

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Arcadis is the leading global Design & Consultancy firm for natural and built assets. Applying our deep market sector insights and collective Design, Consultancy, Engineering, Project and Management solutions we work in partnership with our clients to deliver exceptional and sustainable outcomes throughout the lifecycle of their natural and built assets. We are 27,000 people, active in over 70 countries that generate €3.2 billion in revenues. We support UN-Habitat with knowledge and expertise to improve the quality of life in rapidly growing cities around the world.

Our vision has quickly become our passion; improving quality of life. Through our passion, our people and the work we do with our clients, we have opportunities to shape the future of our world, every day. Guided by five core values, combined with five keystone behaviors, we are building a unique, One Arcadis culture. A culture where focusing on our people and working as one team delivers innovation, excellence and client success. Our Values are:

- **People First:** We care for each other and create a safe and respectful working environment where our people can grow, perform, and succeed.
- **Integrity:** We always work to the highest professional and ethical standards and establish trust by being open, honest and responsible.
- **Client Success:** We are passionate about our clients' success and bring insights, agility, and innovation to co-create value.
- **Collaboration:** We value the power of diversity and our global capabilities and deliver excellence by working as One Arcadis.
- **Sustainability:** We base our actions for clients and communities on environmental responsibility and social and economic advancement.

We support our clients' business and create sustainable and exceptional outcomes in all the projects we undertake on their behalf. We offer full lifecycle solutions for clients in most of the major markets including business advisory and consulting, design and engineering and program, project and cost management. We deliver solutions across the entire value chain through the application of design, consultancy, engineering, project and management services. We differentiate ourselves in key market sectors through our market sector insights, by deepening our market sector capabilities and by developing client relationships that span the entire lifecycle of their assets. We work hard to understand the changing needs of our clients and their market sectors to identify new ways to help create value. We design and deliver complex solutions by combining our unique technical, consulting and management skills to provide exceptional and sustainable outcomes for our clients across all phases of asset investments; from planning, through to creation, operation and possible redefinition.

We support our clients on a truly global basis. Our worldwide network is anchored in leading positions in Europe, North America, Latin America, the Middle East, Asia and Australia Pacific. Clients benefit from our strong local presence and our long-term service record on their behalf is rooted in a deep-seated understanding of local market conditions. Through our global business lines, our clients have access to our vast expertise and our ability to provide the best value added solutions and technology.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Row 1	January 1 2017	December 31 2017	Yes	3 years
Row 2	January 1 2016	December 31 2016	<Not Applicable>	<Not Applicable>
Row 3	January 1 2015	December 31 2015	<Not Applicable>	<Not Applicable>
Row 4	January 1 2014	December 31 2014	<Not Applicable>	<Not Applicable>

C0.3

(C0.3) Select the countries/regions for which you will be supplying data.

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

EUR

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.

Operational control

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Chief Sustainability Officer (CSO)	Sustainability is an integral part of our strategy and an inherent part of the way we do business. The implementation and performance of our Global Sustainability Policy is led by our Global Director of Sustainability who reports directly to the CEO, where the latter has global responsibility for sustainability matters within Arcadis. In the Supervisory Board, Sustainability is included in the portfolio of responsibilities of its Chairman. The Global Director of Sustainability is supported by a Core Sustainability Team ('CST') that develops the Group-wide sustainability strategy and associated policies, and directs its implementation. The CST also manages the relationships with non-governmental organizations, trade associations, and other network groups to promote and develop sustainable development in the value chains in which our clients and our firm participate.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	<ul style="list-style-type: none"> Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues 	The Executive Board, under the supervision of the Supervisory Board, has overall responsibility for the Arcadis risk management and control systems and has full accountability for strategic risks. Management teams of regional companies and global business lines are responsible for operational performance and effectiveness and for managing the associated risks. The Executive Board, Audit & Risk Committee and the Supervisory Board review the identified strategic and operational risks, including trends annually.

C1.2

(C1.2) Below board-level, provide the highest-level management position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Sustainability Officer (CSO)	Both assessing and managing climate-related risks and opportunities	Quarterly
Sustainability committee	Both assessing and managing climate-related risks and opportunities	As important matters arise
Environmental, Health, and Safety manager	Both assessing and managing climate-related risks and opportunities	As important matters arise

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored.

The implementation and performance of our Global Sustainability Policy is led by our Global Director of Sustainability who reports directly to the CEO, where the latter has global responsibility for sustainability matters within Arcadis. In the Supervisory Board, Sustainability is included in the portfolio of responsibilities of its Chairman. The Global Director of Sustainability is supported by a Core Sustainability Team ('CST') that develops the Group-wide sustainability strategy and associated policies, and directs its implementation. The CST also manages the relationships with non-governmental organizations, trade associations, and other network groups to promote and develop sustainable development in the value chains in which our clients and our firm participate.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

Yes

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues.

Who is entitled to benefit from these incentives?

Board/Executive board

Types of incentives

Recognition (non-monetary)

Activity incentivized

Efficiency target

Comment

Climate change incentives for individual board members and senior executives can include both monetary and non-monetary recognition.

Who is entitled to benefit from these incentives?

Board/Executive board

Types of incentives

Recognition (non-monetary)

Activity incentivized

Behavior change related indicator

Comment

Climate change incentives for individual board members and senior executives can include both monetary and non-monetary

recognition.

Who is entitled to benefit from these incentives?

Environment/Sustainability manager

Types of incentives

Recognition (non-monetary)

Activity incentivized

Emissions reduction project

Comment

Monetary and/or non-monetary recognition.

Who is entitled to benefit from these incentives?

Environment/Sustainability manager

Types of incentives

Recognition (non-monetary)

Activity incentivized

Emissions reduction target

Comment

Monetary and/or non-monetary recognition.

Who is entitled to benefit from these incentives?

Environment/Sustainability manager

Types of incentives

Recognition (non-monetary)

Activity incentivized

Energy reduction project

Comment

Monetary and/or non-monetary recognition.

Who is entitled to benefit from these incentives?

Environment/Sustainability manager

Types of incentives

Recognition (non-monetary)

Activity incentivized

Energy reduction target

Comment

Monetary and/or non-monetary recognition.

Who is entitled to benefit from these incentives?

Environment/Sustainability manager

Types of incentives

Recognition (non-monetary)

Activity incentivized

Efficiency project

Comment

Monetary and/or non-monetary recognition.

Who is entitled to benefit from these incentives?

Environment/Sustainability manager

Types of incentives

Recognition (non-monetary)

Activity incentivized

Efficiency target

Comment

Monetary and/or non-monetary recognition.

Who is entitled to benefit from these incentives?

