015) can be used. In order to make the manufacturing process more effective -and thus more sustainable- the designer needs to understand it, and hence needs to communicate with the printer. Understanding and learning from processes is also captured in Biomimicry, an aspect commonly mentioned in matters of SGD. Biomimicry describes the adaptation of natural processes to products designed by humans. As Jedlička (2010, 182) describes, “graphic designers tend to focus solely on the function of attracting the viewer and tend to ignore other functions their piece should have in the context of the entire system.” The lessons graphic designers need to learn, states Jedlička, is to “look beyond the biophilic patterns of the natural world and find the deeper principles of how we can fit in with nature.” (183) Designing backwards is a strategy that is very much in accord with the biomimicry-ideas. Following sustainable design principles, the type of printing process determines the characteristics of the design product. Dougherty (2008) described this as designing backwards, considering all consequences of the outcome before starting to design: “The quantity of the print run determines the type of printing press which determines the paper options available and the press sheet size which drives the structure of a designed layout.”(105)

In order to achieve a truly sustainable design product, it is imperative that it can be fully recycled if necessary. Considering the smallest paper size suitable for each job is also inevitable. Less paper used also means less energy expended and leads to a cheaper product. Unfortunately for the designer, one should stick to standard paper sizes, in order to reduce paper waste.

The amount of ink colours should be reduced to a minimum. The greater the number of inks the more cleaning fluids are required for the presses, which results in greater costs as well. Ink coverage also needs to be kept at a minimum. More ink means more difficult de-inking or greater toxic residue leaching into the groundwater.

Paper

When it comes to paper, it seems like there is an endless list of decisions that need to be made, but “making responsible paper choices is one of the most significant environmental choices we make on a daily basis.” (Jedlička 2010, 265) Printers usually stock

only certain papers, so for the designer, options are limited. But printers stock what is in demand, so designers need to request environmentally friendly options.

Papermaking is generally very resource intensive, contamination of effluents and air pollution accompany the manufacturing. Paper recycling conserves trees and wood fibre and saves water, reduces the need for chemicals and decreases the energy usage compared to using virgin pulp. (Jedlička 2010, 260) If for some reason, virgin fibre paper has to be used, it should at least be certified, the certification ensures that the paper is not sourced from ancient or endangered forests or from indigenous communities, and the wood is being harvested in a manner that it can regrow, with the least environmental impact. Third-party certification programmes offer proof of sustainable forest management through logos, trade names, marks or seals and are therefore valuable guides when selecting papers (Jedlička 2010). FSC, PEFC and the EU Ecolabel are such certifications that are relevant for Irish designers. They have been discussed in detail in chapter 2.

Further, there are two distinctions in the production of paper: “mechanical” and “kraft”. The “mechanical” or “groundwood” process (e.g. newsprint, telephone directories, base sheet for low-cost coated magazine and catalog papers) uses trees about twice as efficiently as paper made in the “kraft” or “freesheet” process (e.g. office and printing papers, letterhead, business cards, copy paper, base sheet for higher-quality coated magazine and catalog papers, advertising papers, offset papers) (Conservatree 2015). For some projects, groundwood paper could be an interesting alternative for designers.

The paper industry is the 4th largest emitter of greenhouse gases (Sustainable Graphic Design Blogspot 2011b). The paper consumption in Ireland was estimated to be 805,000 Tonnes in the year 2009 (Pöyry Management Consulting (London) Ltd 2011). This equals a very rough estimation of 14,490,000 trees. (The calculation is according to Conservatree (2015), and supposing an average value of 18 trees = 1 ton of pure virgin fibre paper).

Recycling 1 ton of paper saves:

- 18 trees
- 26,500 litres water
- 2 barrels of oil
- 4,100 kilowatts of energy
- 3 cubic metres of landfill space
- 27 kilogrammes of air pollution

- 4.2 megawatts of energy (Jedlička 2010, 262; Conservatree 2015)

This data should be enough indication that recycled paper is the only way to go for responsible business owners, if no better options are available. Deciders should take up recycled paper stock with a high post-consumer (PC/PCW) recycled fibre content. Clean mill waste (which would be defined as pre-consumer waste) has always been recycled so it is better to keep consumer paper out of the landfill. They should furthermore consider the use of recycled paper stock that has not been de-inked, since the de-inking is an energy expensive process which still results in toxic waste. (The Society for Responsible Design 2014) The use of unbleached or non chlorine bleached paper stock is also recommended by The Society for Responsible Design with the consent of other SGD experts, because bleached paper requires the use of toxins which are harmful to marine and water based life. These are labeled as Processed Chlorine Free (PCF) or Totally Chlorine Free (TCF) for virgin fibres. An environmentally superior paper is therefore defined by all fibre content having environmental attributes.

The SGD experts from overseas consent with McDonough and Braungart, that recycled paper is not good enough. Their point being, that most recycling is actually downcycling. It reduces its quality overtime. With every time paper gets recycled, the fibres become shorter and shorter, until their last step is to become a toilet paper roll, which is why those do not belong in the recycling bin, as the author has been told in a recycling centre. Alternative renewable paper sources can reduce the need for wood pulp from rainforests. Whenever available, tree free paper stock such as sugar cane waste, straw, seaweed, algae and hemp could be considered, although very rare to be found in Ireland, and unlikely to be stocked by printers. Unlike wood fibre and pulp, the supply and demand for alternative or agriculture-based pulp is not well established, and has many drawbacks as well. Interesting for certain projects, could be the use of exotic papers that are made of animal dung, such as the Ellie Poo Paper, coming from the UK (The Exotic Paper Company Ltd 2015) or paper made of mulberry tree bark, bamboo, garlic, malt etc. (Jedlička 2010, 294), however each and every one of them has its drawbacks, and the higher cost and long transportation distances make them undesirable for Irish designers. The material McDonough and Braungart's *Cradle to Cradle* from 2002 has been printed on, could be a forthcoming alternative one day. It is printed on a synthetic "paper", that does not use any wood pulp or cotton fibre, but is made from plastic resins and inorganic fillers instead. The paper is waterproof and extremely durable and first and foremost, can

be recycled infinitely without any decrease in quality. Since April 2015, Antalis, “Europe’s leading distributor of paper, packaging solutions” (Antalis 2015), which is one of the biggest merchants for the Irish market, stocks the innovative Polyethylene papers by manufacturers Yupo, Polyart and Tyvek. However, those companies do not disclose where their raw materials for the production come from, hence is it supremely questionable that these are environmentally preferential options. Jedlička (2010, 303-304) confirms this author’s presumptions, that synthetic papers are likely to be made from petroleum, which is a very decisive drawback, and the heavier weight of the paper ultimately leads to more greenhouse gas emissions for printed products. For now, it seems best to reduce paper consumption wherever possible, and if necessary, stick to the guidelines listed above.

Ink

Cleanup and disposal are a part of a products life-cycle that designer’s do not often think about, according to Jedlička (2010, 315), but they are decisive in order to make responsible material decisions. Petroleum based inks were introduced in the 1960ies, and favoured since for their feature to dry more quickly than vegetable-based inks. The main problems with petroleum-based inks are Volatile Organic Compounds (VOCs), heavy metals and especially the mere fact that they descend from a non-renewable source. According to the Sustainable Graphic Design Blogspot (2011a), petroleum inks contain 30-35% VOCs. The amount of these released during the printing process or from the finished product depends on many factors. Regarding air quality and pollution issues, VOC’s are suspected to be responsible for health problems for animals, humans and plants (Jedlička 2010, 316). The *Solvents/Emissions of Volatile Organic Compounds from Organic Solvents Regulations*, known as the “Solvents Regulations”, came into force in 2002 and regulate the VOC emissions in inks amongst other things (Office of the Attorney General 2002). Wendy Jedlička (2010, 316) advises to learn more about the VOC content of inks by consulting with the printer, contacting the manufacturer, or asking to see the product’s material safety data sheet (MSDS). VOCs are used to enable the ink to dry quicker. Soy- or vegetable-based inks or other agri-based inks are naturally lower in VOCs as they are made from non-petroleum resources (The Society for Responsible Design 2014).

Jedlička points out, that the amount of vegetable oil content can however vary wildly in inks. Even inks with as little as 7% non-petroleum based inks can be labelled as soy inks. She quotes John Adkin, product director of SunChemical, a large ink manufacturer in Europe, stating that it is difficult to produce coloured pigment without petroleum. Some inks contain barium, copper or zinc, especially in metallic inks that are green yellow or opaque yellow. The metals are toxic and sometimes carcinogenic and are not biodegradable. “Instead, they can leach into soil or groundwater from landfill sites and cause major problems to rivers and groundwater supplies.” (Sustainable Graphic Design Blogspot 2011a). The Society for Responsible Design (SRD) therefore recommend to stay away from metallic inks if possible.

Printing-Methods and Materials

Braungart and McDonough (2002) warn, that a common misconception of the Cradle to Cradle principle is to believe, that it is all about redefining the “ingredients” of a product. And although this is a decisive part of it, choosing the right materials in an inviolous combination can be counterproductive. Also, it is necessary to understand why a product or material is environmentally-friendly or why it is not, otherwise demonised materials are often replaced by others that are just as harmful, or even worse, because they may contain other toxic substances. Or, in the example of grocery bags, a long lasting plastic bag which is likely to segregate its toxic substances in a landfill or the ocean at some stage, might be replaced with a paper bag, which is responsible for deforestation and will need more petrol to be transported due to heavier weight. The answer to the question “Paper or Plastic?” should always be neither. (Jedlička 2010) And the same goes for all materials that are being used for a design product. As soon as materials are being used, they are either sourced from anorganic finite resources that are going to be difficult to dispose or organic materials, which need to be harvested and transported and are likely to be down-cycled after disposal. It is important to keep design products as free from toxic elements as possible, and bear the sustainability principles in mind when assessing the products life cycle.

For printing products, varnishes and coatings are used to effect a certain haptic or visual impression, to protect the underlying material, or to attain a special emphasis on de-

fined areas on a product. All advantages and disadvantages of available coatings and varnishes can not be assessed as it would go beyond the scope of this thesis, but a few shall be named, as mentioned in Jedlička's Sustainable Graphic Design:

Aqueous or water-based coatings are clear and available in gloss, dull and satin finish and are fast drying. They can contain a variety of additives, but offer advantages over traditional varnishes. Varnishes are basically colourless inks and share many of the same environmental impact issues as petroleum-based inks. UV coatings can achieve more protection and sheen than varnish or aqueous coatings. They release hardly any solvents into the air, but make the product more difficult to de-ink and recycle. Liquid or film laminates are used to protect the underlying substrate and to extend its function, as it is done on milk cartons for example. Bioplastic laminates offer the advantages of their petroleum-based counterparts, but make the product more easily recyclable.

The Society for Responsible Design (2014) also mentions the following incentives that should be considered: the overuse of gloss paper stock should be avoided, because more exists than can be de-inked and recycled. And the same applies to plastic films, foil stampings, metallic colours and synthetic adhesives. Some synthetics have a life of 200-500 years after they have been disposed of in landfills, according to the SRD. The Society also recommends to avoid the over use of perfect bound or spiral bound spines as they are difficult to recycle. The glues and metals in such binding impede cost effective recycling. Additionally, the SRD advises to avoid "bleeds" that are then trimmed and must be de-inked before recycling. The ink extended beyond the trim marks requires more intensive recycling than ink within trim marks. The use of filmless and plateless digital printing technology seems to be a desirable objective for small run jobs. Modern printing technology can reduce the amount of plastics, metals and inks used for printing.

Green Hosting and Energy Efficiency

Electricity can be generated from a variety of sources, which include renewable sources like solar, wind and hydropower. The use of renewable energy sources is growing constantly, but compared to fossil fuels, non-renewables (waste) and electricity imports, the overall share of renewables in primary energy in Ireland stood at only 6.8% in 2013 (SEAI 2014). The Sustainable Energy Authority of Ireland (SEAI) offers programmes for

Small and Medium Enterprises (SMEs) to enhance energy efficiency. As the SEAI state in their Economic Analysis of Residential and Small-Business Energy Efficiency Improvements:

- The cost to the business of saving one kWh is 1.8c to 2020 and 0.7c to 2030. By comparison, the average cost of a kWh of purchased energy to the clients is 8.2c.
- The abatement cost per tonne of CO₂ in the period to 2020 is minus €198 per tonne, and minus €216 per tonne in 2030 (SEAI 2011, 26)

In other words, as an abatement measure, the programme saves more money than it costs, which can help businesses to identify and achieve energy efficiency as a desirable goal.

Green Web Hosting is an incentive that is often left out by SGD experts. Some of the most extensive Guidelines do not mention it at all. The field of visual communications includes web design, and many who work as graphic designers offer web design as well. Those who work in this field, are responsible for the websites to be hosted by a responsible provider. Green Web Hosting is a unique movement and can not be assessed in all detail for this study, but one of its main aspects is using energy efficient servers. Green web hosts power their facilities with on-property solar or wind energy. If not, they purchase carbon credits or energy offsets to make up for the carbon they put into the atmosphere, and some plant trees for each new account to balance out the carbon footprint.

Tools like www.eco-grader.com can test websites for their eco-efficiency. It measures page speed, number of Hypertext Transfer Protocol (HTTP) requests, shared resources and the web host provider according to their own ranking system. All these factors count for the energy efficiency of a webpage. The Irish Green web hosting provider Eirbyte states on their website: “Recently total electric bill to operate web servers and related equipment was \$7.2 billion worldwide. And it is estimated that if energy consumption with web hosting keeps rising at the current rate by 2020 the industry will be more polluting than the airline industry.” (Sheerin and Dowds 2015)

Eirbyte launched irishsolar.net, with which they provide web hosting that is powered without a connection to the national electricity grid. Their power is generated by solar photovoltaic panels and a wind turbine.

In the studio

A greener studio involves the use of an energy supplier who uses renewable sources, recycled office supplies, less printing and basically adheres to the five R's: Rethink, Refuse, Reduce, Reduce, Recycle (Benson 2007; Jedlička 2010).

Computer equipment which has energy saving features should be favoured. Energy saver equipment shuts down when not in use, which can save a burden on non-renewable fossil fuels.

The reverse of other sheets should be used to proof work from inkjet printers and for note taking or sketches. This doubles the life span of office paper.

The Society for Responsible Design (2014) advises to be careful with laser printers as toners can adhere to the drum. Overpackaging should be avoided. For example, mailings in envelopes could be substituted through postcards, which follows the credo of REDUCE, avoids unnecessary paper waste and expense.

McDonough and Braungart have instigated a certification system for products after a very high standard of criteria. A copy paper has made it into their list, which is available from environmentally committed office supplier Klee Paper (2015) in Dublin: Steinbeis Papier. All other office supplies can be purchased from the family owned company as well. Their online shop provides free nati-



Fig. 4.1

onwide delivery for orders worth €75 or more. Jedlička (2010, 407-417) advises to consider environmentally friendly options for paper in internal use, office and desk supplies, art supplies, presentation and promotion items, gifts and giveaways, kitchen and break room utensils, janitorial goods, catering for events, office furniture, flooring, shelving and storage. Almost all of these can be purchased at Klee Paper, for competitive prices. As the SRD (2014) points out, dedication should go as far as specifying that the windows on business envelopes be of recyclable cellulosic content, because cellulose based windows can be recycled as paper or easily composted.

Furthermore, a green design studio involves smart communication and a digital workflow, waste reduction and recycling, pollution prevention, a sustainable work environment and the company's encouragement that all members of staff choose eco-conscious commuting.

Change Management

Change Management techniques can help with the implementation of a great variety of information and approaches. In a business environment, it is likely that one person is determined to (implement) change and can act as a change agent, but they will need to convince their peers of the strategies, and teach them. As Wendy Jedlička, author of *Sustainable Graphic Design* (2010, 199ff) points out, the change agent could be in the position of a peer, of an authority, or of an individual in a changing organisation. Each position requires different strategies, which could be anything from teaching each other, leading by example, bringing others to the team, generating alternative designs on a consistent basis to being aware of the process and possible reactions. Obstacles -so Jedlička- include the human tendency to rely on familiar shapes and patterns. Biologically, this is a useful characteristic which can help survival in many cases. In terms of change making, the human dependence on patterns seems to be one of the biggest obstructions. One might assume that design studios should not have too many problems with change, since they rely on a technology-dependent and therefore ever-changing profession: the designer. Nevertheless, technology-based change happens rather gradually and sustainability means a particularly substantial change. Jedlička (2010) argues, that if things have always been done in a certain way, some may see the opportunities in a new way, but others see the new way as threatening. They are comfortable with the way it has been done, and the change is dismissed without further investigation.

Promoting the idea

Using certification logos or ecolabels helps to promote the recycled nature of a product or service. Customers and Users need to have the opportunity to know they are purchasing recycled goods, as argued by the SRD (2014). Further, designers should also print the PCW content, ink and bleaching type on their work. The society's theory is that customers and users educated by one product will look for the same credentials in other products. The SRD also suggests, that designers keep themselves informed of the latest environmental developments in inks, papers and printing processes, since new technologies and rediscoveries of old techniques for green design are occurring constantly. There is growing support for the claim that the role of designers needs to be expanded.

The designer needs to become a consultant and help their clients define a competitive strategy, manage uncertainty, organise resources and position design correctly in the context in which a business operates (Sherin 2013, 26). They should seek partnerships and clients who can further sustainable goals. At present, not only clients in leading industry fields should be sought after but also possibly in the government, non-profit organisations or educational institutions.

Initiatives like The Designers Accord, a “global coalition of designers, educators and business leaders working together to create positive environmental and social impact” (Designers Accord 2014) are a good way to engage with likeminded people worldwide. It has guidelines for design firms, individuals, corporate adopters, professional organisations and educational institutions wishing to participate. Its aims are to create a broad network throughout the creative community, that inspires and motivates their members to share best practices, ideas, and case studies, and hopes that new initiatives will grow from this foundation.

Implementation of these ideas in Ireland and common obstacles

The Printing Dilemma: Case Study Print Factory

To the date this thesis was submitted and to the author’s best knowledge, there is only one printer in the Republic of Ireland that advertises itself to be “the most environmentally friendly”: The Print Factory (The Print Factory 2015). They justify their use of Forest Stewardship Council (FSC) certified virgin paper and recycled paper on their website with the following:

While recycling has many positive benefits, so too has using paper from well managed forests. By using virgin paper, we are creating a demand, and encouraging people to plant trees/forests to meet that demand. And as we know, trees absorb carbon and as such, contribute to keeping our planet a little cooler! (The Print Factory 2015)

However, Kinsella (2012) amongst many others, would argue that it is better for the environment to use recycled paper instead of virgin paper. These divergent perceptions could be the result of misleading statements of virgin paper manufacturers, who “...provide an inaccurate perspective on greenhouse emissions associated with recycled paper [and] ignore all the other benefits (less water usage, fewer effluents, deforestation and

ecosystem destruction, etc) of using recycled paper to support their conclusions.” (Mendelsohn 2011)

Conclusively it is questionable why the Print Factory supports the use of virgin fibre paper, and they do not use tree-free paper. Their use of recycled paper however is reputable. They are supplied with renewable energy by Airtricity, as stated by Brendan Dooley in an e-mail message to the author, on May 26, 2015, and plan on building their own wind turbine. Although supplied by an US-American manufacturer, the Print Factory uses vegetable-based inks for their litho-presses and invested in digital printing presses which are overall more efficient for small-run jobs (Dougherty 2008, 108), which are more common nowadays. (Dooley 2015)

Consequently, The Print Factory might indeed be the most environmentally-friendly printer in the Republic of Ireland, but their underlying philosophy seems to be conflictive with the approach of the leading experts (Braungart and McDonough, Dougherty, Jedlička, et al.) in the field of Sustainable Design.

CHAPTER 5: RESEARCH METHODOLOGY

This chapter illustrates the research design and methods that were used in this study. The methodology for the study is largely determined by the aim and specific objectives of the study. This section explains the research methods used with emphasis on study design, selection of the target population, the sampling procedures, the research instruments, data collection techniques and data analysis procedures that were used in this study.

Annotation of Necessity of Research

The concept of Sustainable Design Practice is based on sustainability principles. Graphic design products are being used wherever information needs to be displayed or arranged, which makes it an indispensable and extensive field of work. Both printing products and computerised applications play a role in the consumption of natural resources, whether this may be through materials or energy consumption. Applying sustainability principles to visual communication design practice means integrating the mitigation or abolition of environmental impacts in the design process and in business practice.

This study aims to investigate to what extent such integration is taking place in the Irish visual communications sector. The environmental awareness of graphic designers in Ireland has, to the best knowledge of the author, not been assessed to the time of this thesis being written.