Environment/Sustainability manager

Types of incentives

Recognition (non-monetary)

Activity incentivized

Behavior change related indicator

Comment

Monetary and/or non-monetary recognition.

Who is entitled to benefit from these incentives?

Environment/Sustainability manager

Types of incentives

Recognition (non-monetary)

Activity incentivized

Environmental criteria included in purchases

Comment

Monetary and/or non-monetary recognition.

Who is entitled to benefit from these incentives?

Environment/Sustainability manager

Types of incentives

Recognition (non-monetary)

Activity incentivized

Supply chain engagement

Comment

Monetary and/or non-monetary recognition.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Recognition (non-monetary)

Activity incentivized

Emissions reduction project

Comment

Monetary and/or non-monetary recognition.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Recognition (non-monetary)

Activity incentivized

Emissions reduction target

Comment

Monetary and/or non-monetary recognition.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Recognition (non-monetary)

Activity incentivized

Energy reduction project

Comment

Monetary and/or non-monetary recognition.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Recognition (non-monetary)

Activity incentivized

Energy reduction target

Comment

Monetary and/or non-monetary recognition.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Recognition (non-monetary)

Activity incentivized

Efficiency project

Comment

Monetary and/or non-monetary recognition.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Recognition (non-monetary)

Activity incentivized

Efficiency target

Comment

Monetary and/or non-monetary recognition.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Recognition (non-monetary)

Activity incentivized

Behavior change related indicator

Comment

Monetary and/or non-monetary recognition.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Recognition (non-monetary)

Activity incentivized

Environmental criteria included in purchases

Comment

Monetary and/or non-monetary recognition.

C2. Risks and opportunities

C2.1

(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.

	From (years)	To (years)	Comment
Short-term	0	3	
Medium-term	3	6	
Long-term	6	100	

C2.2

(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

C2.2a

(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Annually	>6 years	

C2.2b

(C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.

The process for identifying and assessing climate-related risks adheres to the Arcadis Business Controls Framework. The Arcadis Business Control Framework (the ABC Framework) is Arcadis' internal risk and control system, designed and implemented based on the identified twelve key risks which could have an impact on Arcadis' achievement of its strategic goals. The twelve key risks are divided into four risk categories: Strategic, Operational, Health & Safety, and Compliance. Governance standards, global policies, and global guidelines are included in the framework, providing a road map for the management of risk on a day-to-day basis, assisting value creation, and promoting the long-term success of the Company.

The Executive Board has overall responsibility for identifying, analyzing, and managing the risks associated with Arcadis' strategy and activities, including establishing the risk appetite, designing, implementing, and maintaining the internal risk and control system, and monitoring its performance. The Executive Board has established a Risk Management function to provide support and assistance with the effective discharge of these responsibilities. The Risk Management function is headed by the Chief Risk Officer, supported by a Corporate Risk Management team and Regional Risk Managers.

The Risk Management Committee assists the Executive Board with striking the right balance between risk and reward by providing global oversight on risk topics. The Risk Management Committee advises the Executive Board, as needed, in ensuring that a robust risk management framework exists across Arcadis.

The new global on-boarding programme, which inducts new starters on The Arcadis Way, treats risk management as integral to the way we do things at Arcadis. Intelligent risk taking, within the boundaries of our values, is part of our DNA. Soft control surveys are conducted periodically to assess the culture of the company from a risk management perspective and the findings from these surveys are turned into actions – either to close gaps or to share best practices. The outcome of the surveys also helps to improve the clarity of policies and procedures, enhance role modelling of management and obtain deeper understanding of what drives behaviors in relation to compliance and reporting of misconduct.

C2.2c

(C2.2c) Which of the following risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	In order to serve our client needs and maintain a competitive advantage, Arcadis monitors changes to air quality regulations and limits at the local, national and international levels. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts responsible for regulatory compliance keep up to date with new regulations and developments on a routine basis, disseminating information to senior management and the organization as a whole.
Emerging regulation	Relevant, always included	In order to serve our client needs and maintain a competitive advantage, Arcadis monitors carbon tax legislation at the local, national and international levels. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts engaged in carbon tax projects monitor developments on a routine basis, disseminating information to senior management and the organization as a whole. Our service offerings are updated as needed to suit changes in regulation or client needs.
Technology	Relevant, always included	Arcadis stays current with changes in technology to serve our client needs and maintain a competitive advantage. This includes innovations in data tracking, energy efficiency, and sustainable design. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts monitor developments on a routine basis, disseminating information to senior management and the organization as a whole. Our services are updated as needed to suit changes in technology or client needs.
Legal	Relevant, always included	Arcadis continually monitors climate change activity and legislation at the local, national and international levels, including any changes in international agreements. Doing so allows us to serve our client needs and maintain a competitive advantage. Arcadis has several partnerships and memberships. These include UN Global Compact, UN-Habitat, IUCN Netherlands Leaders for Nature, Carbon Disclosure Project and World Business Council for Sustainable Development. We participate in meetings, taskforces and steering committees in order to demonstrate our sustainability commitments, to find common grounds to address sustainability challenges, to keep up to date with important new developments and to adapt our own sustainability strategy. In 2014, Arcadis became a member of the World Business Council for Sustainable Development (WBCSD). ARCADIS subsidiary RTKL is also a signatory to The China Accord, an industry-led coalition which pledges to plan and design built environments to carbon neutral or high-performance standards in keeping with the ambition of the Chinese authorities to improve the urban environment. We are also engaged in dialogues with leading NGO's, like IUCN and Amnesty International.
Market	Relevant, always included	In order to serve our client needs and maintain a competitive advantage, Arcadis monitors the market for climate related services at the local, national and international levels. This includes increased demand for emissions tracking and reporting, renewable energy, and carbon offsets. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts monitor developments on a routine basis, disseminating information to senior management and the organization as a whole. Our service offerings are updated as needed to suit changes in market conditions and client needs.
Reputation	Relevant, always included	Whether its helping a water utility deal with drought, designing a building to withstand the effects of climate change, or helping a client improve resource efficiencies, the environment and potential changes to our environment is embedded into everything we do. We strive to provide our clients with comprehensive solutions that provide sustainable benefit their organization and the communities and environments in which we live and work. We do this by monitoring all aspects of climate change by maintaining memberships and partnerships with key organizations, participating in meetings, taskforces and steering committees, and participating in key projects that help shape regulation. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts keep up to date in their areas of expertise, disseminating any large developments to senior management and individuals responsible for assisting our clients with climate change related matters.
Acute physical	Relevant, always included	As an environmental consulting company, Arcadis already works with many our clients to varying degrees on climate-related issues. Changes in temperature extremes will directly affect many of our clients, at the local, national and international level and could pose a threat to the safety of our staff working in the field or at a project site. Like all climate related issues, this risk driver is specific to geography, as impacts associated with temperature extreme will affect different geographies with different intensities.
Chronic physical	Relevant, always included	As an environmental consulting company, Arcadis already works with many our clients to varying degrees on climate-related issues. Changes in the mean average precipitation will directly affect many of our clients, at the local, national and international level. Like all climate related issues, this risk driver is specific to geography, as impacts associated with precipitation change will affect different geographies with different intensities.
Upstream	Relevant, sometimes included	Understanding greenhouse gas emissions and obtaining reliable and accurate greenhouse gas data serve as a foundation to any carbon reduction efforts. Arcadis engagement with suppliers is prioritized based on Arcadis' largest emitting activities combined with the biggest opportunities to bring about change. To date, efforts to work with Arcadis suppliers have focused on improving data collection practices and encouraging suppliers to offer eco-friendly alternatives.
Downstream	Relevant, always included	As a leader in the environmental space, Arcadis routinely works with clients to comply with environmental regulation, providing our clients with regulatory expertise at the local, state, regional, national, and international level. Changes in environmental regulation will impact a majority if not all of our clients. This risk driver is geographic-specific and sector-specific, linked to the regulation itself. Potential risk impacts include a loss of clients or projects or a tarnished reputation.

C2.2d

(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.

Arcadis aspires to understand and act upon our greatest risks, material to our business, our stakeholders, and society. The Arcadis Supervisory Board oversees and advises the Executive Board, which has overall responsibility for risk management. Using the ERM, main risks were identified following comprehensive discussions that included the likelihood of their occurrence and their potential impact.

RISK PROFILE AND APPETITE

The Executive Board has identified twelve main risks to which we could potentially be exposed in pursuit of our strategy. Our risk appetite in relation to these risks varies from averse to high, reflecting the amount of risk that we are willing to accept. Where risk is unrewarded and we have a limited ability to mitigate and control it, our appetite is averse. For rewarded risks, our appetite ranges from low to high, and higher risks require additional controls. In 2016, macro-economic uncertainty, to an extent driven by geopolitical developments and low oil prices, led to a retraction in spending on the part of governments in several of our operating regions. This has impacted our risk profile. In light of this, we have reviewed our operating model and reorganized some of our regions to ensure that we continue to operate in accordance with our risk appetite.

REGIONAL RESPONSIBILITY

In the regions and operating companies, local management is responsible for actively identifying, evaluating and managing risks to achieve operational performance. They are assisted by Regional Risk Managers who have a functional reporting line to the Global Chief Risk Officer. A key risk assurance role is carried out by the Regional Risk Managers, who evaluate the effective implementation of the controls which make up the ABC Framework throughout the year. If inadequacies are identified, actions are taken to address any resultant issues, with monitoring thereafter to ensure the controls are designed and operating effectively. Regional Enterprise Risk Registers have been developed during this financial year to further support the regions in identifying and managing their risks.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Enhanced emissions-reporting obligations

Type of financial impact driver

Market: Reduced demand for goods and/or services due to shift in consumer preferences

Company- specific description

Arcadis routinely works with clients to comply with air quality limits and regulations, providing our clients with regulatory compliance support experts whose expansive and diverse client-base keeps them on the cutting edge of the latest local, state, regional, national, and global trends in regulations and technology. As such, changes to air pollution regulations or the imposition or

relaxation of air pollution limits will affect our clients at the local, national, and international levels. This risk driver is geographic-specific and sector-specific, linked to the regulation itself. Potential risk impacts include a loss of clients or projects or a tarnished reputation.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Medium

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% decrease in our Business Lines largely responsible for addressing regulatory compliance (Environment, Water, and Infrastructure) would decrease revenue by €32m.

Management method

In order to serve our client needs and maintain a competitive advantage, Arcadis monitors changes to air quality regulations and limits at the local, national and international levels. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts responsible for regulatory compliance keep up to date with new regulations and developments on a routine basis, disseminating information to senior management and the organization as a whole.

Cost of management

500000

Comment

Estimated order of magnitude cost of management is €500,000/year.

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Mandates on and regulation of existing products and services

Type of financial impact driver

Market: Reduced demand for goods and/or services due to shift in consumer preferences

Company- specific description

As an environmental consulting organization, changes in International Agreements on climate change, such as the Kyoto Protocol, Paris Agreement or other agreements sponsored by the UN or other authorities will undoubtedly affect ARCADIS clients and the work we do. This risk driver is not geographic-specific or regulation-specific, as our practice is global and we serve clients globally on most if not all aspects of climate change regulations. Potential risk impacts include a loss of clients or projects or a tarnished reputation.

Time horizon

Long-term

Likelihood

About as likely as not

Magnitude of impact

Low

Potential financial impact

8000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% decrease in our Environmental Business Line would decrease revenue by €8m.

Management method

Arcadis continually monitors climate change activity and legislation at the local, national and international levels, including any changes in international agreements. Doing so allows us to serve our client needs and maintain a competitive advantage. Arcadis has several partnerships and memberships. These include UN Global Compact, UN-Habitat, IUCN Netherlands Leaders for Nature, Carbon Disclosure Project and World Business Council for Sustainable Development. We participate in meetings, taskforces and steering committees in order to demonstrate our sustainability commitments, to find common grounds to address sustainability challenges, to keep up to date with important new developments and to adapt our own sustainability strategy. In 2014, Arcadis became a member of the World Business Council for Sustainable Development (WBCSD). ARCADIS subsidiary RTKL is also a signatory to The China Accord, an industry-led coalition which pledges to plan and design built environments to carbon neutral or high-performance standards in keeping with the ambition of the Chinese authorities to improve the urban environment. We are also engaged in dialogues with leading NGO's, like IUCN and Amnesty International.

Cost of management

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Mandates on and regulation of existing products and services

Type of financial impact driver

Market: Reduced demand for goods and/or services due to shift in consumer preferences

Company- specific description

In parts of the world, carbon taxes are already affect Arcadis clients. The imposition of carbon taxes within various jurisdictions or a change in current carbon tax regulation could directly impact our clients at the local, national, or international level. This risk driver is geographic-specific and regulation-specific. Potential risk impacts include a loss of clients or projects or a tarnished reputation.

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

Low

Potential financial impact

8000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% decrease in our Environmental Business Line would decrease revenue by €8m.