Background for Research Design

Joseph A. Maxwell presents a model of research design in the *SAGE Handbook of Applied Social Research Methods* (Bickman and Rog 2009) that consists of five components: goals, conceptual framework, research questions, methods and validity. Since Maxwell argues, that a good design is “one in which the components work harmoniously together” (Bickman and Rog 2009, 215), the components for this study are construed in the following:

Goals – The relevance of this study lies in the detection that environmental consciousness had not yet been assessed for the Irish visual communications sector, at the time of

this thesis being written. Furthermore it was unclear if sustainable business strategies that are suggested by US-American experts in Sustainable Design could be implemented in the Irish market. This research clarifies the possibilities of sustainable business practice in the Republic of Ireland and makes suggestions for practising designers and the development of the sustainability movement in the realm of visual communications.

Conceptual framework – The author herself has a background in communication design and is a practising freelance designer in the visual communication sector in Ireland and is hence part of the target group for this study. Personal experience and professional knowledge of the subject matter influenced and informed the research at all stages. The author’s view, that resources are not being used in the most efficient way in design practice, rested on personal experience and secondary research.

Research questions – How environmentally responsible is graphic design practice in Ireland? How feasible is the implementation of recommended strategies by experts from the USA in Ireland?

Methods – In order to conduct this study, secondary research has provided the background knowledge from leading experts in the field. An online survey has yielded quantitative data about and from design practitioners and a series of semi-structured interviews have complemented the study with qualitative information about the feasibility of

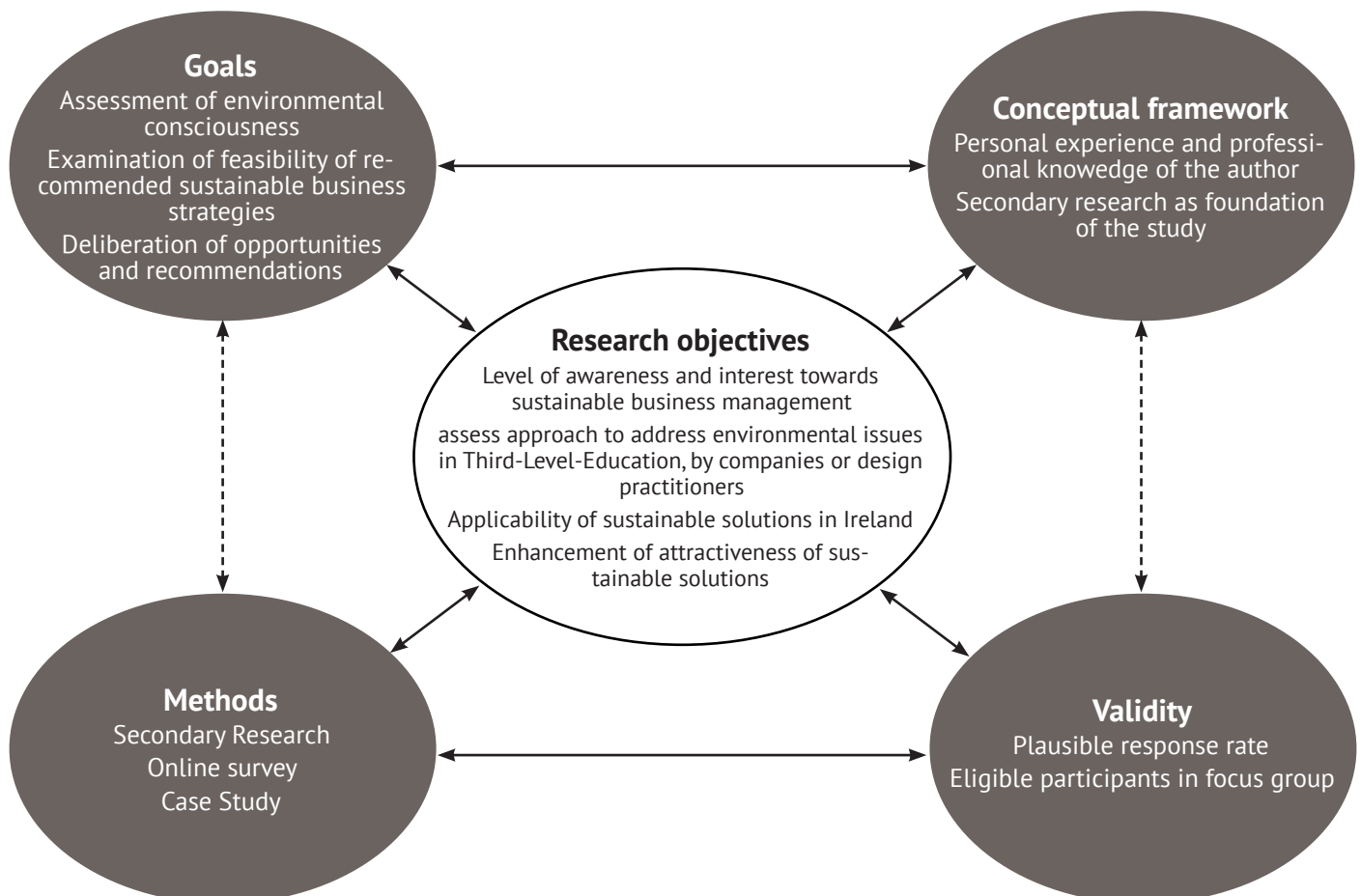


Figure 5.1 Interactive model of research design adapted from Maxwell

recommended strategies. Inferences were drawn by the author from the sources stated above and compared with an additional case study of a best practice example.

Validity – The validity for this research is amongst other things ensured through a plausible response rate in the survey and eligibility of interviewees for the semi-structured interviews.

Research Design

The research design follows the research questions:

- What is the level of awareness and interest of Irish designers and design businesses towards managing their business sustainably?
- Are environmental issues addressed in Third-Level-Education or approached by companies or individuals in their design practice?
- Which sustainable solutions are practicable and applicable in Ireland?
- How could sustainable solutions become more appealing for business owners?

This research employs a design where data was collected from designers currently working in the visual communications sector in the Republic of Ireland. The level of awareness and the implication of sustainable solutions are quantifiable measures. Therefore, a survey was best suited as it provided the opportunity to collect primary quantitative data from the target group. This was necessary in order to measure the environmental consciousness of business practice. In a subsequent series of semi-structured interviews, the researcher was able to interact with a select group of survey participants which made it possible to understand the obstacles and feasibility of sustainable business practice in Ireland. This served to answer the third and fourth questions, which also required the background knowledge of the literature review. The additional case study of a design studio led to deductive recommendations and conclusions.

The three types of data collection procedures (survey, semi-structured interviews and case study) were chosen in order to ensure the research question would be answered after gaining a complete picture of the status quo. The semi-structured interviews furthermore followed the survey in a developmental manner.

Completeness and Developmental are, according to the *SAGE Handbook of Applied Social*

Research Methods (Bickman and Rog 2009) common purposes to justify a mixed methods approach in research.

The conclusions that were made on the basis of the quantitative data collection led to formulation of questions for the qualitative data collection. The research design is hence of a sequential nature. This sequential mixed method design was employed to answer the research questions in order to draw conclusions and make recommendations for a more conscious business practice. The final inferences are based on the data analysis of both strands.

The use of a variety of methods validates the data by cross-verifying the information that has been gathered from both sources. The combination of methodologies in one study of the same phenomenon is also called triangulation (Creswell 1994).

“The concept of triangulation was based on the assumption that any bias inherent in particular data sources, investigator, and method would be neutralised when used in conjunction with other data sources, investigators, and methods.” (174)

The triangulation of this study mitigates bias that could have been more probable if only one of the methods had been executed.

Quantitative: The Survey

As the first part of the sequential mixed method design, a quantitative study was designed and conducted. Borrego, Douglas and Amelink (2009) explain that the main purpose of quantitative research is to enable objective generalisation of results of data collected from a study sample to the entire population of interest. A quantitative data collection procedure was selected because this type of study is reported to provide high levels of reliability.

The survey consisted of mainly closed questions, but often with an additional “Other”-field, giving respondents the option to give an alternative to the fixed answers. Rather few personal factual questions asked the respondent about their current occupational status and educational background. Factual questions about their companies’ business practice might have been very impersonal for employees, who took on the role of informants in this case, but very personal for employers and freelancers, as they are responsible for their businesses. Questions about attitudes and beliefs were measured with the aid of Likert scales, which simplifies the coding of the questions in comparison to open questions, as Bryman (2012) approves.

In order to encourage participants to complete the survey, general rules of thumb, as mentioned by Bryman (2012), were kept in mind when designing the questions. The use of ambiguous terms has been avoided and questions kept short. Double-barreled as well as leading questions were avoided, in order to keep instructions clear and questions unbiased. Technical terms were avoided where possible and explained where necessary. It has been secured that the answers provided for closed questions were balanced. Additionally, only questions were included where respondents would have requisite knowledge in order to answer or they were given an “I don’t know”-option to tick.

The self-completion questionnaires were administered electronically in order to reach a higher number of designers, since e-mail addresses are published more frequently than studio or home addressees.

It is typical for designers to have access to computers and the internet, and to feel comfortable in their use. Online surveys, so Bickman and Rog (2009, 26), are a common approach to send out questionnaires and have several advantages. The data can be collected very rapidly, without costs, and is almost immediately available to the researcher, which is of great help in a study of a sequential nature, and which is dependent on the responses of a rather specific group.

Another important advantage is the survey being programmed to skip and branch where questions are given based on the participant’s previous answer. This was realised with the free online tool Google Forms. The survey responses were gathered between May and July 2015.

Qualitative: Semi-structured interviews

Subsequently to the survey, a series of semi-structured interviews was organised with survey participants who had proved to be eligible to evaluate the opportunities of implementing sustainable business practice. This qualitative research method was chosen in order to answer one of the research questions in particular: How feasible is the implementation of recommended strategies by experts from the USA in Ireland?

The qualitative interview, compared to a structured interview, emphasises greater generality in the formulation of initial research ideas and on the perspectives of the interviewees (Bryman 2012, 470). The interviewee’s perspectives are crucial in this study, since it is the researchers opinion, that only the experiences of several designers combined can give a complete picture about the status quo.

Three interviews were conducted via telephone and video chat (Skype), which provided synchronous communication of time, but asynchronous communication of place. A fourth interview was conducted via e-mail communication, as the interviewee was not available for a telephone interview. All interviews took place in August 2015.

Sampling and sample size

The sample frame that was used for the survey included people that are currently employed at a visual communication design company in the Republic of Ireland or who worked freelance as a designer in the visual communications at the time of the examination, also only if in the Republic of Ireland.

In this regard the researcher collected data from a sample of all who were currently employed as designers in the visual communications in the country. This is because the research was supposed to evaluate current business practice, therefore unemployed designers had to be left out.

So called in-house designers, designers who work in a company where the revenue is not primarily generated through design work, also were not invited to participate in the survey. This is due to the different nature of their responsibilities and work practice. Different sustainability strategies would be appropriate and therefore their inclusion would have jeopardised the feasibility of the study.

Designers working in Northern Ireland were not included, because their governmental position allows for different access to sources and services from the United Kingdom. As to the opinion of the author, if prospects and possibilities are different, business practice can not be examined as an entity (as in extending the study to the Island of Ireland) and would have to be studied separately.

A precise definition of participants helped to make the collected data more reliable and accurate. Sequential mixed sampling was utilised to gather possible participants for the subsequent focus group. Participants were informed about the focus group at completion of the survey and had the chance to fill in their e-mail address to stay in contact with the researcher in case they wanted to participate in the focus group or get more information about the study in general.

According to InterTradeIreland (2009) there were 5,100 people employed in the Design

Sector of the Republic of Ireland in 2010, of which 54% are in the Visual Communications/Graphic Design. That makes 2,754 Visual Communication Designers. However, as the Central Statistics Office (CSO 2015) states, the numbers in employment have been going up in recent years and it is to be assumed that the number of designers has increased since 2010. There is, to the best knowledge of the author, no newer data about exact numbers of designers in the visual communications in Ireland.

In order to reach a high number of eligible participants for the survey, the author got in contact with the biggest active design associations, the Institute of Designers (IDI) and Institute of Creative Advertising and Design (ICAD). Both associations however did not consent to the authors request to send out the survey to their members e-mail addressees.

The survey was sent out via email to all members of a group called “Graphic Design Dublin MeetUp” (MeetUp 2015) by the administrator of the group. The group has 444 members in total.

The survey was personally sent by the author via email to all Graphic Designers listed in the Designers Accord Directory (Core 77 2015) in the Republic of Ireland. These are 15 addressees in total.

The survey was furthermore sent out by the author via email to all Graphic Designers listed in the Creative Ireland Directory (Creative Ireland Directory 2015) who are based in the Republic of Ireland. This gave 523 addressees in total, of which 63 E-Mails returned as undeliverable, which makes 460 potential addressees.

Since members of the “Graphic Design Dublin MeetUp”-group and entrants in the Designers Accord or in the Creative Ireland directory may be overlapping, the response rate can not be estimated accurately. This should not be interpreted as a flaw in the research, it rather tells us more about the nature of work in this particular area in regards to its industry membership and commitment to professional practice.

The response rate, with the number of people who completed the survey being 72, lies between 7.8% in the worst case (sample size of 919, sum of all members) and 15.7% in the best case (sample size of 460, all members overlapping).

Validity and Reliability

In order to gain valid data from the survey, the number of respondents compared with the number of designers the survey had been sent to (response rate), should be reasonably high. It is possible that the lack of benefits for participants may have impinged on the number of responses. Responses are also naturally low for surveys that have been sent out as group e-mails.

However, since the data that yielded from the semi-structured interviews and secondary sources provides convincing evidence that a lot of sustainable design strategies can in fact not be implemented in Ireland yet, the exact number of environmentally conscious designers does not need to be ascertained through this study. Instead, the survey provides proportionate information about how widespread the knowledge of sustainable business practice is.

Due to the nature of this research being of a mixed method approach, and measures for validity and reliability traditionally being used to justify the use of quantitative methods (Denzin and Lincoln 1994, 487), validity is all the more difficult to assess.

Data Analysis

The collected data has been analysed through data analysis tools in order to make it accessible for evaluation. The collected data of the survey has been analysed using means, percentages, standard deviation, and others and has been compared to the secondary data from the literature in order to assess the level of consciousness about environmentally responsible business practice. The questions for the semi-structured interviews have evolved from this analysed data.

In order to take further action of conclusion and recommendation the analysis of all collected data and the complementary case study have been evaluated by the researcher.

Limitations and assumptions

There are various assumptions that have been made in the course of the research and there are also a number of limitations which have been encountered. It has been as-

sumed that most designers working in the Visual Communications have access to a computer and to the internet and are familiar with their use. It has also been assumed that the reader is familiar with the environmental crisis and the necessity to counteract global warming wherever possible.

This survey examined the environmental aspects of sustainability in their economic and social context.

Those who specialised in key areas may be more likely to recognise the importance of sustainable design practice and therefore unhesitant to participate in the study, compared to other designers. Individuals who were more interested in sustainable design were more likely to respond to the survey.

Ethics

The moral issues that typically arise at various stages of research were considered throughout the study. Since for this study, a personal reflection of experiences was sought after in the semi-structured interviews, subjectivity was not an issue, but instead desired. The interviews that were conducted over the phone and video-chat were transcribed soon after the audio-recording. Transcriptions were sent to the interviewees in order for them to review or comment on where they felt they had not expressed themselves as they had wished to.

The privacy of participants was respected insofar as the survey respondents remained fully anonymous, and were only contacted to be conducted for the semi-structured interviews if they had entered their e-mail addresses in the survey form. The interviewees were given the opportunity to remain anonymous but did not object to be mentioned by name. They were also given the opportunity to change company names that they had mentioned in the interviews in order for them to avoid any ensuing detriments.

Ethical knowledge and cognitive choices are not the key to ethical research alone, as educational psychologist Steinar Kvale (1996) asserts. The researcher's sensitivity and commitment to moral issues and actions throughout the study is just as vital. The very nature of this research being derived from an ethical stance allowed for the author to have an all-embracing awareness for ethical matters.

Summary

The research process started inductively by defining the research philosophy and approach, followed by a clear research design and analysis of methods which best suited the purpose of the research.

This research is based on the subjectivism epistemological position as the research seeks to understand the viewpoints of organisations who implement CPD. The use of both qualitative and quantitative methodology enabled a better understanding of the benefit, barriers and reasons for engaging in CPD.

CHAPTER 6: PRESENTATION AND ANALYSIS OF PRIMARY DATA

The previous chapter justified the chosen research design with a mixed method approach. The first section of this chapter will present and analyse the key findings of the online survey while a second section will analyse the interview questions and key findings.

Research method: Survey

A. General questions about profession/employment status

- The majority of respondents work as Sole Traders/Freelancers (37.5%) or work in a Limited Company (34.7%). A further question about the field of work the respondents are engaged in aimed to show the multifaceted talents of designers in the visual communications. Many are engaged in various related fields.

B. Companies self-representation

- 79.1% of respondents stated that their company has no CSR statement, while 6.9% said that they didn't know and 12.5% affirmed their companies had one.
- Those who had answered that the companies they work for had a CSR statement were asked whether it involved environmental considerations, which 44.4% confirmed. When asked to insert the correspondent paragraph of their CSR statement in the form, this resulted in one respondent inserting a brief abstract about EMS, while three others made comments about their incentives. The responses in this regard showed a brief attempt to include environmental considerations.

C. Companies actions – sustainability in practice

The survey participants were asked about exemplary practical implementations of sustainable work practice when doing client work. For some of those implementations there seems to be a concurred stance:

- Preferring FSC certified paper, using a printer that has a CER statement, avoidance of harmful finishings when possible, and considering waste reduction and ink coverage in designs were all confirmed by about 30% of participants.

- Two sustainable propositions found even greater implementation: The aim to offer clients environmentally friendly solutions, even if to a greater cost was approved by 61.1% and the (deliberate) avoidance of long transport distances by 50%.
- Three of the proposed implementations were approved by a relatively low number of respondents: Use of tree-free paper or recycled paper whenever feasible was approved by 12.5%, almost the same as number of approvals for using vegetable or water-based inks (11.1%), where however 29.1% answered “I don’t know” to the latter. Only 5.5% approved to be working with web hosts that power their facilities with renewable energy, although a surprising 44.4% answered this with “I don’t know”.
- The incentives that were more often answered with “I don’t know” than others, where those about certified paper, vendors’ CER statement, green web hosting and inks. Those are questions that require a bit of background knowledge. It can be assumed that those designers have not concerned themselves with Sustainable Design before. An issue that might be solved with integrating sustainability in college curricula and offering CPD’s.

D. Companies internal work environment – sustainability in the studio

Participants were asked about behaviour at their work place, which is supposed to illuminate the studios stance on sustainable behaviour. This category produced a lot more consent than the previous, which demonstrates that the majority of participants are aware of their environmental responsibilities as individuals.

- Over half of the participants (52.7%) use recycled paper for internal use and approximately three out of four aim to reduce paper waste.
- 83.3% of respondents aim to conserve electricity at their work place, try to reduce and recycle waste.
- However 70.3% do not use green energy in their office.

E. Former education

Participants were asked about their design education, in order to assert their educational background and personal interest in sustainability and to confirm the assumption that sustainability is not being taught in design colleges.

- About a third of the respondents (27.7%) hold a postgraduate degree, a half

indicated an undergraduate degree to be their highest, and 15.2% have a further education certificate.

- Two of the 72 respondents affirmed that sustainability was spoken about during some of their course modules, and one respondent stated that sustainability “was a part of [their] own end of year show through own endeavours”.
- A confirmative 79.1% approved that they have a general interest in environmental topics and astonishingly 35 respondents inserted a broad spectrum of answers when they were asked to specify which aspects they are most interested in.
- Seven respondents had attended conferences that addressed environmental aspects. This is however not very decisive for this study, as the events that were attended were not design related conferences. This reflects the general interest of respondents in environmental topics and the trend to address sustainability in other industry sectors.

F. Own decisions and impacts

- 93% either agree or strongly agree that they are in a decision making position in their company, which can be explained with most participants either working freelance or in small companies.
- 79.1% agree or strongly agree that their decisions or their work have an impact on the environment, and 81.8% agree to the statement that it is relevant for their companies business to save natural resources. However, surprisingly almost 9,6% (strongly) disagree with the latter.
- There is an overall interest in CPD in SGD.
- 31.9% find it personally important to be practising sustainable design, and 58.3% find it at least somewhat important, which leaves one in ten respondents to have no personal interest in practising design sustainably.
- When asked to indicate the reasons why they do not implement sustainable solutions in their design projects, most respondents are afraid of higher costs for them or their clients and not having enough knowledge about sustainable business practice. But 12,5% also admit that they either were not aware that they could do something or do not see why they should be changing anything.
- 12 of the respondents are members of the IDI, 10 are members of ICAD and four of GDBA.

G. Sustainability Communication

- 18% of respondents state that their companies engage in campaigns/projects that serve the protection of the environment.

Research method: Interviews

1. What do you think of how far your responsibility goes in terms of environmental protection?

Purpose of the question: This question was asked in order to help answer research question 1 (What is the level of awareness and interest of Irish designers and design businesses towards managing their business sustainably?), in order to estimate the awareness level of interviewees and understand their stance, and to measure the effect practical experiences with clients have on people who have good intentions to work ethically and environmentally friendly.

Key points in the answers: Karen and Danielle say, it is the responsibility of the designer to advise a client whether or not something should be printed at all. Sophia goes so far to say that Sustainable Design can only be possible when working with likeminded clients. In terms of responsibility, she says “From a business perspective I don’t think it’s an obligation I have, it’s just something that I choose to do.” John additionally points out that the clients are dictating the terms, and the market being too tough to be offering solutions that cost 4 times as much.

It has been pointed out by Danielle that educating the client is an essential part of the designer’s job in general. While clients, especially in the SME sector, usually don’t have a very developed understanding of the design work or its value, a lot of effort goes into explaining the general work practice, leaving not much room to delve deep into environmental issues.

The interviewees mention the reduction of waste as one of the main objectives.

Interpretation of the key points: The interviewees seem to be aware that they have an obligation towards the environment, but at times have the feeling that their hands are tied when it comes to implementing responsible behaviour in their work practice due to clients lack of awareness and tight budgets.

2. Do you have a printer that you regularly work with? And if so, which environmentally friendly options does this vendor offer?

Purpose of the question: Answer research question 3 (Which sustainable solutions are practicable and applicable in Ireland?) and gather insight from experiences with printers.

Key points in the answers: All interviewees say they use a number of printers but have one which they use on a regular basis for reasons of cost, the environmentally sustainable choices available and other options they provide.

John uses a few different printers depending on each job but he has a good working relationship with one local printer in particular who caters to his environmental needs/requirements. Danielle uses several but has one she uses regularly which offers FSC papers. Karen works with a few, none of which offer any sustainable options. Sophia uses a very popular printer because they are the cheapest in the country. She also states that this printer has no environmentally friendly options, but she has worked with The Print-Factory in the past.

Interpretation of the key points: Even though the interviewees have a higher than average knowledge about environmentally-friendly printing, the lack of vendors that would cater those needs and especially tight clients budgets do not allow for them to practice as they would like to on a regular basis.

3. What is your experience with clients, do they ever ask for environmentally friendly solutions (ie. Recycled Paper, Green Web Hosting)? Did you ever offer such solutions, and if so, how did clients react?

Purpose of the question: Answer research question 3 (Which sustainable solutions are practicable and applicable in Ireland?) and gather insight from experiences with clients. Also partially answer research question 4 (How could sustainable solutions become more appealing for business owners?)

Key points in the answers: John says that it is quite uncommon for clients to ask about environmentally friendly solutions with exception of some artisan food producers. He also mentions that clients aren't aware of such environmentally-friendly printing options. Sophia says that she has had many clients looking for the most environmentally friendly way to produce their product but after considering the cost of achieving it by these means they always opt for the cheaper less sustainable option. She also mentions

how there are not enough specialist printers in Ireland to cater for such green solutions and that using green printers abroad is not sustainable when you factor in transport. Karen says they never ask for such solutions and also adds that as sustainable solutions cost more for the client they are seldom considered. Danielle works closely with a not for profit group who are trying to promote sustainability as a core practice so they are very open to sustainable options one of which is to pull back on printed material.

Interpretation of the key points: Concluding the interviewees' experiences, it is not the norm that clients assess the environmental effects of their design products when consulting a designer. If informed about sustainable solutions, their benefits and costs, clients usually decline these.

4. Do you know of any governmental policies to encourage sustainability in the work place?

Purpose of the question: Answer research question 4 (How could sustainable solutions become more appealing for business owners?)

Key points in the answers: John says he is not aware of any such governmental policies but has not researched the topic. Karen is not aware of any either. Danielle is aware of other environmentally sustainable governmental incentives that are concerned with transport and domestic issues but is unaware of any business practice policies or any conversation going on regarding the topic. Sophia is also just aware of local initiatives concerning transport but is not aware of any governmental policies for sustainable work practice with regard to her freelance work and work for larger companies.

Interpretation of the key points: The interviewees are not aware of any governmental incentives that could help them make their business practice more sustainable.

5. What do you think are the most common obstacles to working sustainably?

Purpose of the question: Answer research question 3 (Which sustainable solutions are practicable and applicable in Ireland?) and research question 4 (How could sustainable solutions become more appealing for business owners?).

Key points in the answers: John explains that the client's budget is the major obstacle in working sustainably but also notes how the lack of specialist printers who offer eco-friendly solutions force designers to print abroad adding to its carbon footprint and making it less sustainable. Karen states the lack of sustainable options in Ireland and cost

are playing a key role in the client's decisions. Sophia also remarks on the issue of cost for clients when practicing sustainable design and how there is a lack of willingness to pay for such options. She also speaks about the absence of conversation or a network as being obstacles in working sustainably.

Interpretation of the key points: According to the interviewees, the main obstacles to working sustainably are client's budgets and the unwillingness to pay more for better solutions, the lack of environmentally-friendly printers in Ireland and the absence of conversation about the topic.

6. Do you think sustainable work practice can make for a worthwhile USP in Ireland, and increase chances on the market?

Purpose of the question: Answer research question 3 (Which sustainable solutions are practicable and applicable in Ireland?) and research question 4 (How could sustainable solutions become more appealing for business owners?).

Key points in the answers: Sophia thinks sustainability is a good USP as there are now many small food and craft businesses that would share the same USP and so be more likely to use designers suited to their market. Karen thinks contrary to Sophia's answer saying that a sustainable USP wouldn't be viable for SMEs and more suitable for larger corporate companies but that their margins could suffer as a result stating that "the Irish consumer will still pick value over best for environment". Thinks people need to be educated first. Danielle thinks it would be a great USP for the whole country saying the world is moving towards cleaner energy and practices and that it would make us a very attractive country for business. John similarly to Karen thinks that it would be a big risk as to reach that level of sustainability in practice would need some level of government funding to be attractive for companies to attempt.

Interpretation of the key points: The interviewees do not agree whether SGD could make for a worthwhile USP. They see opportunities for businesses and the whole sector, but many risks, especially for SMEs. It appears to be a necessity that the government supports sustainable business practice more and encourages SMEs and clients with tax cuts on environmentally-friendly products etc.

7. What could we do to promote sustainable work practice in our sector?

Purpose of the question: Answer research question 4 (How could sustainable solutions become more appealing for business owners?)

Key points in the answers: Danielle thinks educating design students in college about the topic is important and to raise awareness in the same way that other social causes are promoted with posters etc. John thinks encouraging suppliers by means of certain standards being upheld and enforced; that this could lead the way for a more sustainable practice. He also speaks about the need of awareness for designers to think about their impact. Karen has a similar outlook speaking about government subsidies to encourage suppliers to adopt green policies comparing this to architecture and how government building regulations have been adhered to by designers and developers. Sophia thinks having information resources and starting the conversation on sustainability in design with already existing design gatherings is a way to promote awareness.

Interpretation of the key points: The interviewees mention design education and campaigning, governmental regulations and subsidies for suppliers similar to building regulations for architecture, and adaptation from existing design bodies to promote SGD.

CHAPTER 7: RECOMMENDATIONS AND CONCLUSION WITH THE AID OF A SMALL SCALE CASE STUDY ANALYSIS

A design studio, The Green Hat, in Bristol, UK will be examined on the factors that have been suggested in Chapter 4: Sustainability in Design Practice. This particular studio has been chosen, because it meets most of the criteria, a characteristic that could not be found in any Irish design studio in business to the time of this thesis being written. This case study is significant for the entity of this thesis in order to illustrate the possibilities of sustaining environmentally-friendly business practice in the visual communications sector, with the future prospect to adapt such principles in the Irish business environment.

The Green Hat (GH) studio is based in Bristol, UK, which is the home of the initiative Bristol Green Capital (2015), and the Bristol Pound (2015), that aims to support the city's independent business sector. The city has a population of around half a million and was named Britain's most environmentally sustainable city in 2008 (The Telegraph 2008). Bristol is obvious to be a protruding locality for any environmentally oriented business. The Green Hat is partner of Go Green, a brand new scheme supporting businesses, charities and organisations of all shapes and sizes. "It's a unique opportunity to show the world that our region leads the way in sustainable business practice." (Go Green 2015) The studio has 4 staff members and their work ranges from print, identities and branding, web design, exhibitions, signage and infographics. They are committed to design and work sustainably and advertise this to an all-embracing extent. Their ethos, published on their website, states:

Green Hat is a graphic design company that understands how to produce compelling company literature to the highest environmental standards. We think it's time businesses changed the way they work. A desire to mitigate ones effect on the environment should form a core objective. Our purpose is to make that change happen, by informing, educating and instilling the value of sustainability in all our clients.

In order to assess the authenticity of that statement, the studio will be evaluated after the key SGD principles that have been defined in Chapter 4, with the information being retrieved from the GH's Environmental policy statement:

Design Thinking: Unfortunately, the Design Thinking process cannot be assessed as it

would go beyond the scope of this study. It can be assumed that the GH designers keep the finished product in mind before and while designing, since they have assessed the printers they work with very thoroughly.

Business Decisions, Transport and Logistics: GH aim to use local suppliers for all office supplies and support the Bristol Pound. They use an ethical business current account for all banking. The company uses sustainable methods of transport and walk or cycle when commuting to work or attending local meetings. GH has an in-house electric bike to get to meetings and use car-sharing for further distances.

Effective design: GH aim to avoid sizes and formats that would create a lot of paper waste. They teach their knowledge to other designers via workshops and a downloadable guide to greener printing

Paper: They aim to use 100% PCW paper or FSC paper.

Ink: They aim to use vegetable-based inks or water-based printing when possible.

Printing Methods and Materials – GH have a series of “Tick Marks” (See Appendix D) which allow for grading of the sustainability of the paper and the printer involved. Five different “Tick Marks” that are shown on each quote that’s received. The more ticks, the greener the product’s credentials.

Green Hosting and Energy Efficiency: Their policies stipulate to always turn appliances off at the mains and not to leave them on standby mode. They also use low energy light bulbs. The office has a water meter which enables staff to successfully monitor the amount of water used and review this if necessary. GH uses a green energy supplier, Ecotricity, which supplies gas and electricity with the lowest carbon footprint in the country, according to GH’s website; When the company replaces electrical items in the office they aim to replace them with items that have a low energy rating.

In the studio: The studio recycles all items in the office where there are facilities available and encourages the use of recyclable materials for many of their 3D projects; They use 100% PCW recycled or FSC certified paper in the office, with exception of the colour printer, for which such paper is not available for. Bristol Fairtrade Network have awarded Green Hat a Fairtrade Workplace Status, for buying Fairtrade products where possible.

Change Management: GH is committed to corporate social responsibility and donates money and time to their annually chosen charity. Their future plans involve to recycle even more, so their waste is as close to zero as possible and to encourage behavioural

change through design, so they can promote greener living and help in the effort to combat climate change.

Promoting the idea: The website has links to other local sites and ethical events; GH highlight the positive environmental aspects of their work and promotes them to their clients. They created Green Print, a guide to sustainable printing.

Design studios located in the UK have certain advantages over Irish businesses. Resources like *Lovely as a tree* (2014), which delivers a map with environmentally-friendly printers in the UK or initiatives like *Go Green* allow for different opportunities which cannot be found in Ireland to that degree. Therefore the preconditions for an exceedingly green design studio are a lot more supporting in Bristol than they would be in the ROI. However, the successful adaptation of sustainability principles for the *Green Hat* shows that there is a scope for it in Europe. The adaptation in Ireland has tougher circumstances due to the geographical isolation and comparatively low population. But the Bristolians had strong intentions to become a green capital and therefore support from each other and the government, showing that a people's mind shift can make for an ideal breeding ground for sustainable businesses.

The UK Government also offers funding and support schemes for businesses that strive to become greener. There is a National Contact Point to guide and support UK businesses in accessing funding, like the Enterprise Capital Funds who provide early stage risk capital for innovative SMEs with high growth potential in correlation with sustainable development (HM Government 2011). The government wants to use their purchasing power and the wider public sector to support businesses that produce more sustainable products and services (HM Government 2015). Kingston University London and University of Brighton offer MA courses in Sustainable Design (Kingston University London 2015; University of Brighton 2015), which can help for all designers to broaden their horizon in terms of sustainable design. The *Go Green Action Plan* tool helps businesses of any size to create their own action plan, and use it as a checklist to tick off actions they are already working on or have completed, which reminds of the process to achieve an ISO14001 certification. The tool also aims to inspire with other best practices, inform about local organisations that can help and provide resources for upskilling. Users can also demonstrate their progress to other users and the public with the tool (Go Green 2015).

Conclusively, what can be learned from this case is that SGD can work practically, also for in the SME sector, but what seems decisive for the success of this business is the extraordinarily supportive environment. Governmental support is a key point that might be adaptable for the Irish sector. But it goes hand in hand with a community's mindset.

Key findings of the study

- The research shows that sustainability is not a part of the Irish visual communication design/graphic design curriculum. As can be reasoned from the analysis of the survey, where only 2 of the 72 respondents stated that sustainability was spoken about during their college education, it becomes obvious that this is one of the main issues that need to be addressed. Those who work as designers and have knowledge about sustainable solutions are self taught in those regards, or have studied a related profession.
- Irish printers usually have few recycled or FSC certified paper options. They get their supplies from overseas since paper and inks are not being produced in Ireland. Using the Print Factory and Klee Paper would allow for sustainable practice, with exception of the logistic considerations. Demanding sustainable paper and printing options from a local vendor might be the more sustainable option. About a third of survey respondents stated that their printer has a CER statement, which indicates that those designers know their printer's stance.
- The design sector needs and gets support from the Government. The industry sector is comparably small, thus the Government offers funding for design start-ups. The ID 2015 initiative aims to promote the sector, as evaluated in chapter 2.
- The design industry is lacking CPD's, moreover it is lacking of understanding value and purpose of CPD's, according to Kennedy (2015).
- The survey identified that only 12.5% of the designers' companies have a CSR statement, and they include environmental aspects only very briefly, if at all. The majority of designers (61.1%) states to offer sustainable solutions to clients. This demonstrates that designers are willing to make an effort and prefer sustainable options.
- In their studios, some designers clearly make an effort to reduce waste and

energy, but they don't have enough background knowledge to realise further implementations. This means that they for example make an effort to turn off lights when unused (83.3%), but only few studios are supplied with green energy (13.8%). Even lesser (5.5%) work with green web hosts.

- When working with or for clients, the implementation of sustainable principles seems to be even more difficult than in the office. For example, 52.7% use recycled paper for internal use, but only 12.5% consider it for clients work.
- The majority of designers (79.1%) is aware that their decisions have an impact on the environment and see it as relevant (81.8%) that their business saves energy. 79.1% have a personal general interest in environmental issues, and 90.2% feel that SGD practice is at least somewhat important. Designers seem to find it important that environmental aspects are considered and are mostly aware of their responsibilities, but when it comes to implementing sustainable solutions in business practice, a lack of knowledge and clients' awareness seem to be in the way.
- The case study of the Green Hat studio illustrates that SGD is practicable in Europe. It also shows that the surrounding circumstances for a studio can be decisive for the stance of the studio. There is a demand for Sustainable Graphic Design, hence was it easy for the Green Hat to establish themselves. They did not have to justify their stance. The society needs to be educated as much as the clients and the designers and the printers.

Recommendations

Institutions teaching visual communications or graphic design are the hatcheries for the new design-generations. They have to make sure that teaching sustainability practice does not have a reverse effect on the students and is seen as propaganda. Benson and Napier (2012) have made that experience and recommend to remind the students of their own personal values and beliefs and connect them to environmental issues. Students want to do meaningful work, according to the researchers. There is a lot of literature on environmental ethics, but they have to find their way into the classroom.

According to the survey, there is a general interest in sustainability related CPD's for designers and Con Kennedy has pointed out the importance of up-skilling in the visual

communications sector. It is time for graphic designers to realise that up-skilling can enhance their professionalism, for the DDP Skillnet to offer programmes about sustainable business practice, and for the Government to fund and support such offers. The majority of designers (90.2%) finds Sustainable Graphic Design at least somewhat important, 31.9% find it very important. If designers present themselves as confident and educated agents of the sustainability movement, it will be easier for them to convince clients to pay more for sustainable options.

Even small design studios can have a CSR or CER statement, it can be short, but it communicates that the company bears its responsibilities. The research suggests, that there needs to be a discussion around SGD practice. Through networking, designers can learn from each other and help one another. A re-invented network for European graphic designers could be a mix of the Designer's Accord and the Network for Responsible Business. An organisation that offers individuals and businesses the opportunity to connect, get informed and inspired of each other. The research shows that networking and discussing sustainability is an important instrument to encourage sustainable change. There should either be a network of European designers that are interested in sustainable change, or the existing bodies, like the IDI develop strategies to implement sustainability in their organisation. This could be difficult however. It seems to be helpful for environmental organisations to have some sort of accreditation or code of ethics that needs to be signed. Since approximately one in ten of the survey participants are not interested in sustainability, the chances are high that some IDI members would decline to sign an environmental commitment. The author suggests that sustainability should not be forced onto anyone, this could have the reverse effect Benson and Napier described. Instead, a certification system similar to those that exist for other design disciplines could become operative. It could encourage designers to learn about sustainable work practice and work together with other certified designers/printers/merchants. It could raise their level of professionalism and increase clients' respect for a designers value and expertise.

Designers can look out for printers and suppliers that have a EMS certification like ISO 14001. The more they show interest in credentials, the more are printers motivated to achieve them. Designers should approach the SEAI SME Support Centre to avail of help to increase their business's energy efficiency. When buying energy efficient equipment, they can avail of the ACA tax allowance scheme. Design companies can review their work

dynamic to encourage systems thinking . All transport should be kept to a minimum. This includes choosing Irish vendors and products whenever possible and commuting to work by bike or public transport. Sustainable design is effective design, that keeps the impacts of the finished product in mind. Designers should therefore favour paper with a high content of PCW, and can also experiment with special papers for certain projects, while avoiding harmful coatings and varnishes. The relationship between printers and designers is traditionally a difficult one. This is mainly due to a lack of knowledge of the designer about printing processes. It can not be expected that designers have the knowledge of a printer, but they should be respectful and curious and get involved in the process. Designers should become aware of the impacts each and every step of the printing process has. It is also about time that designers learn about energy efficient webdesign and Search Engine Optimisation (SEO). Green web hosting could be an option for the next client and a green energy supplier for the office could be considered as well. A studio can become more sustainable with every purchase, from fairtrade tea bags to recycled toilet paper. The work flow can be altered as well; teams could for example use a digital work tool like Google Docs instead of printing everything. The SGD experts suggest that a change manager monitors these small changes and encourages further steps. The sustainable mindset should be cherished and promoted, for example through certifications or work for charities.

Sustainable solutions could become more appealing for business owners if there was more governmental support and tax reductions. The SGD experts consent that reducing usually equals saving. The same impact can often be achieved with less. This allows more budget to be spent on better materials and production systems. Nonetheless, recycled paper should also be cheaper. Healthy and environmentally-friendly options should be supported through tax reductions. There should be more support for SME's wishing to work more sustainably, and educational incentives should also be supported by the Government. This would ultimately strengthen the design sector, but Irish designers also need to show that they would like to have these options, and use them.

The sustainable way certainly is not always the easiest, but it could be the most rewarding. Because as Benson and Napier have shown, design students want their work to be meaningful and according to their values. Once in business, values fade into the background; and need to be brought back to the fore.

SWOT analysis for the adaptation and implementation of sustainability principles in a design studio that is based in Ireland

The Strength-Weaknesses-Opportunities-Threats (SWOT) analysis is usually used as a strategic management tool. But educators Marilyn Helms and Judy Nixon explored the tool in its present utilisation and came to the conclusion that they are being used as planning tools in research commonly nowadays (2010). A brief SWOT analysis has been created by the author (See Fi. 7.1) in order to demonstrate all different aspects of SGD in practice that this research study emphasised. The strengths and opportunities of SGD practice in Ireland clearly outweigh the threats and weaknesses that were mentioned by the participants. That is because the greatest weakness of the idea is that money and time need to be invested in order to go through a transformation towards sustainable practice. This can be compensated if the societies interest in sustainable products grows and the Government gets involved.