Management method

In order to serve our client needs and maintain a competitive advantage, Arcadis monitors carbon tax legislation at the local, national and international levels. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts engaged in carbon tax projects monitor developments on a routine basis, disseminating information to senior management and the organization as a whole. Our service offerings are updated as needed to suit changes in regulation or client needs.

Cost of management

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Please select

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Mandates on and regulation of existing products and services

Type of financial impact driver

Market: Reduced demand for goods and/or services due to shift in consumer preferences

Company- specific description

In parts of the world, cap and trade schemes (carbon based as well as other air quality pollutants) already impact Arcadis clients. The adoption of a cap and trade scheme or a change in existing schemes could directly impact our clients at the local, national, or international level. This risk driver is geographic-specific and regulation-specific. Potential risk impacts include a loss of clients or projects or a tarnished reputation.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium-low

Potential financial impact

8000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% decrease in our Environmental Business Line would decrease revenue by €8m.

Management method

In order to serve our client needs and maintain a competitive advantage, Arcadis monitors cap and trade schemes at the local, national and international levels. This includes the EU Emissions Trading Scheme. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts involved in cap and trade monitor developments on a routine basis, disseminating information to senior management and the organization as a whole. Our service offerings are updated as needed to suit changes in regulation or client needs.

Cost of management

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Risk 5

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Enhanced emissions-reporting obligations

Type of financial impact driver

Market: Reduced demand for goods and/or services due to shift in consumer preferences

Company- specific description

Some Arcadis clients already report their emissions, driven by supporting regulations and/or voluntary initiatives. Power utilities and other large emitting industries are already required to report their emissions, particularly in Europe and North America. Emission reporting obligations are geographic-specific or regulation-specific and could impact ARCADIS, as our practice is global and we serve clients globally on most if not all aspects of climate change regulations. Potential risk impacts include a loss of clients or projects or a tarnished reputation.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Low

Potential financial impact

8000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% decrease in our Environmental Business Line would decrease revenue by €8m.

Management method

Arcadis stays current with changes in emission reporting obligations to serve our client needs and maintain a competitive advantage. This includes mandatory reporting through EU ETS, Defra, EPA, and CARB. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts involved in emissions reporting monitor developments on a routine basis, disseminating information to senior management and the organization as a whole. Our services are updated as needed to suit changes in regulation or client needs.

Cost of management

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Risk 6

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Mandates on and regulation of existing products and services

Type of financial impact driver

Market: Reduced demand for goods and/or services due to shift in consumer preferences

Company- specific description

Regulation-driven taxes on either fuel or energy already impacts Arcadis clients, particularly in the power sector. Changes to existing legislation or new legislation would affect many of our clients. This risk driver is geographic-specific or regulation-specific. Potential risk impacts include a loss of clients or projects or a tarnished reputation.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Medium-low

Potential financial impact

8000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% decrease in our Environmental Business Line would decrease revenue by €8m.

Management method

In order to best serve our clients, Arcadis continually monitors changes in fuel/energy taxes and regulations. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts working on fuel/energy tax and/or regulation projects monitor developments, disseminating information to senior management and the organization as a whole. Our services are updated

as needed to suit changes in regulation or client needs.

Cost of management

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Risk 7

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Mandates on and regulation of existing products and services

Type of financial impact driver

Market: Reduced demand for goods and/or services due to shift in consumer preferences

Company- specific description

Regulations which impose energy or resource efficiency affect Arcadis clients on a routine basis at local, national, and international levels. In addition, many Arcadis clients see the value of energy/resource efficiency, imposing their own set of standards on their projects. Should Arcadis not be familiar with changes in efficiency regulations/standards, we will be limited in our ability to serve our client needs. This risk driver is not geographic-specific or regulation-specific as our practice is global and we serve clients globally on these issues. Potential risk impacts include a loss of clients or projects or a tarnished reputation.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Medium-low

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% decrease in our Business Lines addressing regulatory compliance on a routine basis (Environment, Water, and Infrastructure) would decrease revenue by €32m.

Management method

Monitoring developments in product efficiency regulations and standards is paramount to our business. Many of our employees participate in meetings, taskforces and steering committees geared towards driving energy and product efficiency. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts monitor developments, disseminating information to senior management and the organization as a whole. Our services are updated as needed to suit changes in regulation or client needs.

Cost of management

500000

Comment

Estimated order of magnitude cost of management is €500,000/year.

Identifier

Risk 8

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Mandates on and regulation of existing products and services

Type of financial impact driver

Market: Reduced demand for goods and/or services due to shift in consumer preferences

Company- specific description

Product labeling regulations, for example, labeling regarding energy or resource efficiency could affect one or more of Arcadis clients, in some cases at a local, national and international level. Should Arcadis not be familiar with the changes in regulations which impose these labeling requirements, we will be limited in our ability to serve our client needs. This risk driver is not geographic-specific or regulation-specific as our practice is global and we serve clients globally on most if not all aspects of climate change regulations. Potential risk impacts include a loss of clients or projects or a tarnished reputation.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Low

Potential financial impact**Explanation of financial impact**

Order of magnitude impact. Financial implications will vary. A 1% decrease in our Environmental Business Line would decrease revenue by €8m.

Management method

In order to best serve our clients, Arcadis monitors changes in product labeling regulations and standards. This includes CLS and GHS regulation. Our product labeling experts monitor developments, disseminating information to senior management and the organization as a whole. Services are updated as needed to suit changes in regulation or client needs.

Cost of management

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Risk 9

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Other

Type of financial impact driver

Market: Reduced demand for goods and/or services due to shift in consumer preferences

Company- specific description

The voluntary agreement of governments with companies with regards climate change matters will affect one or more of Arcadis clients, in some cases at a local or national-level. Should Arcadis not be familiar with these voluntary agreements, we will be limited in our ability to serve our client needs. This risk driver is specific to the government authority and private company involved in the voluntary agreement, at least for those agreements affecting our clients. Potential risk impacts include a loss of clients or projects or a tarnished reputation.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Low

Potential financial impact

8000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% decrease in our Environmental Business Line would decrease revenue by €8m.

Management method

Some of our clients already participate in voluntary carbon agreements. In order to best serve our clients, Arcadis monitors and tracks voluntary carbon agreements primarily in Europe, the UK, and the US. Some employees participate in meetings, taskforces and steering committees in order to demonstrate our sustainability commitments, find common grounds to address sustainability challenges, and keep up to date with important new developments.