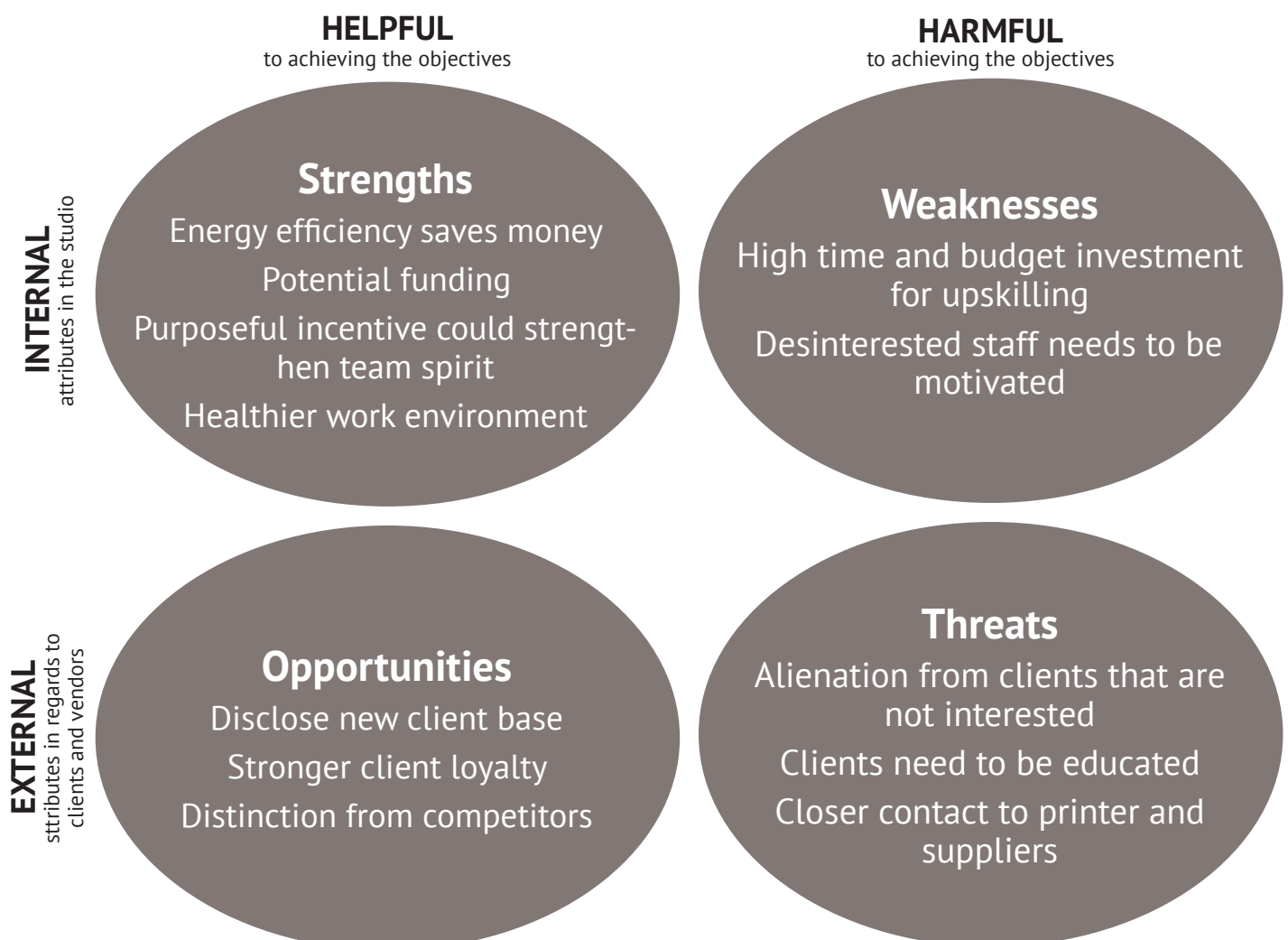


Fig. 7.1 Swot Analysis

APPENDICES

Appendix A: The Designers Accord's guidelines:

1. Publicly declare participation in the Designers Accord.
 2. Initiate a dialogue about environmental and social impact and sustainable alternatives with each and every client. Rework client contracts to favor environmentally and socially responsible design and work processes. Provide strategic and material alternatives for sustainable design.
 3. Undertake a program to educate your teams about sustainability and sustainable design.
 4. Consider your ethical footprint. Understand the impact of your firm, and work to measure, manage, and reduce it on an annual basis.
 5. Advance the understanding of environmental and social issues from a design perspective by actively contributing to the communal knowledge base for sustainable design.
- (Designers Accord 2014)

Appendix B: The 10 FSC Principles

Ten rules for responsible forest management

The ten FSC Principles require the forest owner or manager to do the following:

(Source: Official Website of FSC: <https://ic.fsc.org/the-ten-principles.103.htm>)

Principle 1:

Compliance with laws and FSC Principles – to comply with all laws, regulations, treaties, conventions and agreements, together with all FSC Principles and Criteria.

Principle 2:

Tenure and use rights and responsibilities – to define, document and legally establish long-term tenure and use rights.

Principle 3:

Indigenous peoples' rights – to identify and uphold indigenous peoples' rights of ownership and use of land and resources.

Principle 4:

Community relations and worker's rights – to maintain or enhance forest workers' and local communities' social and economic well-being.

Principle 5:

Benefits from the forest – to maintain or enhance long term economic, social and environmental benefits from the forest.

Principle 6:

Environmental impact – to maintain or restore the ecosystem, its biodiversity, resources and landscapes.

Principle 7:

Management plan – to have a management plan, implemented, monitored and documented.

Principle 8:

Monitoring and assessment – to demonstrate progress towards management objectives.

Principle 9:

Maintenance of high conservation value forests – to maintain or enhance the attributes which define such forests.

Principle 10:

Plantations – to plan and manage plantations in accordance with FSC Principles and Criteria.

Appendix C: From Legislative Obligations to Best Practice Initiatives

(Source: Good for Business, Good for the Community - Ireland's national plan on Corporate Social Responsibility 2014-2016)

From Legislative Obligations.....to Best Practice Initiatives

Key Policy Instruments and Guidance	Sample Best Practice CSR Activities
ENVIRONMENTAL PROTECTION	
<p>Statutory Obligations e.g.:</p> <ul style="list-style-type: none"> > Environmental Liability Directive 2004 > Environmental Impact Assessment Directive 2011 > Waste Water Discharge (Authorisation) Regulations 2007 > Environmental Protection Agency (EPA) Licences/permits > Aarhus Convention Regulations <p>Guidance Tools, e.g.:</p> <ul style="list-style-type: none"> > "Green Business" supports (www.greenbusiness.ie) > Website guidance, e.g. www.epa.ie, www.seai.ie > Producer Responsibility Initiatives > Access to Information on the Environment Guidelines (at www.environ.ie) 	<p>Best Practice, e.g.:</p> <ul style="list-style-type: none"> ✓ Environmental Management Standards ✓ Transparency in reporting ✓ Responsible/sustainable supply chain policies ✓ Environmental awareness training ✓ Green Team initiatives ✓ Resource use management (e.g. company policies on energy, water use, etc.)

CLIMATE CHANGE AND GHG EMISSIONS

<p>Statutory Obligations e.g.:</p> <ul style="list-style-type: none"> > Impending Climate Action and Low Carbon Development Bill > Climate and Energy Package – Emissions Reduction Targets, Renewable Energy Targets, Energy Efficiency targets > EU Directives e.g. Renewable Energy, Emissions Trading Scheme, Energy Efficiency <p>Guidance Documents, e.g.:</p> <ul style="list-style-type: none"> > EU Commission Roadmap for a competitive low carbon economy by 2050 > Green Public Procurement Action Plan > National Climate Adaptation Framework 2012 	<p>Best Practice, e.g.:</p> <ul style="list-style-type: none"> ✓ Transparency in disclosure of emissions data ✓ Employee, Customer and supplier awareness initiatives ✓ Proactive policies on CO₂ reduction ✓ Green Supply chains/logistics policies ✓ Promotion of behavioural change and energy efficiency measures
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RESPECT FOR BIODIVERSITY

<p>Guidance Documents, e.g.:</p> <ul style="list-style-type: none"> > EU Biodiversity Strategy to 2020 > National Biodiversity Plan: Actions for Biodiversity 2011-2016 	<p>Best Practice, e.g.:</p> <ul style="list-style-type: none"> ✓ Risk management policies incorporating respect for biodiversity ✓ Consultation processes with local stakeholders
--	--

RESOURCE EFFICIENCY – WATER, WASTE, ENERGY

<p>Statutory/National Obligations e.g.:</p> <ul style="list-style-type: none"> > EU Energy Efficiency Directive, 2012 > Second National Energy Efficiency Action Plan, 2013 > Bioenergy Action Plan, 2007 > Food Waste Regulations, 2010 > Water Services Act, 2013 <p>Guidance Documents, e.g.:</p> <ul style="list-style-type: none"> > Our Sustainable Future – a Framework for Sustainable Development in Ireland > Green Tenders – Green Public Procurement Action Plan 	<p>Best Practice, e.g.:</p> <ul style="list-style-type: none"> ✓ Use of renewable energy for electricity, heating and transport ✓ Recycling centres and initiatives ✓ Energy efficiency in buildings and transport (e.g. eco-driving) ✓ Resource use management (e.g. policies on energy, water use) ✓ Effective monitoring and reporting mechanisms ✓ Eco Design of Products ✓ Energy Management Standards, e.g. I.S. EN ISO 50001
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Appendix D: Tick Marks by The Green Hat Studio

(Source: <http://www.greenhatdesign.co.uk/about-us/best-practice/>)

How it works. As part of each print quote we rate the potential environmental impact of the job and grade it accordingly using the **TICK MARKS**. There are five grades in all, illustrated here. The more **TICK MARKS** the better.

1

THE PRINTER HAS ISO14001 CERTIFICATION

To achieve ISO 14001 certification a business must first assess its impact on the environment and then commit to reduce it. For example, installing low energy lighting or recycling printing press heat back into the factory as an alternative to central heating. Printers must also manage any waste materials, recycling them or organising specialist processing and disposal. At present very few UK print companies have achieved this international accreditation.

2

THE PAPER HAS A FSC CERTIFICATION OR IS RECYCLED

The Forest Stewardship Council (FSC) promotes the responsible management of the world's forests. For a printed product to achieve FSC accreditation every business in the supply chain, from the plantation owner to the printer, must follow and adhere to the strict FSC guidelines.

Papers can also be sourced which contain 50% to 100% recycled content.

3

THE PRINTED ITEM CAN BE FULLY RECYCLED

No solvent based laminates or metallic inks are used when printing, which means that the paper can still be recycled easily.

4

THE PRINTERS LOCALITY

We aim to use a printer within a radius of 20 miles from you, thereby keeping the emissions low when transporting the finished product.

5

THE PRINTER USES ENERGY FROM RENEWABLE SOURCES

The printer sources their energy from an ethical supplier or produces some, or all, of their own energy.

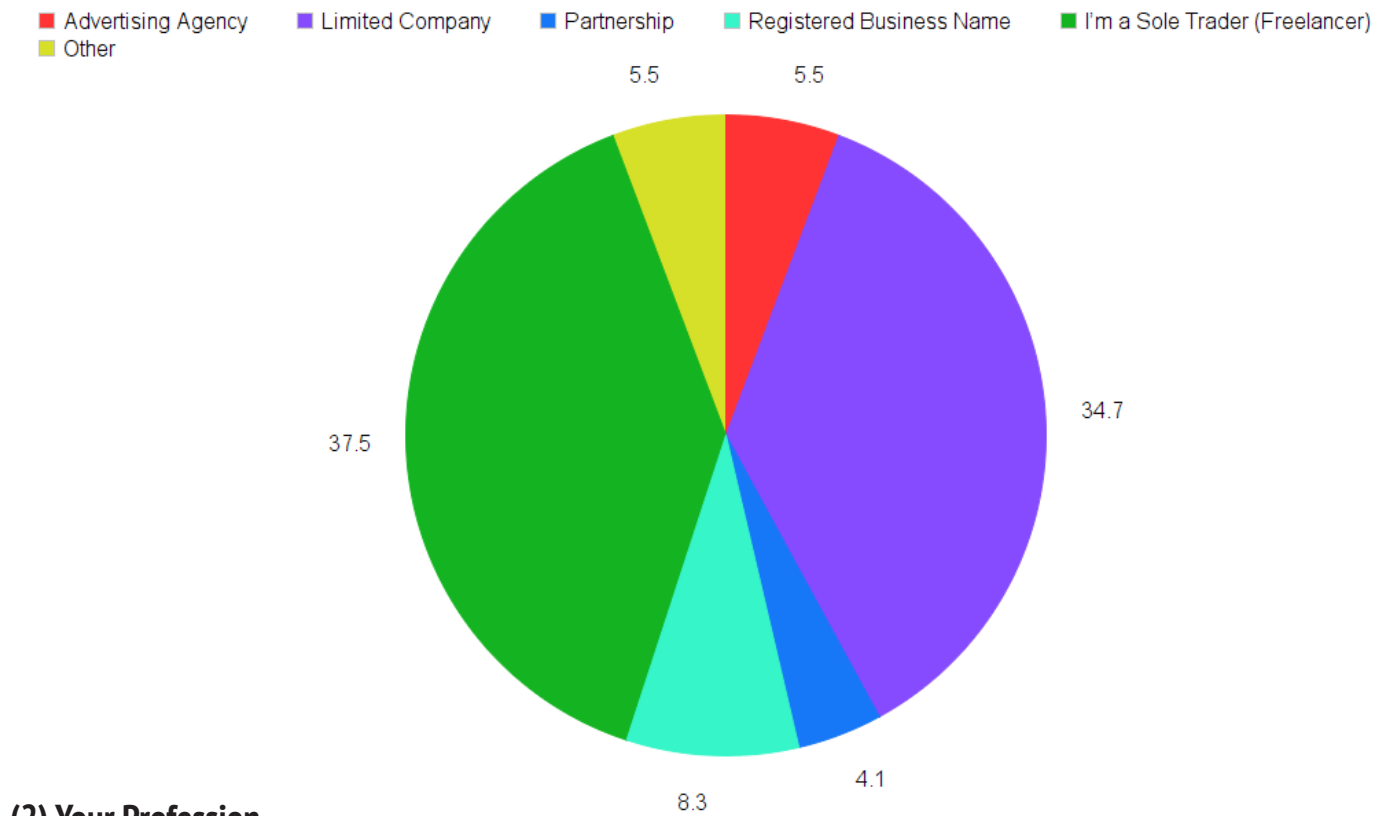
TICK MARKS 1 2 3 4 5

This leaflet has been printed by Apple Colour Limited an ISO 14001 accredited lithographic printer, situated within 20 miles of GreenHAT. The paper used is Cyclus Offset and is 100% recycled and can be recycled again. Finally the printer derives its electricity from renewable sources, giving this piece of print the full five **TICK MARKS**.

Appendix E: Survey

A. General Questions about your Profession/Employment status

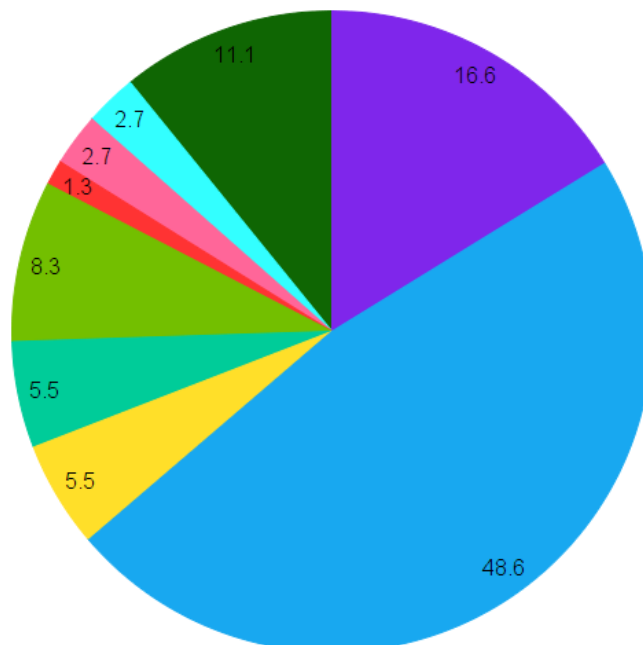
(1) The Business you work for is a...



(2) Your Profession

Please choose or enter all answers that represent your field of work in the business you work for by placing a tick in the appropriate boxes.

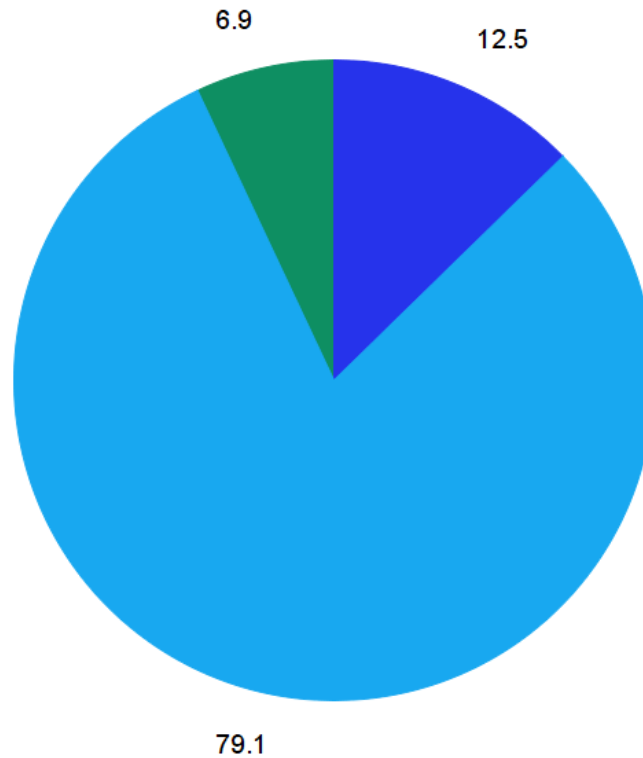
- Creative Director
- Communication or Graphic Designer / Art Director
- Webdesigner
- Communication or Graphic Designer / Art Director, Creative Director, Copywriter, Webdesigner
- Communication or Graphic Designer / Art Director, Webdesigner
- Creative Director, Webdesigner
- Communication or Graphic Designer / Art Director, Creative Director
- Account director
- Other



B. Your company's self-representation

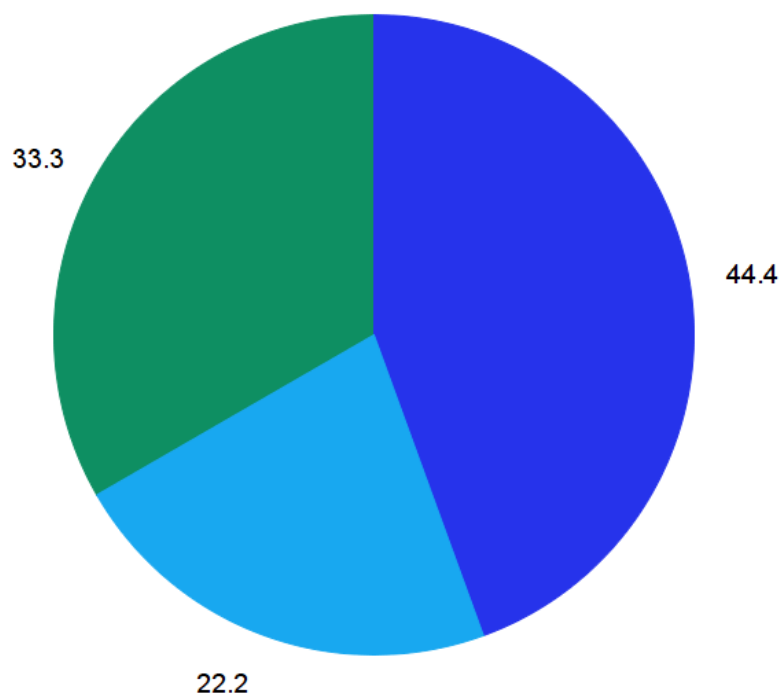
(3) Does your company have a Corporate Social Responsibility (CSR) statement or anything similar to that?

■ Yes ■ No ■ I don't know



(3.1) If yes, does your company's CSR statement include Environmental Considerations? (Out of the 12.5% of yes answers from previous question)

■ Yes ■ No ■ I don't know



(3.1.1) If you answered 'Yes' to the last question, what does it say?

You can copy and paste the appropriate part of your company's CSR/CER statement into the field below. Please include only parts that cover environmental considerations.

Environmental Management Statement

Review

Following a review it was determined that there were no significant environment impact arising from the activities of this office based business. Recycling of used toner cartridges was the most important issue considered. The practice of separating waste into general waste and recyclable waste (paper, cartons & plastic) was generally satisfactory. Equipment for disposal was held on site until specific arrangements were made for recycling or other environmentally safe means of disposal. The situation of the premises in a modern terrace has contributed to the low heating requirements except during periods of extremely cold weather.

Policy

The policy of the company is to minimise the environmental impact of its operations by maximising recycling of waste and used products and ensuring other material is disposed of safely.

Operation

The policy objectives are achieved by:

- a. Use of HP toner cartridges not just for their quality but because of HP's recycling service through the post.
- b. Maximising the recycling of waste paper (including packaging) and plastics.
- c. Minimising the disposal of general waste.
- d. Retention on site of used equipment pending arrangements for safe disposal.

Review

Management keep the operation of this policy under continuing review.

As part of our commitment to a sustainable society we recommend the use of FSA papers for printed material.

Check twice print once.

Sorry don't have it to hand at the moment but basically it covers :

Promotion of cycling to work.

Recycling all paper in the studio.

Using online resource etc such as google docs to reduce paper use.