Cost of management

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Risk 10

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Mandates on and regulation of existing products and services

Type of financial impact driver

Market: Reduced demand for goods and/or services due to shift in consumer preferences

Company- specific description

As a leader in the environmental space, Arcadis routinely works with clients to comply with environmental regulation, providing our clients with regulatory expertise at the local, state, regional, national, and international level. Changes in environmental regulation will impact a majority if not all of our clients. This risk driver is geographic-specific and sector-specific, linked to the regulation itself. Potential risk impacts include a loss of clients or projects or a tarnished reputation.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Medium

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% decrease in our Business Lines addressing regulatory compliance on a routine basis (Environment, Water, and Infrastructure) would decrease revenue by €32m.

Management method

In order to serve our client needs and maintain a competitive advantage, Arcadis monitors changes to environmental regulation at the local, national and international level. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts responsible for regulatory compliance keep up to date with new regulations and developments on a routine basis, disseminating information to senior management and the organization as a whole. Environmental regulation is core to our business.

Cost of management

500000

Comment

Estimated order of magnitude cost of management is €500,000/year.

Identifier

Risk 11

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Other

Type of financial impact driver

Market: Reduced demand for goods and/or services due to shift in consumer preferences

Company- specific description

Regulatory uncertainty will affect one or more of Arcadis clients, in some cases at a local, national and global-level. Should Arcadis not be aware of this uncertainty, we will be limited in our ability to serve our client needs. This risk driver is not geographic-specific or regulation-specific. Potential risk impacts include a loss of clients or projects or a tarnished reputation.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium-low

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% decrease in our Business Lines addressing regulatory compliance on a routine basis (Environment, Water, and Infrastructure) would decrease revenue by €32m.

Management method

There is always some uncertainty to new regulation. In order to understand this uncertainty, Arcadis continually monitors climate change activity by maintaining memberships and partnerships with organizations, participating in meetings, taskforces and steering committees, and participating in key projects that help shape regulation. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts keep up to date with new regulations and developments on a routine basis, disseminating any uncertainty to senior management and individuals responsible for informing our clients on regulatory change.

Cost of management

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Risk 12

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Other

Type of financial impact driver

Market: Reduced demand for goods and/or services due to shift in consumer preferences

Company- specific description

As with uncertainty, the lack of clear guiding regulations will affect one or more of Arcadis clients, in some cases at a local, national and international level. Should Arcadis not be familiar with the implications of this lack of regulation, we will be limited in our ability to serve our client needs. This risk driver is not geographic-specific or regulation-specific as our practice is global and we serve clients globally on most if not all aspects of climate change regulations. Potential risk impacts include a loss of clients or projects or a tarnished reputation.

Time horizon

Long-term

Likelihood

Unlikely

Magnitude of impact

Low

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% decrease in our Business Lines addressing regulatory compliance on a routine basis (Environment, Water, and Infrastructure) would decrease revenue by €32m.

Management method

Arcadis staff stayed informed on changes in regulation by maintaining memberships and partnerships with key organizations (e.g. WBCSD), participating in meetings, taskforces and steering committees, and participating in key projects that help shape regulation. By staying informed on regulatory advancements, we are able to understand the potential for lack of regulation.

Cost of management

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Risk 13

Where in the value chain does the risk driver occur?

Customer

Risk type

Physical risk

Primary climate-related risk driver

Chronic: Rising mean temperatures

Type of financial impact driver

Reduced revenues from lower sales/output

Company- specific description

As an environmental consulting company, Arcadis already works with many our clients to varying degrees on climate-related issues. Changes in the mean average temperature will directly affect many of our clients at the local, national and international level. Like all climate related issues, this risk driver is specific to geography, as impacts associated with temperature change will affect different geographies with different intensities.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% decrease in our business would decrease revenue by €32m.

Management method

Whether its helping a water utility deal with drought, designing a building to withstand the effects of climate change, or helping a client improve resource efficiencies, pro-active planning is the best approach to mitigating the effects of climate change. Arcadis offers its clients' a full suite of climate change related services including climate change modeling, energy efficiency, resource conservation, flood and coastal protection, water management, and disaster preparedness. By offering a wide range of climate related services, staying up to date on potential impacts of climate change, working on a wide variety of projects in Water, Environment, Infrastructure, and Buildings, and global information sharing, Arcadis is best positioned to serve our clients' needs. Arcadis continually monitors climate change activity by maintaining memberships and partnerships with organizations, participating in meetings, taskforces and steering committees, and participating in key projects that help shape regulation. Our Technical

Knowledge and Innovation (TKI) Community of Practice (CoP) experts keep up to date with new developments on a routine basis, disseminating any uncertainty to senior management and individuals responsible for informing our clients on climate change related issues..

Cost of management

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Risk 14

Where in the value chain does the risk driver occur?

Customer

Risk type

Physical risk

Primary climate-related risk driver

Acute: Increased severity of extreme weather events such as cyclones and floods

Type of financial impact driver

Reduced revenues from lower sales/output

Company- specific description

As an environmental consulting company, Arcadis already works with many our clients to varying degrees on climate-related issues. Changes in temperature extremes will directly affect many of our clients, at the local, national and international level and could pose a threat to the safety of our staff working in the field or at a project site. Like all climate related issues, this risk driver is specific to geography, as impacts associated with temperature extreme will affect different geographies with different intensities.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% decrease in our business would decrease revenue by €32m.

Management method

Whether its helping a water utility deal with drought, designing a building to withstand the effects of climate change, or helping a client improve resource efficiencies, pro-active planning is the best approach to mitigating the effects of climate change. Arcadis offers its clients' a full suite of climate change related services including climate change modeling, energy efficiency, resource conservation, flood and coastal protection, water management, and disaster preparedness. By offering a wide range of climate related services, staying up to date on potential impacts of climate change, working on a wide variety of projects in Water, Environment, Infrastructure, and Buildings, and global information sharing, Arcadis is best positioned to serve our clients' needs. Arcadis continually monitors climate change activity by maintaining memberships and partnerships with organizations, participating in meetings, taskforces and steering committees, and participating in key projects that help shape regulation. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts keep up to date with new developments on a routine basis, disseminating any uncertainty to senior management and individuals responsible for informing our clients on climate change related issues.

Cost of management

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Risk 15

Where in the value chain does the risk driver occur?

Customer

Risk type

Physical risk

Primary climate-related risk driver

Chronic: Changes in precipitation patterns and extreme variability in weather patterns

Type of financial impact driver

Reduced revenues from lower sales/output

Company- specific description

As an environmental consulting company, Arcadis already works with many our clients to varying degrees on climate-related issues. Changes in the mean average precipitation will directly affect many of our clients, at the local, national and international level. Like all climate related issues, this risk driver is specific to geography, as impacts associated with precipitation change will affect different geographies with different intensities.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% decrease in our business would decrease revenue by €32m.