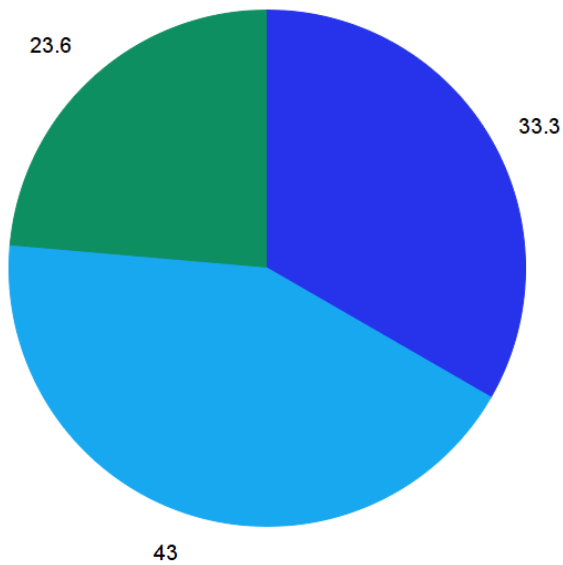
Always printing on recycled paper

C. Your company's actions

(4) Sustainability in Practice

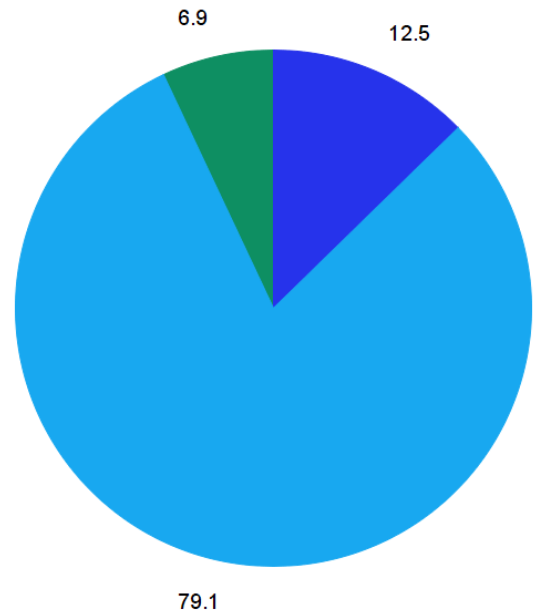
If we use virgin fibre paper, we only use FSC certified paper.

■ Yes ■ No ■ I don't know



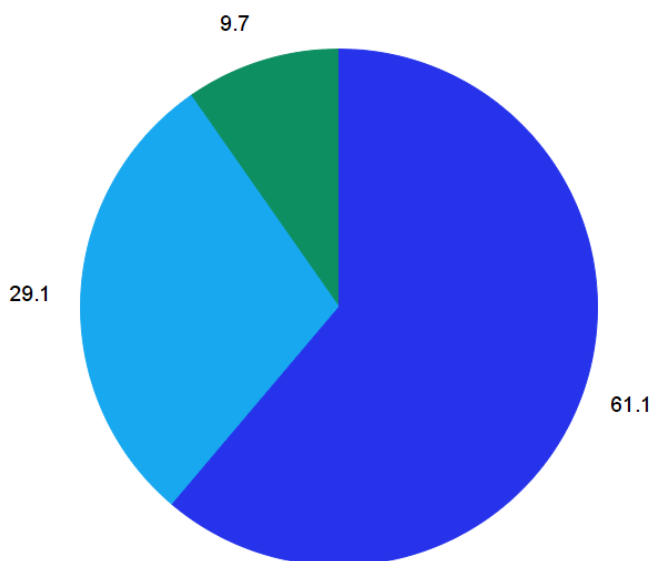
We use tree-free paper or recycled paper whenever possible.

■ Yes ■ No ■ I don't know



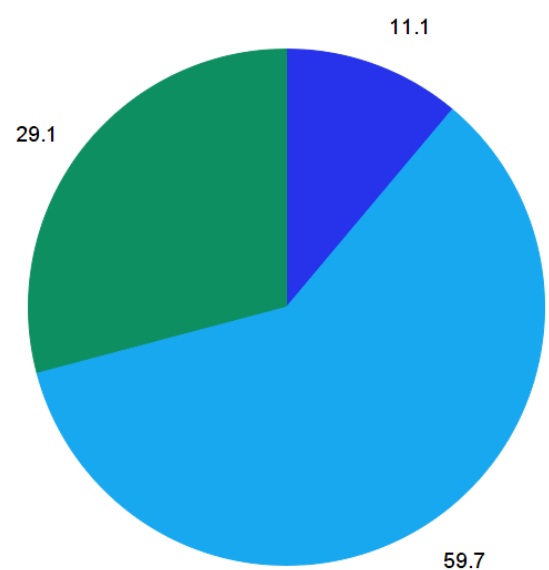
We aim to offer our clients environmentally friendly solutions, even if it costs a little more.

■ Yes ■ No ■ I don't know



We use soy, vegetable or water-based inks for our printing products.

■ Yes ■ No ■ I don't know

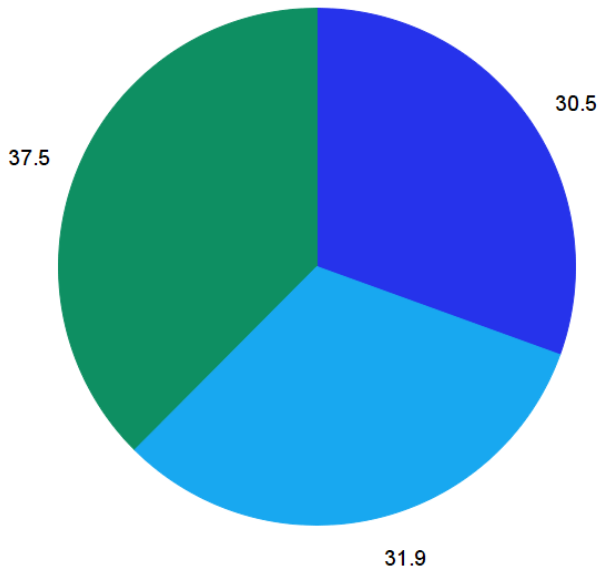


C. Your company's actions

(4) Sustainability in Practice

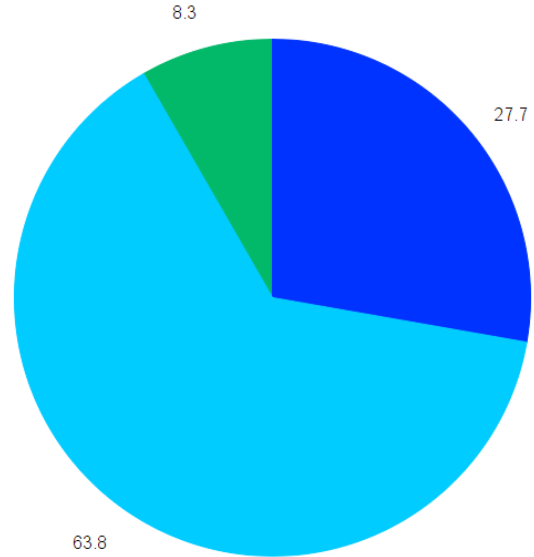
Our printer has a company environmental statement. (CER statement)

■ Yes ■ No ■ I don't know



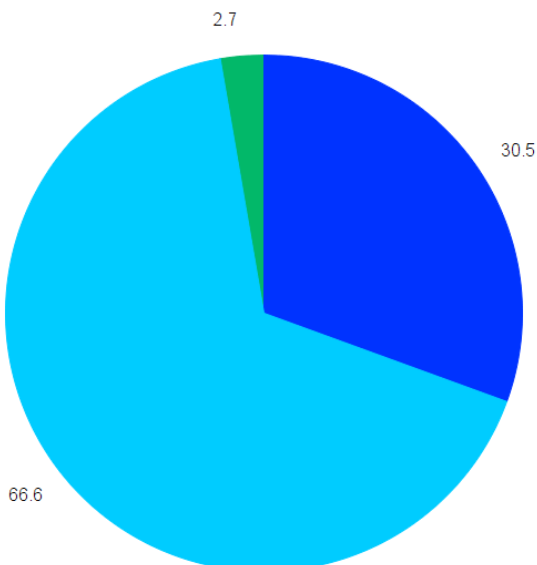
We avoid harmful finishings, such as metallic ink or varnishes, whenever possible.

■ Yes ■ No ■ I don't know



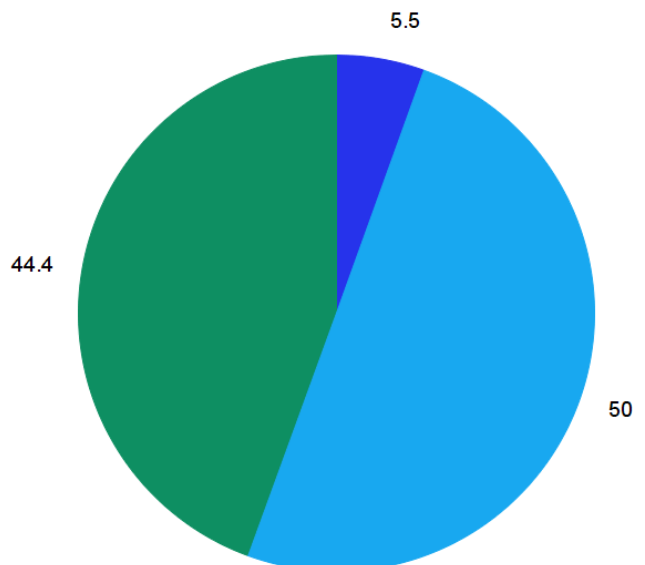
We reduce paper waste and minimise ink coverage on printing products through smaller and lighter designs.

■ Yes ■ No ■ I don't know



We work with web hosts that power their facilities with renewable energy.

■ Yes ■ No ■ I don't know

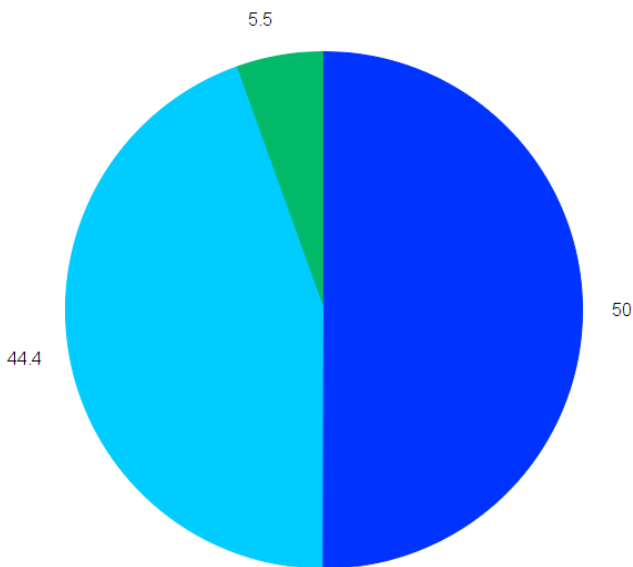


C. Your company's actions

(4) Sustainability in Practice

We avoid long transport distances through choosing local vendors.

■ Yes ■ No ■ I don't know

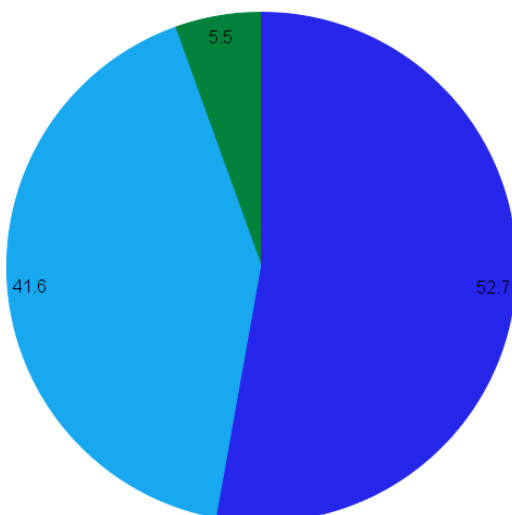


D. Your company's internal work environment

(5) Sustainability in the studio

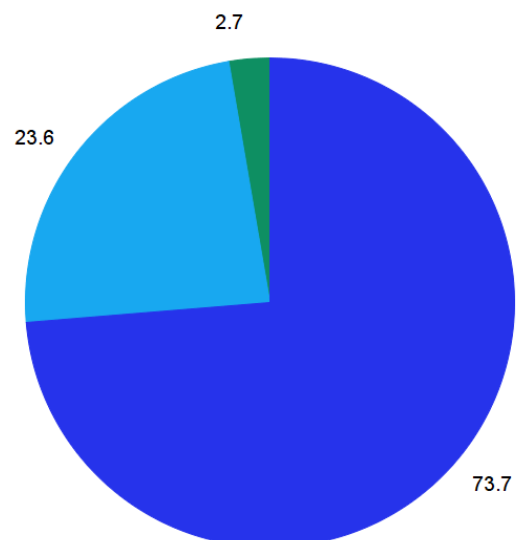
We use recycled Paper for internal use.

■ Yes ■ No ■ I don't know



We aim to reduce paper waste (e.g. By using scrap paper for notes and sketches)

■ Yes ■ No ■ I don't know

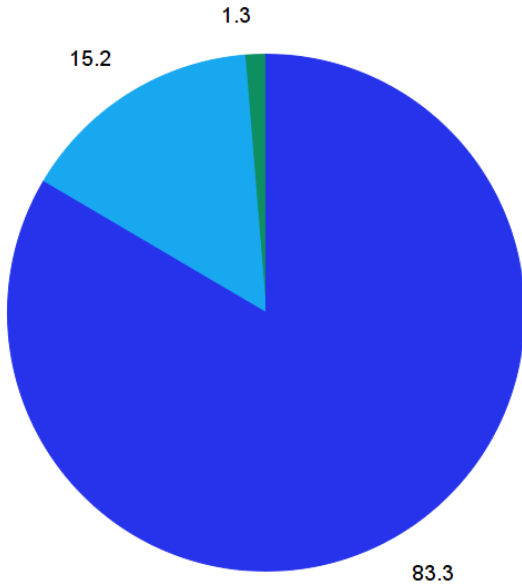


D. Your company's internal work environment

(5) Sustainability in the studio

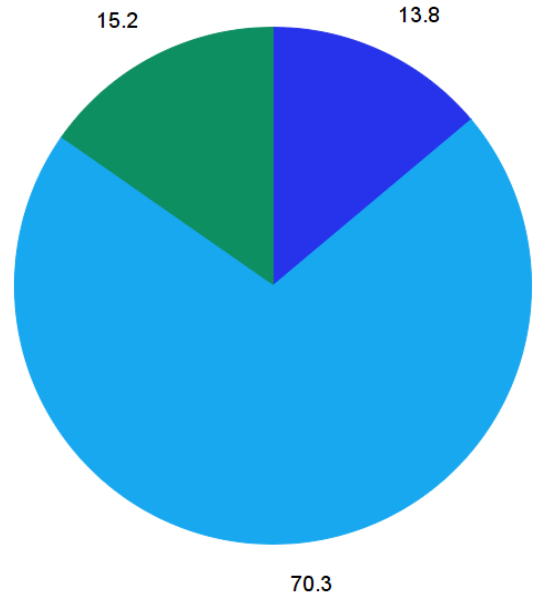
We aim to conserve electricity wherever possible (e.g. switching off lights when unnecessary).

■ Yes ■ No ■ I don't know



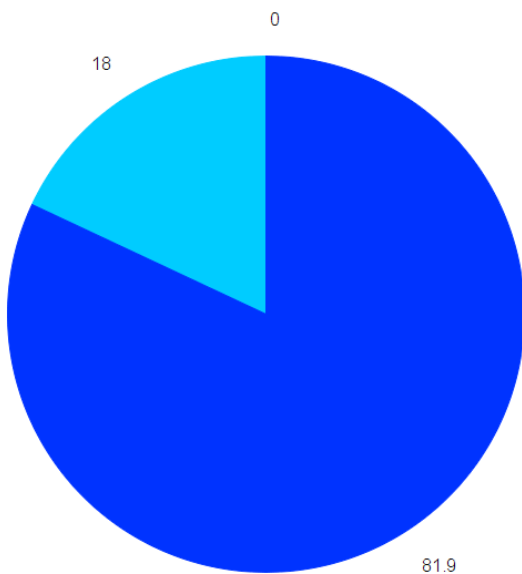
We use Green Energy (from renewable sources) in the office.

■ Yes ■ No ■ I don't know



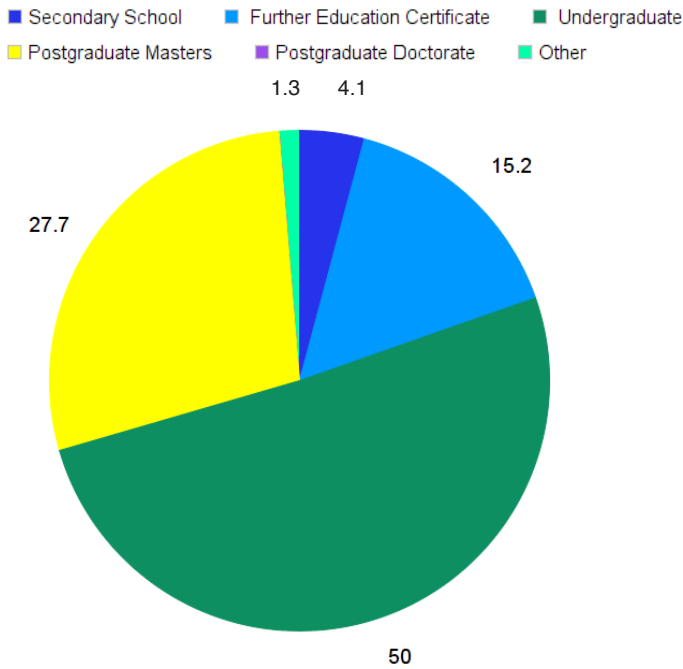
We recycle waste and try to keep it at a minimum (e.g. No paper/plastic cups, Tap water instead of bottled,...).

■ Yes ■ No ■ I don't know

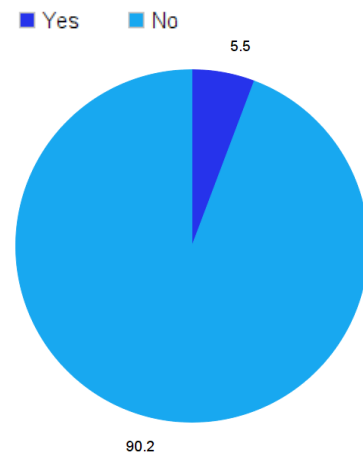


E. Your Former Education

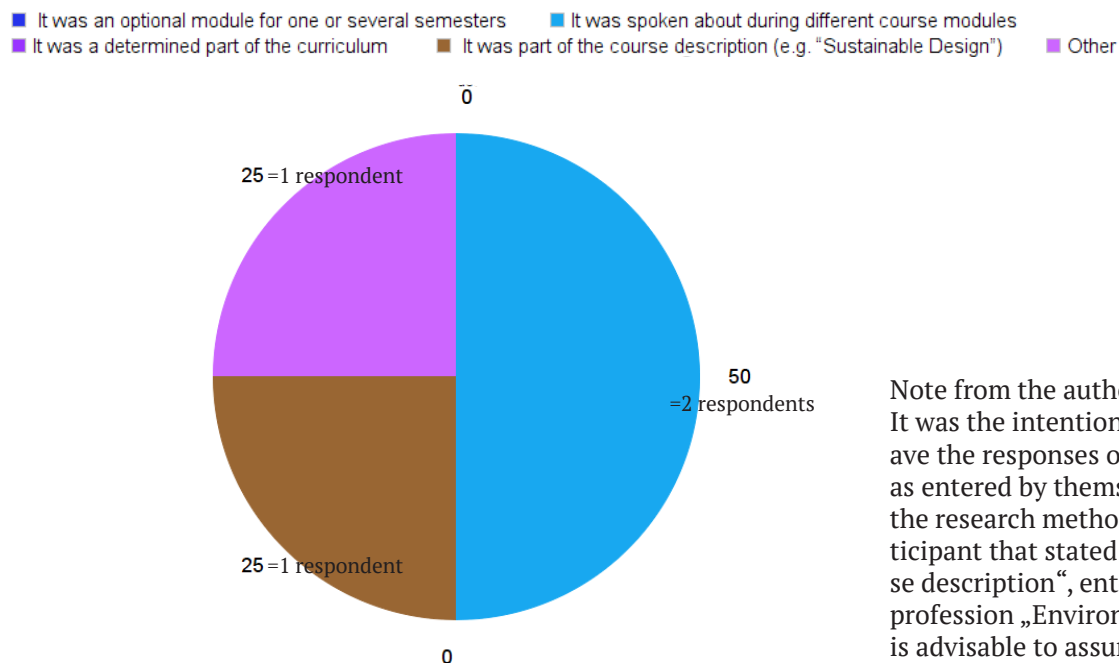
(6) What is the highest level of education you have completed?