Management method

Whether its helping a water utility deal with drought, designing a building to withstand the effects of climate change, or helping a client improve resource efficiencies, pro-active planning is the best approach to mitigating the effects of climate change. Arcadis offers its clients' a full suite of climate change related services including climate change modeling, energy efficiency, resource conservation, flood and coastal protection, water management, and disaster preparedness. By offering a wide range of climate related services, staying up to date on potential impacts of climate change, working on a wide variety of projects in Water, Environment, Infrastructure, and Buildings, and global information sharing, Arcadis is best positioned to serve our clients' needs. Arcadis continually monitors climate change activity by maintaining memberships and partnerships with organizations, participating in meetings, taskforces and steering committees, and participating in key projects that help shape regulation. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts keep up to date with new developments on a routine basis, disseminating any uncertainty to senior management and individuals responsible for informing our clients on climate change related issues.

Cost of management

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Risk 16

Where in the value chain does the risk driver occur?

Customer

Risk type

Physical risk

Primary climate-related risk driver

Chronic: Changes in precipitation patterns and extreme variability in weather patterns

Type of financial impact driver

Reduced revenues from lower sales/output

Company- specific description

As an environmental consulting company, Arcadis already works with many our clients to varying degrees on climate-related

issues. Changes in the precipitation patterns will directly affect many of our clients, at the local, national and international level and could pose a threat to the safety of our staff working in the field or at a project site. Like all climate related issues, this risk driver is specific to geography, as impacts associated with precipitation patterns will affect different geographies with different intensities.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% decrease in our business would decrease revenue by €32m.

Management method

Whether its helping a water utility deal with drought, designing a building to withstand the effects of climate change, or helping a client improve resource efficiencies, pro-active planning is the best approach to mitigating the effects of climate change. Arcadis offers its clients' a full suite of climate change related services including climate change modeling, energy efficiency, resource conservation, flood and coastal protection, water management, and disaster preparedness. By offering a wide range of climate related services, staying up to date on potential impacts of climate change, working on a wide variety of projects in Water, Environment, Infrastructure, and Buildings, and global information sharing, Arcadis is best positioned to serve our clients' needs. Arcadis continually monitors climate change activity by maintaining memberships and partnerships with organizations, participating in meetings, taskforces and steering committees, and participating in key projects that help shape regulation. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts keep up to date with new developments on a routine basis, disseminating any uncertainty to senior management and individuals responsible for informing our clients on climate change related issues.

Cost of management

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Risk 16

Where in the value chain does the risk driver occur?

Customer

Risk type

Physical risk

Primary climate-related risk driver

Acute: Increased severity of extreme weather events such as cyclones and floods

Type of financial impact driver

Reduced revenues from lower sales/output

Company- specific description

As an environmental consulting company, Arcadis already works with many our clients to varying degrees on climate-related issues. Changes in the precipitation extremes and droughts will directly affect many of our clients, at the local, national and international level and could pose a threat to the safety of our staff working in the field or at a project site. Like all climate related issues, this risk driver is specific to geography, as impacts associated with precipitation extremes and droughts will affect different geographies with different intensities.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% decrease in our business would decrease revenue by €32m.

Management method

Whether its helping a water utility deal with drought, designing a building to withstand the effects of climate change, or helping a client improve resource efficiencies, pro-active planning is the best approach to mitigating the effects of climate change. Arcadis offers its clients' a full suite of climate change related services including climate change modeling, energy efficiency, resource conservation, flood and coastal protection, water management, and disaster preparedness. By offering a wide range of climate related services, staying up to date on potential impacts of climate change, working on a wide variety of projects in Water, Environment, Infrastructure, and Buildings, and global information sharing, Arcadis is best positioned to serve our clients' needs. Arcadis continually monitors climate change activity by maintaining memberships and partnerships with organizations, participating in meetings, taskforces and steering committees, and participating in key projects that help shape regulation. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts keep up to date with new developments on a routine basis, disseminating any uncertainty to senior management and individuals responsible for informing our clients on climate change related issues.

Cost of management

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Risk 17

Where in the value chain does the risk driver occur?

Customer

Risk type

Physical risk

Primary climate-related risk driver

Chronic: Changes in precipitation patterns and extreme variability in weather patterns

Type of financial impact driver

Reduced revenues from lower sales/output

Company- specific description

As an environmental consulting company, Arcadis already works with many our clients to varying degrees on climate-related issues. Changes in snow and ice will directly affect many of our clients, at the local, national and international level and could pose a threat to the safety of our staff working in the field or at a project site. Like all climate related issues, this risk driver is specific to geography, as impacts associated with snow and ice will affect different geographies with different intensities.

Time horizon

Long-term

Likelihood

About as likely as not

Magnitude of impact

Low

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% decrease in our business would decrease revenue by €32m.

Management method

Whether its helping a water utility deal with drought, designing a building to withstand the effects of climate change, or helping a client improve resource efficiencies, pro-active planning is the best approach to mitigating the effects of climate change. Arcadis offers its clients' a full suite of climate change related services including climate change modeling, energy efficiency, resource conservation, flood and coastal protection, water management, and disaster preparedness. By offering a wide range of climate related services, staying up to date on potential impacts of climate change, working on a wide variety of projects in Water, Environment, Infrastructure, and Buildings, and global information sharing, Arcadis is best positioned to serve our clients' needs.

Arcadis continually monitors climate change activity by maintaining memberships and partnerships with organizations, participating in meetings, taskforces and steering committees, and participating in key projects that help shape regulation. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts keep up to date with new developments on a routine basis, disseminating any uncertainty to senior management and individuals responsible for informing our clients on climate change related issues.

Cost of management

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Risk 18

Where in the value chain does the risk driver occur?

Customer

Risk type

Physical risk

Primary climate-related risk driver

Chronic: Rising sea levels

Type of financial impact driver

Reduced revenues from lower sales/output

Company- specific description

As an environmental consulting company, Arcadis already works with many our clients to varying degrees on climate-related issues. Sea level rise will directly affect some of our clients, at the local, national and international level. Like all climate related issues, this risk driver is specific to geography, as impacts associated with sea level rise will affect different geographies with different intensities.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Low

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% decrease in our business would decrease revenue by €26m³²

Management method

Whether its helping a water utility deal with drought, designing a building to withstand the effects of climate change, or helping a client improve resource efficiencies, pro-active planning is the best approach to mitigating the effects of climate change. Arcadis offers its clients' a full suite of climate change related services including climate change modeling, energy efficiency, resource conservation, flood and coastal protection, water management, and disaster preparedness. By offering a wide range of climate related services, staying up to date on potential impacts of climate change, working on a wide variety of projects in Water, Environment, Infrastructure, and Buildings, and global information sharing, Arcadis is best positioned to serve our clients' needs. Arcadis continually monitors climate change activity by maintaining memberships and partnerships with organizations, participating in meetings, taskforces and steering committees, and participating in key projects that help shape regulation. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts keep up to date with new developments on a routine basis, disseminating any uncertainty to senior management and individuals responsible for informing our clients on climate change related issues.