(6.1) Was Environmental Sustainability to any extent part of your Third-level-education? (Only answered by those who attended Third-level-education)



(6.1.1) If yes, to what extent?



Note from the author:

It was the intention of the researcher to leave the responses of all survey participants as entered by themselves, as mentioned in the research methodology chapter. The participant that stated „It was part of the course description“, entered in the field for their profession „Environmental consultant“, it is advisable to assume that the course he attended was not a design course.

E. Your Former Education

(7) Do you have a general interest in environmental topics?

■ Yes ■ No

If yes, do any specific topics come to mind?

Wasting resources

all topics

Global warming, recycling

Energy

What you have highlighted here in this survey. I will make a conscious decision to check out what printers can offer

anything to help the environment but not seriously impact the studio

Nothing in particular, I just try to be environmentally responsible at home, recycling everything I can and not wasting needlessly

I don't believe humanity can continue to waste our resources and pollute the planet at it's current rate, in my own opinion it's unsustainable.

Paper

minimising waste

Building

Global warming, destruction of natural environments

Aquaculture

Energy saving

energy, pollution, recycling

energy

Transnational responses to climate

change

Sustainability

local food production,

self sufficiency, organic

agriculture, fair-trade

produce and much more.

Sustainability,

waste reduction,

recycling, Low carbon

energy generation,

green design/building

electric car, solar power, recycling

waste

sustainable built environments

global warming

global warming

Activism through greenpeace. I try to reduce, reuse & recycle as much as possible (in that order). Through

woodworking I do a fair bit of up-cycling. I cycle to work rather than

using the car both for saving money, health and the environment.

Solar power, recycling, up cycling,

water cinservation

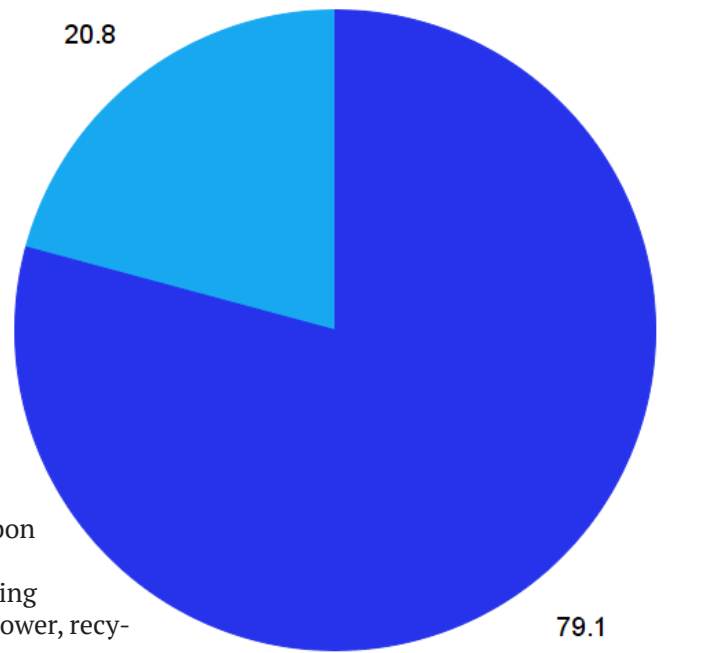
energy, recycling, polution

Air Polution

renewable energy

Paper usage

I have a general ethos of avoiding



waste -

using uncoated papers etc and try

to communicate that to my clients

where possible. I have only placed

FSc logos for corporate clients. I

work mostly with arts clients and

aesthetic concerns tend to echo

environmental concerns - a formal

policy for instance from the arts

council could also be limiting - but

guidelines could be interesting.

recycle household/business

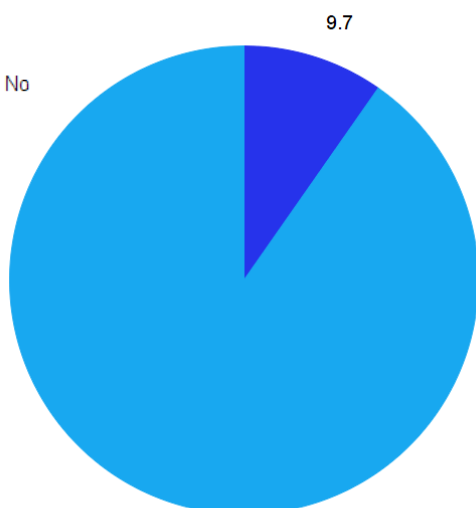
Water Pollution, Wildlife Conservati-

on, Food safety

Polar Ice Caps, forestry, mining

(8) Have you attended any conferences or events where environmental aspects were addressed?

■ Yes ■ No



If so, please name them in the field below:

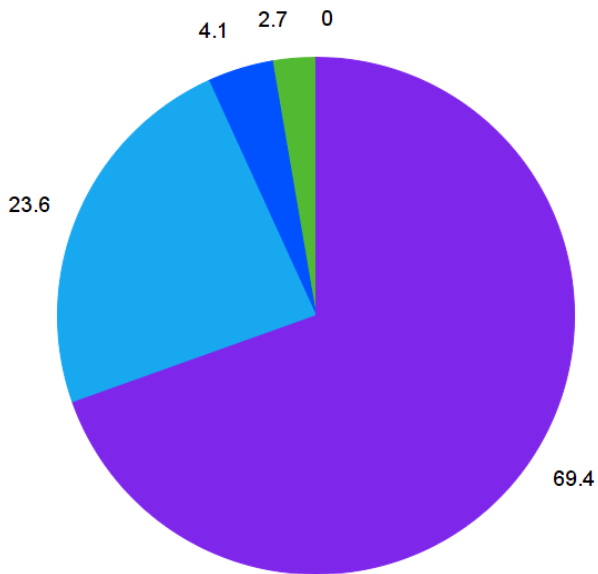
- Energy Ireland, engineers Ireland events, eolas magazine events,
- One of my clients is the Southern Region Waste Management Office, I design their newsletters and I find their content interesting
- A number of different music festivals where environmentalism was used as a marketing tool to promote the event, Glastonbury, Electric Picnic, Body and Soul as well as a few smaller scale hippy festivals.
- Dublin Chamber of Commerce events
- Ecotopia gatherings, Gateways of the mind, Future proof events and events at cultivate in dublin.
- Ecobuild (London), Green Awards 2015 & 2013 (Dublin)
- Cultivate/ CloghJordan

F. Your own work/Your decisions

(9) Yourself

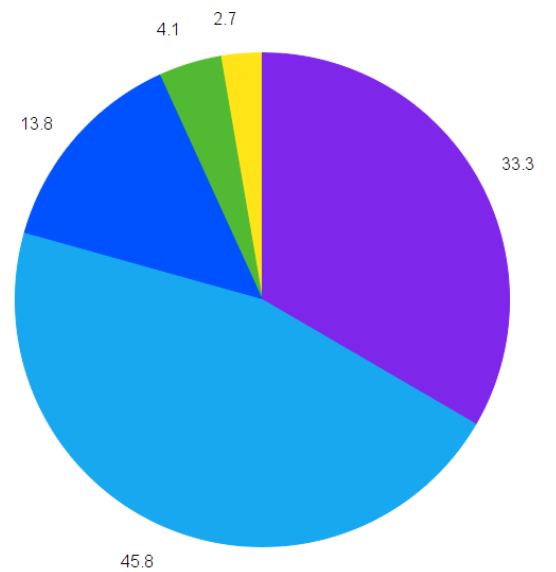
I see myself in a decision making position in the company.

Strongly Agree Agree undecided Disagree Strongly Disagree



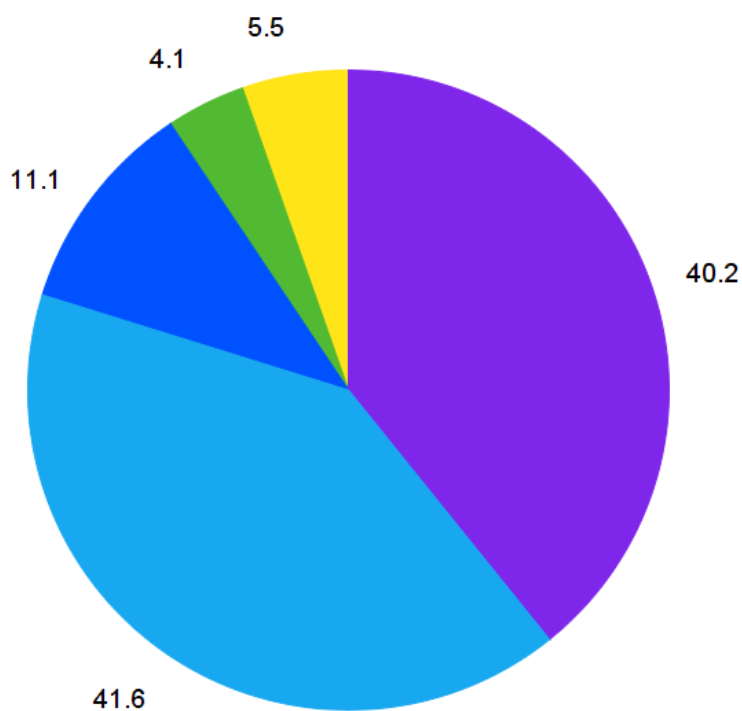
My work or the decisions I make have an impact on the environment.

Strongly Agree Agree undecided Disagree Strongly Disagree



It is relevant for my companies business to save natural resources.

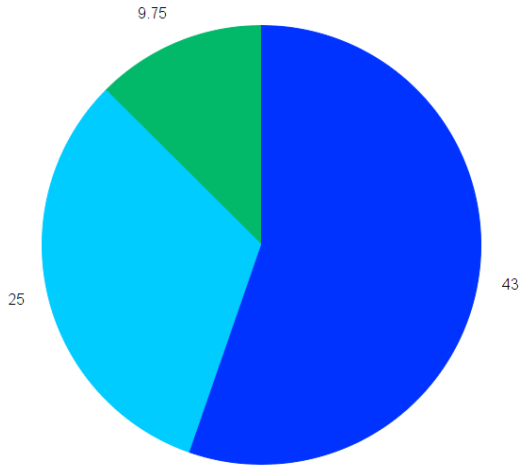
Strongly Agree Agree undecided Disagree Strongly Disagree



F. Your own work/Your decisions

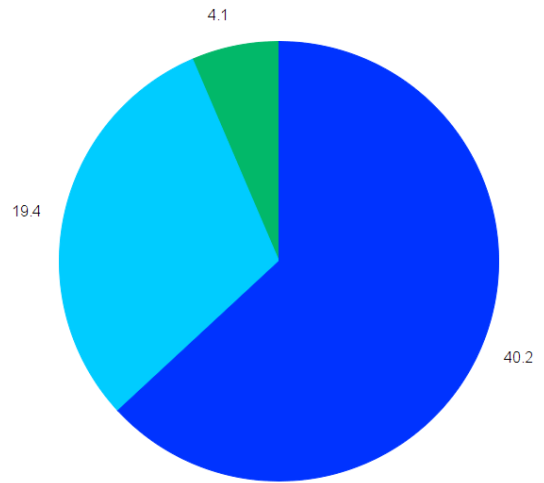
(10.a) For employers: Would you consider Continuing Professional Development (CPD) about Environmental Sustainability for your employees?

■ Yes ■ No ■ Other



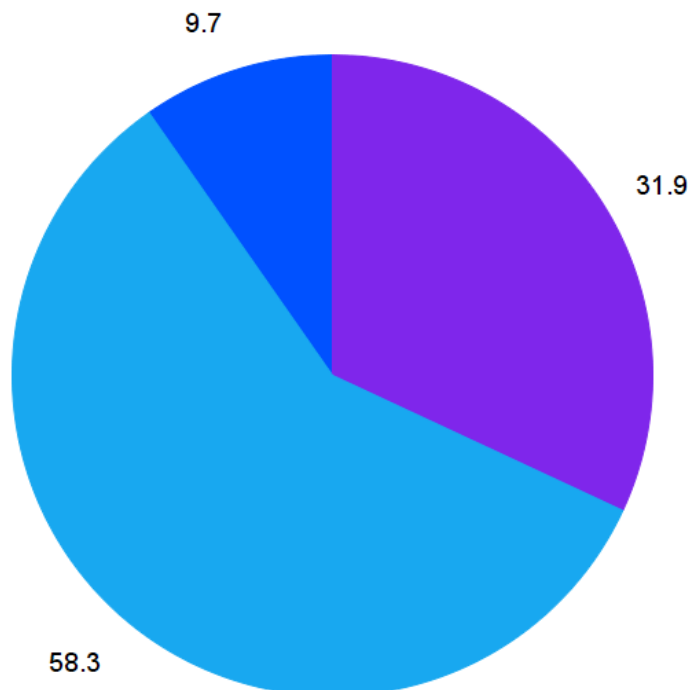
(10.b) For employees: Would you be interested in Continuing Professional Development (CPD) about Environmental Sustainability in Visual Communications/your area of work?

■ Yes ■ No ■ Other



(11) On a personal level, how important is practicing sustainable design to you?

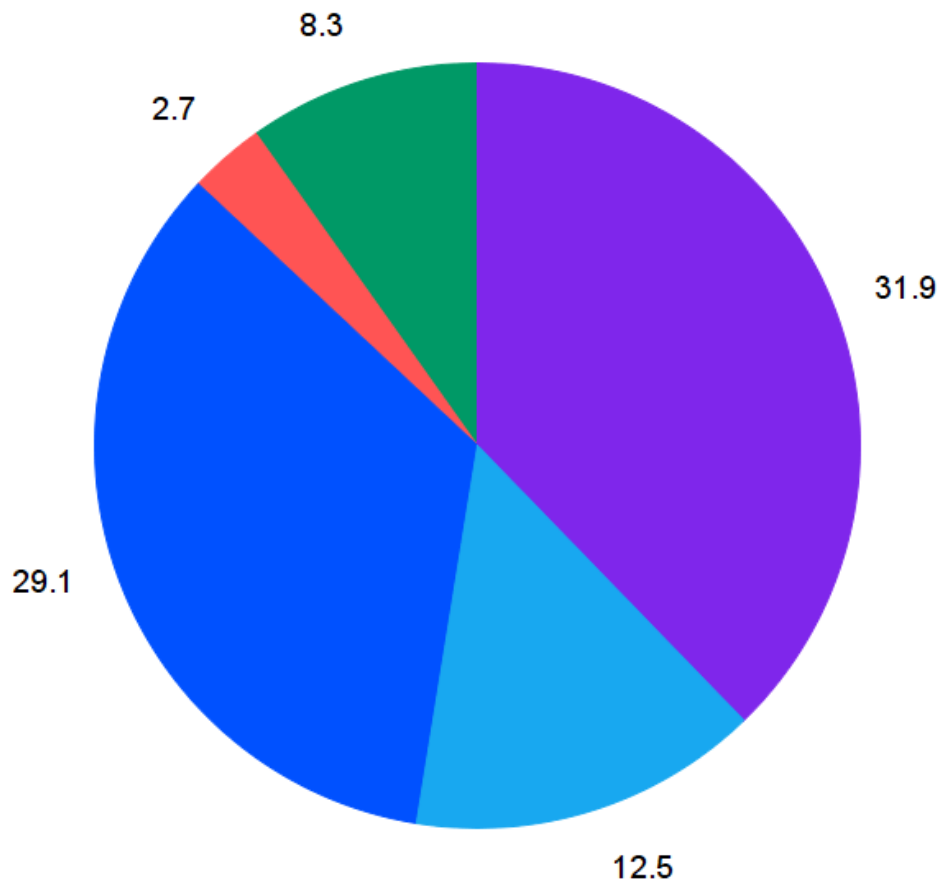
■ Very important ■ Somewhat important ■ Not important at all



F. Your own work/Your decisions

(12) Please select the reasons for not implementing sustainable solutions in your design projects

- I don't have enough knowledge about sustainable business practice
- I was not / am not aware that there is anything I could do or why I should do something
- I am not interested in sustainability.
- I am afraid it would cost more for my client or my company.
- Other



Other - responses:

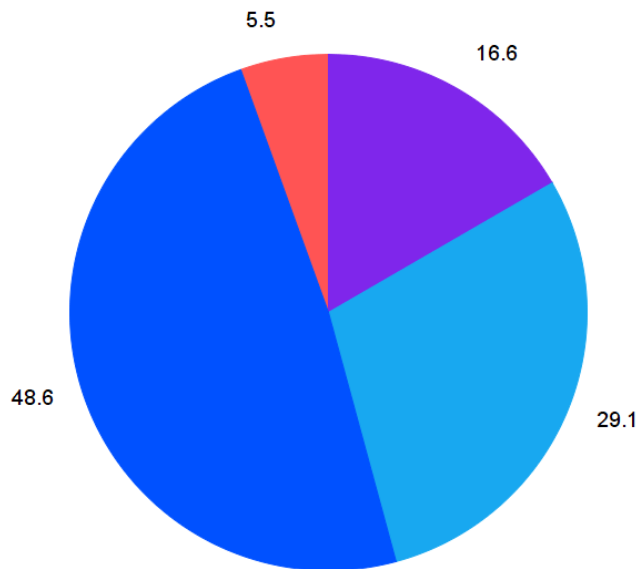
- I am passionate about this area
- Most of my work is screen based so aside from trying to reduce my energy use it's difficult for me to make a positive impact. I think it's a bigger industry issue for screen based work such as the computer manufacturers etc.
- I put client needs first
- facilitation not always in place
- Although we offer sustainable solutions clients often do not have the budgets to go down those routes
- Mostly outside our control with big clients
- clients choose to cut costs
- recycle yes, but additional investments is pointless
- We exist to serve our clients, it's unfortunate but it's reality.
- Mainly BS, MOST PAPER ETC IS AL READY RECUCLED, MOST SO CALL FRIENDLY PAPERS USE EXTREME AMOUNTS OF BLEACH, SUSTAIN-ABILIYT IN DESIGN MEANS SOMETHING COMPLETELY DIFFERENT THAN WHAT THIS SURVAY SUGGESTS
- Client budgets for the costs
- scale of jobs and budgets rarely makes it a real issue.
- n/a

F. Your own work/Your decisions

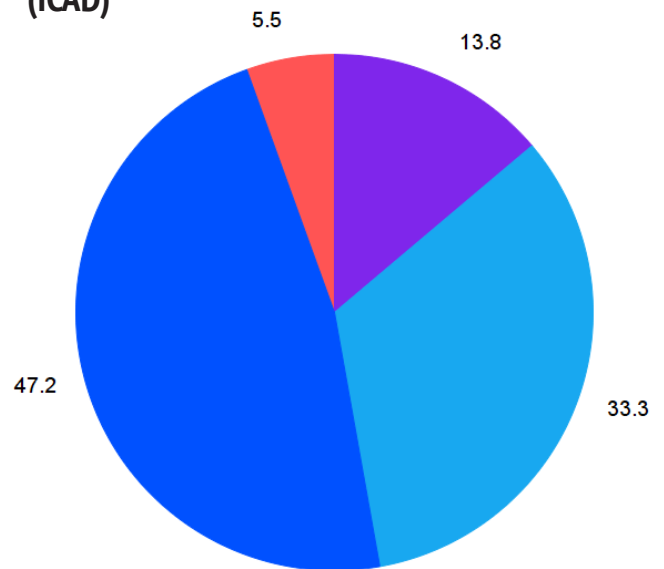
(13) Please indicate your familiarity with each of the following Irish Design Associations:

- I'm a member
- No member, but involved through newsletters, events etc
- No connection with the association
- Never heard of them

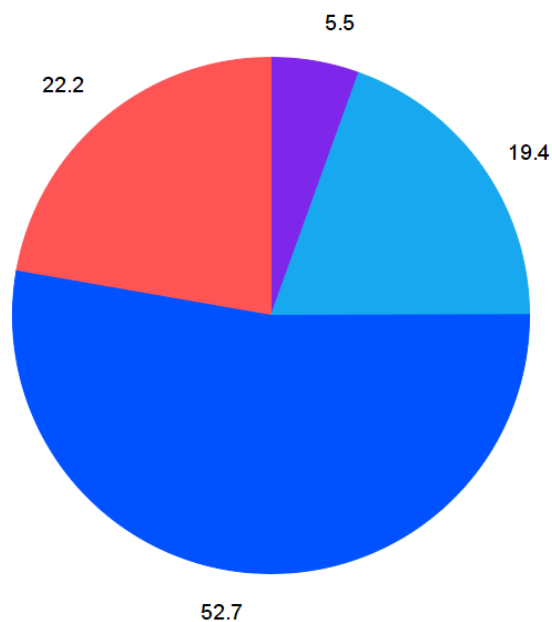
Institute of Designers Ireland (IDI)



Institute of Creative Advertising and Design (ICAD)



Graphic Design Business Association (GDBA)

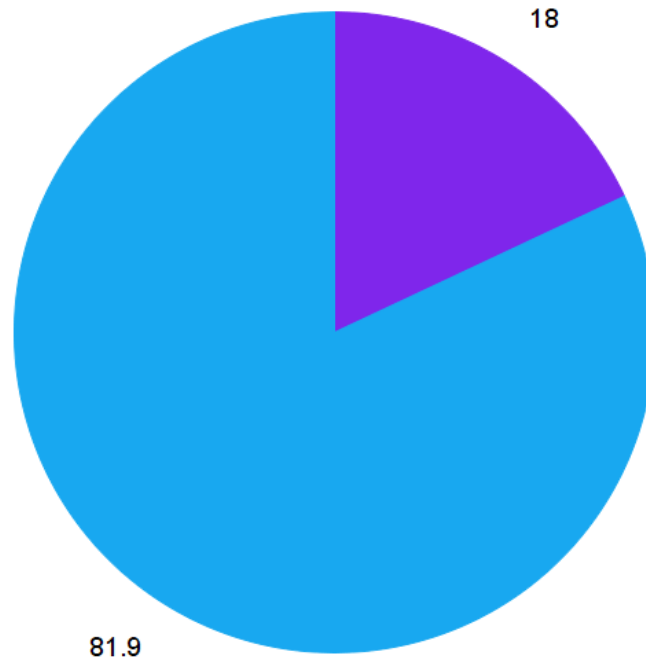


Please state other Design Associations you are involved with, if any:

G. Sustainability Communication

(14) Does your company engage in campaigns/projects that serve the protection of the environment?

■ Yes ■ No



If yes, please name some of the projects:

Dublin Cycling Campaign, Ashoka, Change Nation, Change X, Southern Waste Region Waste Management Office Newsletter & design of Regional waste Management booklet for Retailers, Repak

Appendix F

Interview with Danielle Townsend, August 25th, 2015, 12:00 pm

LISA: Would you be ok with me recording this interview?

DANIELLE: Yea, that's ok.

LISA: I'm just going to give you a brief introduction with the formalities if that's ok. You can refuse to answer any questions you do not want to answer. I will give you the transcription of this interview and you can review it and let me know if you would like to change things you said or leave them out. You can also tell me things "off the record", if you like. And I will not publish any of this conversation without your consent obviously, but if you give me your permission, I will add the transcription as an appendix to my thesis.

DANIELLE: Okay.

LISA: Do you still have in mind what I'm doing or would you like me to explain it again?

DANIELLE: If you like, that would be great actually.

LISA: Great, okay. I am researching sustainable business practice in Ireland, because I heard about this movement. - I studied graphic design in Germany actually, but came here for good, so I was interested in how far this movement is evolved here. So I heard about this Sustainable Graphic Design here, but most of what I researched was happening in the States, and most books I found are coming from the States. So I wanted to examine how sustainably Irish graphic designers work. Some of the questions I'm going to ask you now I might be similar to what I have asked you in the survey already. But since you have shown interest in Sustainable Design practice, I would like to hear your extended answer and comments to it. So feel free to say your opinion, that's really what this interview is about.

The first question would be:

What do you think how far your responsibility goes in terms of environmental protection?

DANIELLE: I think, it's a tough one especially when you're in business it's at the forefront of your clients mind and you're trying to educate them about design to the most part and in environmental and sustainable issues after that sometimes and after that it's often secondary to the whole thing because I think in Ireland there's an underdeveloped awareness in some sectors in the SME sector in particular about design as a practice and its value. Then to try and put on top of that then inherent value of ethics and sustainable design practices and you know all those additional things. Sometimes it becomes a barrier for clients and they don't want to engage with that sort of things quite so much which is unfortunate. I think its about client education as much as anything else and I think the clients have within their own company or organisation some sort of responsibility in terms of setting goals for sustainability or carbon footprint. Their more likely to want you to spend time talking and discussing that with them; but if its not part of their strategic goals to be maybe seen as green or you know a carbon neutral company or whatever it might be, sometimes it just falls on deaf ears. So I think it comes back to the client having the awareness or educating the client about what can be done within the graphic design output because sometimes they have an awful lot of design work being produced on an on-going basis and maybe they just don't consider it as having any environmental impact really.

LISA: So do you think you as a designer would have a special responsibility though?

DANIELLE: I think so. I mean I think you have to fight. Like I think the day that designers linked in with printers is well gone now and you might have a printer that you use all the time and you've got a special price and all this kind of stuff and you might have to be linked in with them in some way

and I think now it's the responsibility of the designer to advise the client whether or not some things should go to print all the time, because there's an awful lot of stuff that doesn't need to be printed. You know in the boom, in the Celtic Tiger years every company had a very elaborate annual report printed and really it's a PDF now and nothing has changed other than budgets and fair enough the budget constraints have helped a lot in that respect. Some things that aren't necessarily needed to be printed don't get printed but while most designers want to see their work in print; (which I do, I must admit I'm one of them) I think it's unfair to say 'let's just print everything' you know if it really has no inherent value to see a printed copy or a submitted copy and you need to actually ask the client the question and ask themselves do they need this to become what will potentially be more landfill or hopefully recycled product you know?

LISA: How long have you actually been working as a freelance designer?

DANIELLE: I have my studio set up for over 5 years now but I've been working as a designer since 2002, so quite a few years.

LISA: So before that you were working for an agency or?

DANIELLE: Yes, I worked with two different companies previous to that. I was working as a studio manager and senior designer and then I decided to go out and take a bit more control and do it on my own. So for the last 5 years that's what I've been doing.

LISA: So did those companies have any interest in sustainable solutions already or did that interest come from yourself then?

DANIELLE: No, interestingly enough one of the companies had a large format side for business like large format in-house printing and quite a lot of it was for trade shows because it was around the time of the boom when the RDS had a trade show every weekend almost and those awful banner ups, you know those roller banner things which are printed on vinyl; they produced tonnes and tonnes and tonnes of them and a lot of the time they were just for single events and there was no reuse of them and in fact trying to get rid of that vinyl and those outdoor vinyl graphics it's actually impossible, it just doesn't recycle at all. I did see at one point an initiative actually it was in New Zealand, it was to conquer this problem where craft workers were actually taking those vinyl's and turning them into up cycled products like handbags and tote bags and things like that because it was all just going into landfill because the inks that they used were permanent inks that would resist sunlight and not fade. And there was no way that these things were going to be reused really so at least there was some kind of attempt to reuse them. But there was no real evidence or no real incentive I suppose to recycle those types of materials it was just quicker and cheaper to print more so, as far as I remember, the companies I worked for didn't really have a policy on recycling. I'm sure they do now.

LISA: What printer do you usually work with?

DANIELLE: There would be several. One of the main ones I would work with would be Hackett's down on Baggot street. They do lots of different types of things. So they're very good. I know that they do use the FSC and the forestry steward's papers but I don't know what their policy is on recyclables and things like that now.

LISA: So would you know a bit more about what environmentally friendly options they offer? So say if you wanted to do a project now with vegetable based inks or something, something really less harmful, would you go to them or would you go to someone else?

DANIELLE: No, actually I did a project over Christmas – it was a Christmas card project actually and it was for Child Line, we made Christmas cards and donated all funds to Child Line and we actually went and got everything printed using soy based inks – now the unfortunate thing is that we had to go to UK as we couldn't get it done in Ireland. So it was just soya based inks that are environmentally sound and recycled paper and all that kind of stuff. So I did complete that project but we couldn't find anyone in Ireland to print the project for us, perhaps maybe up in Northern Ireland but we certainly couldn't at the time find anyone apart from over in London to print the work for us and we had to get

it shipped over and then we sold the cards. So that was one particular project that was completely sustainable I think.

LISA: And what's your experience in your freelance business; do your clients ever ask for environmentally friendly solutions?

DANIELLE: Yes actually, I work very closely with the Irish Green Building Council and they are trying to promote a better built environment for Ireland basically. But everything that we produce - (how to communicate their message etc) has lead us to put a digital message together and we have definitely pulled back on printed material. This was in consultation with that particular client and their very open to it which makes it very easy. We have pulled back on anything that gets printed and we really question if we should print anything because they're trying to promote sustainability as a core practice and it's a core value of their organisation, and they're not for profit. So we really do have those conversations and actually its funny they're having a trade show coming up soon and we're trying to find a way to make something that's eye-catching that we can reuse and it's not going to be a single use item. So it's timely that I'm talking to you about it actually.

LISA: Do you know of any government policies to encourage sustainability in the work place?

DANIELLE: I'm not sure about government policies. I know they're trying to start to rate homes based on how accessible they are in terms of how far you can walk in to the city centre or walk to your local school and not use cars or if you have an electric charging point near your neighbourhood. But in terms of business practice, not necessarily, I don't see that there's any massive campaign or strategy or conversation that's happening out there as such really, no.

LISA: What do you think are the most common obstacles for designers to work sustainably?

DANIELLE: Cost. if there's an additional cost like maybe papers or things like that or reduced quality can sometimes be an issue too. When you talk about those soya based inks they don't have the permanency that perhaps the rest of the other inks might have so you know there's a kind of tradeoff. I suppose you want it to look a particular way but you also want it to be environmentally sound. So I think that can sometimes be a barrier that you don't want print to look less vibrant perhaps but cost for sure is something to consider. I think again if a client understands their own message in terms of their company and how they're communicating and they have it as part of their core strategy then it's an easier buy-in but if they don't care and some just don't care; it can be quite difficult to get them to pay that extra for particular papers or particular stocks or maybe particular practices that would encourage less use of wasteful materials.

LISA: Do you have the feeling then that many designers would actually try to work sustainably?

DANIELLE: I honestly don't think so. I don't think it's something that a lot of designers would really kind of – and again if they were working with a company or client that had sustainability as a core part of their message they would run with it and absolutely I think they would make sure that everything was compliant but when a client doesn't have that – maybe they're not working in that space, I don't know if it would be many designers priority– I wouldn't want to paint everybody with the same brush; but I don't think many designers would consider it too strongly in terms of maybe a conversation point with the clients per se. But I could be wrong on that.

LISA: Do you think sustainable work practice can make for a worthwhile USP in Ireland, and increase your chances on the market?

DANIELLE: I think so, like the carbon footprint thing, that idea is years old now, lowering the carbon footprint and now the US have put in place measures and by whatever date companies need to have reduced emissions. I think if Ireland became a clean country that was able to produce an industry that was cleaner than somewhere else - I think it's definitely the way things are going - we're going to have cleaner energy sources & supply. I think if Ireland was able to promote itself on that basis as well as all the other amazing things that we can do creatively and with the people and workforce that we have available to us I think that yes for sure it would be a USP for the entire country. Absolutely, yes!

LISA: And for your own business though. Do you think it helps for you to promote that you work sustainably or you try to?

DANIELLE: Well I think for myself, because I have a couple of clients actually that I work with that are in that space – by working with those clients it has made me very much aware of what I am offering and it's kind of a symbiotic relationship almost. One particular project that I worked on was for the Electric Picnic last year– the brief was to try and create a space that was basically didn't cost very much, had a low budget but mainly that we didn't actually make things that were going into landfill. So everything was actually reclaimed from landfill and was up-cycled to make this space and we ended up contacting a lot of companies and getting end of life bits of products and creating this entire little space based on things that were literally going to be thrown out and just to be able to do that and do something like that for a festival where you know 'Joe Public' is there to see what's possible is great -This is fun and seeing them respond to the fact that all of this stuff is going to be in the rubbish bin and look what we've done with it.

I mainly think about saying when I'm talking to other clients ,lets give you more ideas of what you could potentially do with what's available to you as opposed to making more rubbish'. So I think its if you have the clients, you have the conversation and once you have that client and have that conversation you're probably more willing to bring it into the next conversation with a client not currently in the sustainable space. So I think for sure I feel lucky that I have a couple of those types of clients that I work with on a regular basis.

LISA: What could we do to promote sustainable work practice in our sector?

DANIELLE: I think possibly it would be interesting to bring it back into colleges and maybe into the final year just to make you a little bit more aware. I mean designers are socially aware anyway, they're enquiring creatures, they know what's going on around them usually – they're interested to find out more and I think the environmental side of things could be brought in there too. We often times make posters in support of social causes and maybe we should be looking at environmental causes too a bit more so perhaps maybe a little bit of a stronger emphasis at a college level. Or I know for example, students particularly respond well to competitions. So maybe more competitions in terms of sustainable design practices and show what's out there, see what other people are doing. I know this year IDI have listed a sustainable award – with SEAI I think, - and listed a sustainable award for the first time ever. But its kind of strange that it is the first time that they're listed that kind of award. So maybe those types of things and giving credit to the companies that are doing it well might be something that could work more strongly.

LISA:That's it with my questions actually. Is there anything you would like to add?

DANIELLE: No, I don't think so.

LISA: One last question actually, sorry! Where did you get your knowledge from about sustainable business practice? Did you read books or hear about it in college or is it just common sense kind of?

DANIELLE: Well no, we kind of touched on it maybe a little bit in college and things like that but definitely it would have been something that I would have looked into myself. It wouldn't have been anything that would have been prescribed or scripted really so I think it really is something that people have to really come to themselves & figure out – at the moment, they find out the information for themselves and ask the questions and when they're dealing with they're printers and suppliers they have to ask the questions; ,well what is the paper stock source etc?' as opposed to ,how much is the paper' and what are the inks made from, do they biodegrade etc. They would be questions that I would ask but I don't know that it's always something that people might ask so it's definitely something you have to seek out. It's very rare that it's at the top of the spec of jobs and such.

LISA: That's great. Thank you so much for your time!

DANIELLE: No problem.

Interview with John Gavan, August 18th, 2015, 12:45 pm

LISA: Hi John, thanks for taking the time! Would you like me to introduce my research again or do you want to start right with the questions?

JOHN: Maybe give me just a brief synopsis of the project.

LISA: I'm researching sustainable business practice in Ireland specifically because I studied graphic design; I work as a freelance graphic designer and I heard about this movement of sustainability and people being really into the development of sustainable business practice in visual communications but most of what I heard and what I read was in the USA and I just want to find out how far this movement got here in Europe and in Ireland and I just want to find out how sustainably graphic designers work.

Unfortunately I can't give you a full analysis of the survey yet as I'm still at it. But only very few designers actually implement sustainable strategies so really work with sustainable printers because there aren't that many printers. But you said you were interested in it and you do I think?

JOHN: Yea, I worked in the UK for about 12 years and I worked in a lot of design and brand agencies over there, I ran a freelance consultancy for a number of years and then I set up my own design studio for the last 6 years of that time. I suppose London is such a huge city there's a lot more opportunities and a lot more things happening and I guess you come across a lot more of these concepts or philosophies. When I moved to Ireland -now coming up to 5 years- , it's a different country. I always come to the population side being one of the limiting factors in terms of choice and also in terms of the wholesale movement. It's kind of hard for a small population to get a cluster or group of people to come together in an area for instance, or a locality, to kind of encourage a movement, or jump on to it, so I guess I come from somewhere that was very active and vibrant in terms of the activity that was going on into something that's a little slower and more behind the times in a lot of areas, but progressive in others. Environmental issues are very much part of my day to day living so I guess I try to put that into my design practice and always aim to get -particularly if we're looking at print work - to get the best that I can in terms of what's going to be the least impact on the environment. Be that working with a local printer to deliver something locally so you're saving on transport and fuel, all that kind of thing. Also I'm always looking for vegetable based inks and at least FSC paper stocks so every job that I do I would make sure that I would have at least that starting point.

I was just with a printer this morning and he runs more of a digital print shop and it was funny, though the whole conversation he was very much trying to sell his services to me and didn't mention the environment once. You know, I let him speak and I didn't voice my opinions on that because I think with digital it seems to be shorter print runs , and less of a concern at the moment and I think that's because of the technology feeding it as opposed to the traditional printing industry so it hasn't caught up with the bigger kind of scale of print runs and therefore its impact in terms of the environmental awareness I guess, so I guess that's kind of a bit of a muddle as to where they're coming from. Digital printing may purport to be the true sustainable approach in the long run. Only print what you need or when you need it. But in my opinion the papers and inks and tech is not geared up for sustainability. That's my attitude towards sustainability in design more related to the print side of things but even if you're looking at stuff like your computers and your hardware and all that kind of stuff that you're using - I'm almost trying to, and I always call it the 1970's dad syndrome, where instead of buying something new you try and fix it and I try and bring that philosophy through into my professional studio as well, so if we have all these computers is there something that we can do to upgrade them and make them useable as opposed to throwing them out and buying something new, and the same is always of buying paper and stationery and all that kind of stuff - I guess you make a decision every time or you're conscious about what you're doing in terms of what impact the environment and how sustainable it is. Like buying a hard drive from China which is cheaper but it's coming across on aeroplanes or boats and all that kind of thing whereas you could spend 20 quid more and you could pick it up locally is that better? Or is that local guy just getting it from China anyway? But those are the food chain kind of journeys that it's hard sometimes run the lifecycle of some products.

LISA: What do you think how far your responsibility goes in terms of environmental protection?

And do you have a special responsibility as a designer?

JOHN: I do and its funny you know we operate in a commercial industry, if I had the choice it would be 100% sustainable and I would be putting a lot more energy and effort to create that and potentially that could be a great marketing tool for me to say you know I'm a really sustainably small business that will be seeking out the best – but the clients are looking always at the bottom line of saying 'how come if I print a 1000 letter heads with your method it costing me 4 times as much' and you can see it from their perspective that they can't justify it because often being sustainable potentially it has a knock on effect of it being more expensive so I think that's a determinant factor. But at home for instance we're very conscious of recycling everything and not wasting electricity or water or you know trying to utilise technologies that try to reduce our carbon footprint or our energy usage and you know that in a sense is easier to manage because we're a household, but in a commercial industry you know your clients will dictate the terms and will say 'you know we've got a 1000 euro to spend on print and if I'm looking to do it in the way that I'd like to, it's going to cost 4000. It's just not possible but even at that point I'm always trying to get to the point where it's going to do the least amount of damage and making them aware. But even so a lot of them aren't that conscious of the environment. They're very much commercially minded and money is the driving force. But that does depend on – some of my clients are artisan food producers and they're conscious of the environmental impact of what they do, what their packaging does and all that kind of area, so that is part of their unique selling point so would be a lot more receptive to sustainable ideas.

LISA: And why do you personally care?

JOHN: Well I guess it's for the greater goal of humanity and the long term future of the earth and its quite obvious that we're not respecting the planet as we should and progress is often – you know the environment is kind, is seen as our last thing and we just drain it and we just use it as much as we can and not really care about a future. So I guess its also about a consciousness thing we've kind of lost touch with nature in a lot of ways, we're living in densely packed cities and surrounded by machinery and technology and the amount of people who have never stood in an empty field or something like that is probably quite rare these days and that kind of connection is starting to be lost but there's a lot to be gained from it, from health and wellbeing and a connection with the earth and making people feel that makes people understand what the significance of it is that's my feelings on that.

LISA: Lovely, thanks and you mentioned already that you would always try to get FSC certified paper and vegetable ink and all that so you must know who you work with really I guess. Do you have a regular printer that you work with who offers all these options?

JOHN: Often it depends on the particular types of jobs so you know some standard jobs are a lot easier to do and you have a much broader choice of printers that you use but I do have a set of three printers that I regularly use, sometimes they will transmit things to larger scale print houses but I will always try and figure out who they were to ensure that they were trying their best as well in terms of being sustainable and going back to the UK model there is certain printers that some of their marketing drive is that they are sustainable even though I think the majority of the printers that I come across now will be using vegetable based inks and you know their papers are not all recycled but FSC approved forestry. So I would have a regular printer and they are aware of I guess my needs and also in what I want and also the quality of it too. Its good to have a relationship like that.

LISA: Is that printer near you -because you're based in Waterford is it?

JOHN: Yea, it's probably about a mile, a mile and a half away.

LISA: Would you mind naming that printer?

JOHN: Yea, they're called Swift Print. I use a printer in the UK for my UK clients and they're called Generation Press and they're in Brighton. Those guys are very much conscious of the environment and it would be really well worth you having look at them and reading up about them because again they are a high end printer they do very high quality work and they do a lot of special finishing and they're very nice people to deal with but they are very conscious on their impact on the environment

and techniques and you know if I had the choice I'd use them all the time but sometimes it's a cost based thing.

LISA: What is your experience with clients, do they ever ask for environmentally friendly solutions (ie. Recycled Paper, Green Web Hosting)?
Did you ever offer such solutions, and if so, how did clients react?

JOHN: It's funny, not very often. As I've said maybe the artisan food producers might be a little bit more aware or may request something that's safe -physically. Or if you say 'oh this is acid free paper and it's suitable for use with food packaging and they go "Oh", they're happy to know that but sometimes they need to be guided. I think it's difficult, with print in particular that you can print stuff at home or you can walk down a street, walk into a print shop and get stuff printed. I guess it's much more accessible now than it used to be now and the quality is much better you can just walk in off the street. I guess its everywhere so people see it as being a very easy thing to do and I guess they don't think about the finer details of what types of inks are being used or machines or papers or where it's coming from and you know a lot of those kind of issues they don't often consider because they maybe don't really know much about it.