Cost of management

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Risk 19

Where in the value chain does the risk driver occur?

Customer

Risk type

Physical risk

Primary climate-related risk driver

Acute: Increased severity of extreme weather events such as cyclones and floods

Type of financial impact driver

Reduced revenues from lower sales/output

Company- specific description

As an environmental consulting company, Arcadis already works with many our clients to varying degrees on climate-related issues. Tropical cyclones will directly affect some of our clients, at the local, national and international level and could pose a threat to the safety of our staff working in the field or at a project site. Like all climate related issues, this risk driver is specific to geography, as impacts associated with extreme weather events will affect different geographies with different intensities.

Time horizon

Long-term

Likelihood

About as likely as not

Magnitude of impact

Low

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% decrease in our business would decrease revenue by €26m.

Management method

Whether its helping a water utility deal with drought, designing a building to withstand the effects of climate change, or helping a client improve resource efficiencies, pro-active planning is the best approach to mitigating the effects of climate change. Arcadis offers its clients' a full suite of climate change related services including climate change modeling, energy efficiency, resource conservation, flood and coastal protection, water management, and disaster preparedness. By offering a wide range of climate related services, staying up to date on potential impacts of climate change, working on a wide variety of projects in Water, Environment, Infrastructure, and Buildings, and global information sharing, ARCADIS is best positioned to serve our clients' needs. Arcadis continually monitors climate change activity by maintaining memberships and partnerships with organizations, participating in meetings, taskforces and steering committees, and participating in key projects that help shape regulation. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts keep up to date with new developments on a routine basis, disseminating any uncertainty to senior management and individuals responsible for informing our clients on climate change related issues.

Cost of management

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Risk 20

Where in the value chain does the risk driver occur?

Customer

Risk type

Physical risk

Primary climate-related risk driver

Chronic: Other

Type of financial impact driver

Reduced revenues from lower sales/output

Company- specific description

As an environmental consulting company, Arcadis already works with many our clients with issues related to changes in the availability of natural resources (e.g., water, metals, forests, fossil fuels). Changes in the availability of natural resources will directly affect many of our clients, at the local, national and international level. This risk driver is specific to geography and business, as impacts will affect different geographies and different industries with varying intensity.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% decrease in our business would decrease revenue by €32m.

Management method

Whether its helping a water utility deal with drought, designing a building to withstand the effects of climate change, or helping a client improve resource efficiencies, pro-active planning is the best approach to mitigating the effects of climate change. Arcadis offers its clients' a full suite of climate change related services including climate change modeling, energy efficiency, resource conservation, flood and coastal protection, water management, and disaster preparedness. By offering a wide range of climate related services, staying up to date on potential impacts of climate change, working on a wide variety of projects in Water, Environment, Infrastructure, and Buildings, and global information sharing, Arcadis is best positioned to serve our clients' needs. Arcadis continually monitors climate change activity by maintaining memberships and partnerships with organizations, participating in meetings, taskforces and steering committees, and participating in key projects that help shape regulation. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts keep up to date with new developments on a routine basis, disseminating any uncertainty to senior management and individuals responsible for informing our clients on climate change related issues.

Cost of management

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Risk 21

Where in the value chain does the risk driver occur?

Customer

Risk type

Physical risk

Primary climate-related risk driver

Chronic: Other

Type of financial impact driver

Reduced revenues from lower sales/output

Company- specific description

Uncertainty regarding any of the other risk factors discussed herein can affect one or more of Arcadis clients, in some cases at a local, national and global-level. Should Arcadis not be familiar with the uncertainties associated with these physical features of climate change, we will be limited in our ability to serve our client needs. This risk driver is not geographic-specific or specific to the nature of the physical change, as our practice is global and we serve clients globally on most if not all aspects of climate change implications.

Time horizon

Long-term

Likelihood

About as likely as not

Magnitude of impact

Low

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% decrease in our business would decrease revenue by €32m.

Management method

It is difficult to understand and accurately predict all physical risks associated with climate change. While Arcadis offers a full-suite of climate change related services to suite our clients' needs, we also believe in working with directly with our clients to help them understand climate change inherent risks and uncertainty. We do this through global information sharing, technical presentations, individual discussions, and facilitated workshops.

Cost of management

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Risk 22

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Reputation: Increased stakeholder concern or negative stakeholder feedback

Type of financial impact driver

Reputation: Reduced revenue from decreased demand for goods/services

Company- specific description

Arcadis is a consulting company that is deeply involved in providing expertise to clients on a variety of environmental topics including climate change. Should our own internal carbon performance be lacking or our climate related services be in line with the needs of our clients, we could suffer a reputational risk with clients and employees resulting in loss of clients and/or projects.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Medium

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% decrease in our business would decrease revenue by €32m.

Management method

Whether its helping a water utility deal with drought, designing a building to withstand the effects of climate change, or helping a client improve resource efficiencies, the environment and potential changes to our environment is embedded into everything we do. We strive to provide our clients with comprehensive solutions that provide sustainable benefit their organization and the communities and environments in which we live and work. We do this by monitoring all aspects of climate change by maintaining memberships and partnerships with key organizations, participating in meetings, taskforces and steering committees, and participating in key projects that help shape regulation. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts keep up to date in their areas of expertise, disseminating any large developments to senior management and individuals responsible for assisting our clients with climate change related matters.

Cost of management

1000000

Comment

Estimated order of magnitude cost of management is €1,000,000/year.

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Type of financial impact driver

Increased revenue through demand for lower emissions products and services

Company- specific description

Arcadis routinely works with clients to comply with air quality limits and regulations, providing our clients with regulatory compliance support experts whose expansive and diverse client-base keeps them on the cutting edge of the latest local, state, regional, national, and global trends in regulations and technology. As such, it is important to monitor changes to air pollution regulations or the imposition or relaxation of air pollution limits as they will affect our clients at the local, national, and international levels. This opportunity is geographic-specific and sector-specific, linked to the regulation itself.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Medium

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% increase in our Business Lines largely responsible for addressing regulatory compliance (Environment, Water, and Infrastructure) would increase revenue by €32m.