LISA: Do you know of any governmental policies to encourage sustainability in the work place?

JOHN: To be honest I haven't been approached or come across anything but I haven't looked into any detail about it but I definitely would be interested to find out if there was.

LISA: What do you think are the most common obstacles to work sustainably?

JOHN: I'd say budgets is probably the key one in terms of a client's budget for print. They want to get as good quality as they can for as cheap as they can, It's a real on-going thing. I would say the geographical location of Ireland as well a lot of stuff like specialist papers and things like that have to be imported so you've got road miles on pretty much everything that you're bringing through also the print industry has changed a lot so there's less printers in every town so potentially for certain finishes you might have to go outside of your locality to get certain types of work done and again that's adding to road miles per print job.

LISA: Do you think sustainable work practice can make for a worthwhile USP in Ireland, and increase chances on market?

JOHN: It's a hard one, I think I'd like to have a lot of money in the bank to risk it to become that specialised - that it's my business is driven by sustainability in everything that I do and it's like becoming an organic farmer; there's a lot of I suppose codes and practices and procedures that would have to be implemented so for a small design agency to me it feels like maybe a leap a little bit too far at the moment. But if I had the support around there maybe if there was government funding or something like that to enter into that I'd definitely be interested in that. I'm looking at it very practically from a business owner to saying it's potentially restrictive because of all the work and effort in order to do that. And then even getting to that point where you can say you're the sustainable design agency in the area or whatever it is maybe clients wouldn't really care. You may get people coming out of the woodwork or would come to you specifically to you for that. I know of a design agency in London and they specialise and just work for non-profit organisations and they use that as their USP and they can get business out of that. But it's just something I haven't really come across, you know some of the designers I work with wouldn't be like myself in being sustainable but I don't know anyone at the moment that's using that as key business driver.

LISA: So you don't advertise that you're working sustainably?

JOHN: No, not necessarily. I mean, my work comes by referral, so in meetings with clients, I do web work too, but, when talking about print, I would mention it at that point. But it's not a marketing element, that I would promote publicly at the moment.

LISA: So, don't you think, if you promoted it, you could get a different range of clients, or attract different clients?

JOHN: Yeah, potentially, it's something I'm looking at at the moment. I'm just looking at my own website, and promoting my business a little more out there. You know it's something that I will voice on the website. But I guess, suggesting that you're sustainable on there and then actually being able to follow through with it, sometimes might be different stories. If I'm working with a client who has no interest in it and wants something very cheaply done and I have to break my stance to get something done for them. Then I'm obviously not living by my philosophy. It's probably something I haven't even really considered in depth.

LISA: What do you think we could do to promote sustainable work practice in our sector, speaking from designer to designer?

JOHN: I think it probably needs to focus on a lot of in terms of the suppliers maybe being encouraged or some sort of legal requirements that they have to fit into certain sustainable standards. That way it's almost encouraging them to make the lead. You know as designers we have to buy print, if we know that certain standards have to be upheld, then we're already kind of running this. Obviously awareness is a key thing. ID 2015 would be -as a forum- a great vehicle to encourage sustainability and I haven't come across anything on that but I haven't searched in depth into ID 2015 to see if there has been any activity regarding sustainability but I think it needs to come from industry bodies I think to really encourage it and make people aware of it, I don't think people are aware of it even in the design industry you know. You may be thinking 'Oh well I'll print 10,000 brochures and you think 'well what's the shelf life of something like that', if it's picked up and just chucked in a bin and all the processes and inks and travel and all that kind of thing that goes into something. I think that kind of awareness would encourage designers to maybe think about what they do in terms of their print work.

LISA: Where did you say you studied again?

JOHN: I did study here in Ireland.

LISA: Do you remember learning something about sustainability or where did you first hear about it or get interested in the topic or did you read a book or where does your knowledge come from basically?

JOHN: Yea, I'm trying to think. I don't recall anything in my education at that time... that I recall anyway that was geared towards sustainability or anything like that I would say. I guess there was probably some movements back in the 80s or whatever about the ideas or you know caring for the environment and greenhouse gases and I suppose awareness was building up back then but I can't think of any pivotal incident or point I guess it was just a growing, learning or understanding over time that kind of built that up.

LISA: Ok, and did you read any books about sustainability and graphic design - or was most of what you actually implement right now is that mostly just common sense or do you get your information from somewhere?

JOHN: I haven't come across any books actually or read any that related to sustainability in design and yea, most of it would be common sense sometimes you know maybe design studios that would look at or may mention in their portfolio for instance that 'job was printed on x type of paper' or they may talk about the green credentials of some of their work so sometimes then by looking at that you think 'oh actually, that's a good idea, I didn't know you could do that' so in a roundabout way you would keep that in mind for the next time you do a job you know there are other possibilities. So they are interesting because I think waste is boring and as a designer I'm aware that a lot of things that you create are just waste you know, that can generate waste if they're not of interest with other people so it's about a consciousness element to it but you know I don't think a lot of people aren't really aware that the work that they do and that they're really focused on the aesthetics and the business function of it as opposed to what happens to it, what happens when its shelf life has passed.

LISA: So that's it now with my questions actually. Would you like to add anything?

JOHN: Not that I can think of really. I mean it's probably a business and an industry scale issue you know and certain types of businesses will go far to get accredited as being carbon neutral and all these kinds of things and a lot of it is probably tax incentives for them to do that. But it does help that there are people making an effort and I think that kind of starts to push out into smaller business and it's often the smaller businesses that are sometimes leading the way but sometimes can be a lot further behind so it's a general kind of educational thing. You know, I think maybe Ireland might be a bit behind in terms of its approach to the environment. You know you probably grew up in Germany and would look at how things have been done there for a long time in terms of recycling and household recycling and that kind of thing, it's very much more part of life then it would have been here in a similar era so I think it's about catching up and just looking after what we have and trying to have and trying to sustain it.

LISA: Thank you so much for your time, John. This has been of great help!

JOHN: That's alright! I understand what it's like. I do some lecturing in the local art college in the Degree course. And as part of that I'm trying to drop tips about sustainability and people's attitudes towards that. So I'm hoping that in a roundabout way that some of the students will pick up on some of my feelings about that kind of thing. So, I'm hopeful for the future. I hope it doesn't have to become critically necessary, you know, we should be aware of it now, but we have to pinpoint towards things in order to make it happen. But, we have to watch this space, as they say.

LISA: Great, thank you so much, John!

JOHN: Not at all, best of luck with it!

Interview with Karen Nolan

sent out via E-Mail, answers received on August 18th, 2015

Background information about this study:

I am researching Sustainable Business practice in Ireland, because I heard about this movement, about people being really into sustainable development in the visual communications, but most of what I researched was happening in the USA, and I want to find out how sustainably Irish Graphic Designers work.

About this interview

You can refuse to answer any questions you do not want to answer.

I will not publish any of this "conversation" without your consent, but if you give me your permission, I will add the transcript as an appendix to my thesis.

Some of these questions I might have - in some form or another - asked you in the survey already. But since you have shown interest in Sustainable Design Practice, I would like to hear your extended answer and comments to it. So feel free to say your opinion, that's really what this interview is about.

What do you think how far your responsibility goes in terms of environmental protection?

KAREN: I feel it's my responsibility to point out any possible waste issues ie. too big a print run for the sake of it and when designing packaging I encourage the use of sustainable and minimal packaging materials. Ultimately though it up to the client, whose decision is always driven by lowest financial outlay.

Do you have a printer that you regularly work with? Which environmentally friendly options does this vendor offer?

KAREN: I work with a few but they don't offer any environmentally friendly options. I can only hope that there is a reasonable amount of environmental legislation that they are complying with.

What is your experience with clients, do they ever ask for environmentally friendly solutions (eg. Recycled Paper, Green Web Hosting)?

KAREN: NEVER

Did you ever offer such solutions, and if so, how did clients react?

KAREN: Such solutions cost extra so it is seldom considered

Do you know of any governmental policies to encourage sustainability in the work place?

KAREN: No

What do you think are the most common obstacles to work sustainably?

KAREN: Cost of using sustainable materials in printing such as recycled paper and lack of non-plastic/biodegradable packaging options that offer the same protection and cost of plastic. Hard to get clients to pay the extra.

Do you think sustainable work practice can make for a worthwhile USP in the ROI, and increase chances on the market?

KAREN: Generally not in the SME market- maybe in the larger corporate companies that have the marketing budget to use it as a selling point and some smaller craft companies whose target market are middle-class professionals- but their margins may suffer so, despite best intentions, it's rarely viable. Awareness of sustainability is improving but I think the Irish consumer will still pick value over best for environment. More education needed.

Where did you get your knowledge from when it comes to sustainable business practice?

KAREN: I don't have much knowledge with regard to business practice but I am interested in green

issues and environmentally sound practices – I write a green blog www.greenjamjar.com and research a lot about these issues. The more I learn the more I think the answer lies in a community based circular economies. Which is why I am changing direction slightly career-wise and also why I am interested in the outcome of your studies.

What could we do to promote sustainable work practice in our sector?

KAREN: Maybe government subsidies to encourage companies (our clients & suppliers) to adopt (and commit to them for a number of years) green policies and practices. As designers we can adopt all the usual practices of waste reduction, energy saving, etc. And maybe educate ourselves in any relevant government policies that we can in turn pass on to clients. Look to architecture as a case in sample- Irish government have put all the onus on the designer to ensure building regs are adhered to. This not the answer. Client/suppliers must bear some responsibility.

Is there anything you would like to add?

KAREN: I have condensed your questionnaire onto one page to save you printing a second page! ;-)
Just to point out that small steps count too. If we all adopt small positive changes it adds up to a large positive impact.

Thank you very much!

Interview with Sophia Westwick, August 14th, 2015, 11:00 am

LISA: Hi Sophia! Thanks for taking the time! I'm just going to give you a brief introduction with the formalities if that's ok. You can refuse to answer any questions you do not want to answer. I will give you the transcription of this interview and you can review it and let me know if you would like to change things you said or leave them out. You can also tell me things "off the record". And I will not publish any of this conversation without your consent obviously, but if you give me your permission, I will add the transcription as an appendix to my thesis.

SOPHIA: Okay.

LISA: Great. Would you like me to explain a bit of my research again?

SOPHIA: Yes, that would be great.

LISA: Okay. I am researching sustainable business practice in Ireland, because I heard about this Sustainable Graphic Design movement during my studies, but most of what I came across was happening in the States, and most books I found are coming from the States. So I wanted to examine how sustainably Irish graphic designers work.

Some of the questions I'm going to ask you now I might be similar to what I have asked you in the survey already. But since you have shown interest in Sustainable Design practice, I would like to hear your extended answer and comments to it. So feel free to say your opinion, that's really what this interview is about.

SOPHIA: What I find personally is that a lot of the work we do as graphic designers is not particularly environmental or ethical or sustainable; so we tend to just call it that- ok I offer sustainable graphic design because I use recycled paper. I don't fully believe that myself; so I take it with a pinch of salt. You know if somebody says sustainable graphic design - I think it depends on who your client is, why you're designing anything at all -you know, is it a book, or is it purely a promotional item? Then it's just going to end up in landfill, what is the point? But at the same time; that's our job and maybe you could just try and add a little element of recyclability or choosing a more expensive eco printer - occasionally, but there hasn't been a huge demand - like I think in the UK there is a bigger demand from ethical businesses for ethical design companies; but I don't know if there is the demand here. So the reason that I'm promoting more sustainable design to clients is just because of my own personal way of living. I want to just bring my own way of living into my work because I'm self employed and I'm working from home. But from a business point of view? Yea, it's a difficult one.

LISA: What do you think how far your responsibility goes in terms of environmental protection - personally and as a business person?

SOPHIA: Personally I think I have quite a higher than normal interest in environmental protection. From a business perspective I don't think it's an obligation I have it's just something that I choose to do. Well what I'm personally keen to do is work for businesses that have a similar ethos to myself. So rather than working for a big company and then somehow bringing in a little bit of environmental graphic design; I would rather work for a company who's already an environmental or sustainable company and I've been doing that like on a small scale with smaller producers you know small local businesses.

LISA: Do you, in your freelance work, have one printer that you usually work with?

SOPHIA: Yea, at the moment that main printer I work with and probably most people in Ireland work with is PRINTZ¹. They're the cheapest printer in Ireland and I think even if you go to a lot of small printing companies in Ireland they subcontract the job to PRINTZ.

LISA: What environmentally friendly options does PRINTZ offer?

1 Name of Company changed

SOPHIA: Absolutely zero. Even if you're prepared to pay more for recycled paper its not their bread and butter so they prefer not to - you know I think it's almost an annoyance for them to order special paper for one job because they have their standard stock. I suspect that they could use vegetable-based ink because a lot of printers are and they don't even realize - like when you ask them about their environmental policy - they have no policy, they're not advertising it.

LISA: Just in theory would you know a better printer in your area that you could use?

SOPHIA: There is one printer in Ireland - I forget exactly where they're based, is it Wexford maybe... they're below Dublin anyway. It's quite interesting, they started advertising as being the most environmentally conscious printer in the country and now they're still using the same brand and it's still energy efficient, carbon neutral but they don't advertise anymore. Its almost like the environmental credentials didn't sell for them. What works for them is to look more mainstream. So they're still going but instead of the main thing on their website being how environmentally friendly they are - it's just a small little piece on one page of their website. I can send you their web address.

LISA: Is that the printfactory possibly?

SOPHIA: Oh yes, that's the name I think.

LISA: You did tell me though that you have experience with soya based ink, don't you?

SOPHIA: Soya based or vegetable based. Yea, I would have printed things with the printfactory years ago. And they use vegetable based inks, but it was them that actually told me that the printers in Ireland are using those inks and they come from Germany - they are pretty industry standard but a lot of printers wouldn't even know.

LISA: Ok, so they are actually using vegetable-based inks and just don't know?

SOPHIA: Possibly - that would be interesting to find out where they're buying their inks because I think most printing inks come from Germany.

LISA: But didn't you say it was more expensive, was that because print factory is more expensive than PRINTZ?

SOPHIA: Definitely. And I think anyone who's advertising as an environmentally friendly printer is going to be more expensive. Not just because they're smaller businesses but I think like you and me it's a more expensive process.

LISA: Do you think that is because they have to be more expensive or they can be this expensive because they have this stamp of being environmentally friendly?

SOPHIA: I think it's definitely because they have to. The market is tough enough for them to have the luxury of charging more.

LISA:What is your experience with clients, do they ever ask for environmentally friendly solutions (ie. Recycled Paper, Green Web Hosting)?

SOPHIA: It is amazing, I've had clients that are very environmentally conscious and they ask for the most environmentally possible way that they can get it - but they look at examples that have come from America and they feel that if it can be done in America it can be done here and then they find out the costs to do something similar here, and then it generally always goes back to the lower priced, less environmentally friendly product.

I have clients that would be strict about the recycled paper, 100% post-consumer waste and things like that but that's kind of easily achievable but when it comes to maybe printing on biodegradable packaging or something like that then it's not really possible here.

LISA: And why is that then?

SOPHIA: There just aren't the manufacturers in Ireland and then the majority of the printing companies that exist are just conventional printing companies there's no specialists because there's not the demand. And if you look to start printing abroad that adds another element of transport and things like that.

LISA: Would you; say if you have a regular client who isn't necessarily coming from that area -like environmentally friendly- would you tell them 'oh, there's like several options that we can do. We can do it either environmentally friendly, or cheap'. Like would you offer regular clients to print on recyclable paper or do you not mention it then? How do you handle this?

SOPHIA: Yea. I always would recommend uncoated paper stock as one of the smallest changes. The main thing would also be that I try to save the client money by not printing waste so if they come to me and say they want a whole load of leaflets but I really believe that they are just going to go in the bin, I would completely advise against it and I would try to design something that's maybe useful to someone so that they can keep it. So instead of just a flyer that just has information that goes in the bin maybe it's like a little booklet that has recipes or a bookmark; something that's actually useful but relevant to the client's brief.

LISA: Do you know of any governmental policies to encourage sustainability in the work place?

SOPHIA: Hum, good question. Em, no I don't know about government policies and not even just relating to my freelance work but I cant think of any relevant to my pay work with a bigger company either. You know there's small things locally that we get involved with like smarter travel but that's just a local council initiative.

LISA: What do you think are the most common obstacles to work sustainably?

SOPHIA: One of the obstacles has to be the lack of conversation about it among people that are interested. So that maybe if there was a network where you had resources you could find out information, share ideas, share projects, maybe collaborate or start to put pressure on printers to say 'look, this is what we want'. That would kind of have helped me- because I've always been looking to meet somebody, even somebody that I could go into business with and work with somebody else rather than working on my own; but I've never found those people. There are very good environmental networks in Ireland but I have never met any graphic designers. So for me that's been a bit of an obstacle and possibly the lack of willingness to pay the extra money from clients to actually go for the most environmental option.

LISA: Do you think sustainable work practice can make for a worthwhile USP in Ireland, and increase chances of a business on market?

SOPHIA: I think so because - well that would be a good experiment to find out because I'm just going to go back to more freelance work and I want to really specifically advertise as small scale more environmentally conscious designer and I hope that will attract similar companies to work with me; you know so possibly. I'm sure if you had a bigger business than mine and you really promoted yourself and advertised then yea, it would be attractive to people now. Especially because there are so many small artisan food producers and crafts people now in Ireland I think they would be keen to work with a like-minded design company...if that makes sense.

LISA: You did try before didn't you? You called yourself like 'Green Design Studio' or something? Why did that not work out, or did it work out?

SOPHIA: Yea, well I didn't ever advertise - the only place I advertised my contact details - there used to be a network called cultivate in Dublin - it's gone now. I can't remember what network was called was it sustainable Ireland? But it was a network of people and part of their website was just a business directory. Well I put myself on there, it's just free to advertise and the only other place I advertised was you know the telephone book. So I had my own website but that was all I ever did and actually just from those two places it did attract environmental clients, and I was doing that for about 7 years

but I got sick of working on the computer on my own. And I left graphic design completely for a few years and started working as a care assistant. But then another graphic design job came back up so I took it.

LISA: What could we do to promote sustainable work practice in our sector?

SOPHIA: Having the information resources so whatever you find or if other people are able to contribute. Might have a directory – doesn't have to be overly complicated or maybe even get involved in some of the already existing design events that ask specific questions or a conversation about what is ethical or environmental and things like that.

Even just to consider that it might be important I'm not sure.

LISA: May I ask where you actually got your knowledge from; is it just like common sense or did you research yourself or did you learn something like that in college or read books?

SOPHIA: I did study product design in university and, we had quite a good instructor who would have brought up all those issues about sustainability and what is ethical and I read quite a lot about it. So my conclusion at the end was probably to design nothing because most of the stuff we're designing is just useless. That was probably what started me thinking that I would do graphic design instead of going into product design so it came with me like from there and from my own research I was always looking for another company that was already doing something and I didn't find it but I did find quite a few companies in Australia just on the internet in Sydney that it seems to be a much much more like its just a bigger part of the graphic design culture. So that's where I got most of the inspiration from.

LISA: That's actually it with my questions would you like to add anything?

SOPHIA: Well just that it would be great to read your work and I would have some energy to put into further sustainable graphic design discussions.

LISA: Sounds really good, yea, I would love to do that personally myself because I need the same experience as yourself I guess. As working as a designer I find it really hard to find like-minded people and even now with the research I found 3 or 4 other people who were willing to get interviewed so I'm just going to do the interviews with them separately and I hope I'm going to bring you together if that makes sense like if they want that. I'm not sure yet how interested they are at the whole thing but we'll see, I really hope that there's something evolving from this.

SOPHIA: Yea, I wonder is it because most people who are environmentally conscious and good at maybe creative work choose not to work as a designer and choose to be artists or who choose to be something different.

LISA: Maybe yea – and as you said I think a lot of graphic designers never considered it really that they have a part in this, that they just work away and just don't think actually that they have an impact or they could have an impact if they wanted to.

SOPHIA: Yea, its quite small. It's a smaller impact that we'd like to hope for but em, what sort of design work do you do?

LISA: So far I'm still, I did the masters right after the Bachelor I was just working freelance for like 2 or 3 years now. But em, most of it was web design to be honest even though I don't like doing that so much. There was not too much print, some business cards or something but there wasn't really many environmentally friendly decisions I could have made but I did realise that I could not work as a regular graphic designer for myself because most companies would have clients that I wouldn't be able to work for.

SOPHIA: That is a good point, I had to say no to a quite a few jobs. I had like regular work for years with one company and they decided to go into partnership with another Irish company who produce bananas do you know fyffes?

LISA: Oh yea, I know them.

SOPHIA: They're the absolute worst for human rights and environmental abuse. So I had to stop working with the people that I was with just because I didn't want to. But that's personal, you know it's when your personal decisions get in the way of business.

LISA: I know that all too well. Ok I better let you go. Thank you so much for your time!

SOPHIA: Ok, no problem. We'll keep in touch!

LISA: Definitely, yea!

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