Strategy to realize opportunity

In order to serve our client needs and maintain a competitive advantage, Arcadis monitors changes to air quality regulations and limits at the local, national and international levels. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts responsible for regulatory compliance keep up to date with new regulations and developments on a routine basis, disseminating information to senior management and the organization as a whole.

Cost to realize opportunity

500000

Comment

Estimated order of magnitude cost of management is €500,000/year.

Identifier

Opp2

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of climate adaptation and insurance risk solutions

Type of financial impact driver

Better competitive position to reflect shifting consumer preferences, resulting in increased revenues

Company- specific description

In parts of the world, carbon taxes are already affect Arcadis clients. Understanding the imposition of carbon taxes within various jurisdictions or a change in current carbon tax regulation benefits Arcadis and our clients at the local, national, or international level. This opportunity is geographic-specific and regulation-specific.

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

Low

Potential financial impact

8000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% increase in our Environmental Business Line would increase revenue by €8m.

Strategy to realize opportunity

In order to serve our client needs and maintain a competitive advantage, Arcadis monitors carbon tax legislation at the local, national and international levels. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts engaged in carbon tax projects monitor developments on a routine basis, disseminating information to senior management and the organization as a whole. Our service offerings are updated as needed to suit changes in regulation or client needs.

Cost to realize opportunity

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Opp3

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of climate adaptation and insurance risk solutions

Type of financial impact driver

Better competitive position to reflect shifting consumer preferences, resulting in increased revenues

Company- specific description

As an environmental consulting organization, it is important to monitor changes in International Agreements on climate change, such as the Kyoto Protocol, Paris Agreement or other agreements sponsored by the UN or other authorities as it will undoubtedly affect Arcadis clients and the work we do. This opportunity is not geographic-specific or regulation-specific, as our practice is global and we serve clients globally on most if not all aspects of climate change regulations.

Time horizon

Long-term

Likelihood

About as likely as not

Magnitude of impact

Low

Potential financial impact

100000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% increase in our Environmental Business Line would increase revenue by €8m.

Strategy to realize opportunity

Arcadis continually monitors climate change activity and legislation at the local, national and international levels, including any changes in international agreements. Doing so allows us to serve our client needs and maintain a competitive advantage. Arcadis has several partnerships and memberships. These include UN Global Compact, UN-Habitat, IUCN Netherlands Leaders for Nature, Carbon Disclosure Project, World Economic Forum, and World Business Council for Sustainable Development. We participate in meetings, taskforces and steering committees in order to demonstrate our sustainability commitments, to find common grounds to address sustainability challenges, to keep up to date with important new developments and to adapt our own sustainability strategy. In 2014, ARCADIS became a member of the World Business Council for Sustainable Development (WBCSD). ARCADIS subsidiary RTKL is also a signatory to The China Accord, an industry-led coalition which pledges to plan and design built environments to carbon neutral or high-performance standards in keeping with the ambition of the Chinese authorities to improve the urban environment. We are also engaged in dialogues with leading NGO's, like IUCN and Amnesty International.

Cost to realize opportunity

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Opp4

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of climate adaptation and insurance risk solutions

Type of financial impact driver

Increased revenue through demand for lower emissions products and services

Company- specific description

In parts of the world, cap and trade schemes (carbon based as well as other air quality pollutants) already impact Arcadis clients. Monitoring cap and trade schemes or a change in existing schemes could directly benefit our clients at the local, national, or international level. This opportunity is geographic-specific and regulation-specific.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium-low

Potential financial impact

8000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% increase in our Environmental Business Line would increase revenue by €8m.

Strategy to realize opportunity

In order to serve our client needs and maintain a competitive advantage, Arcadis monitors cap and trade schemes at the local, national and international levels. This includes the EU Emissions Trading Scheme. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts involved in cap and trade monitor developments on a routine basis, disseminating information to senior management and the organization as a whole. Our service offerings are updated as needed to suit changes in regulation or client needs.

Cost to realize opportunity

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Opp5

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Type of financial impact driver

Increased revenue through new solutions to adaptation needs (e.g., insurance risk transfer products and services)

Company- specific description

Some Arcadis clients already report their emissions, driven by supporting regulations and/or voluntary initiatives. Power utilities and other large emitting industries are already required to report their emissions, particularly in Europe and North America. Emission reporting obligations are geographic-specific and regulation-specific and understanding obligation changes benefits Arcadis , as our practice is global and we serve clients globally on most if not all aspects of climate change regulations.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Low

Potential financial impact

8000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% increase in our Environmental Business Line would increase revenue by €8m.

Strategy to realize opportunity

Arcadis stays current with changes in emission reporting obligations to serve our client needs and maintain a competitive advantage. This includes mandatory reporting through EU ETS, Defra, EPA, and CARB. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts involved in emissions reporting monitor developments on a routine basis, disseminating information to senior management and the organization as a whole. Our services are updated as needed to suit changes in regulation or client needs.

Cost to realize opportunity

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Opp6

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Type of financial impact driver

Increased revenue through demand for lower emissions products and services

Company- specific description

Regulation-driven taxes on either fuel or energy already impacts Arcadis clients, particularly in the power sector. It is important for Arcadis to monitor changes to existing legislation or new legislation as it will benefit our clients. This opportunity is geographic-specific and regulation-specific.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Medium-low

Potential financial impact

8000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% increase in our Environmental Business Line would increase revenue by €8m.

Strategy to realize opportunity

In order to best serve our clients, Arcadis continually monitors changes in fuel/energy taxes and regulations. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts working on fuel/energy tax and/or regulation projects monitor developments, disseminating information to senior management and the organization as a whole. Our services are updated as needed to suit changes in regulation or client needs.

Cost to realize opportunity

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Opp7

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

Type of financial impact driver

Increased revenue through new solutions to adaptation needs (e.g., insurance risk transfer products and services)

Company- specific description

Regulations which impose energy or resource efficiency affect Arcadis clients on a routine basis at local, national, and international levels. In addition, many Arcadis clients see the value of energy/resource efficiency, imposing their own set of standards on their projects. Arcadis monitors changes in efficiency regulations/standards to best serve our client needs. This opportunity is geographic-specific and regulation-specific as our practice is global and we serve clients globally on these issues.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Medium-low

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% increase in our Business Lines addressing regulatory compliance on a routine basis (Environment, Water, and Infrastructure) would increase revenue by €32m.

Strategy to realize opportunity

Monitoring developments in product efficiency regulations and standards is paramount to our business. Many of our employees participate in meetings, taskforces and steering committees geared towards driving energy and product efficiency. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts monitor developments, disseminating information to senior management and the organization as a whole. Our services are updated as needed to suit changes in regulation or client needs.

Cost to realize opportunity

500000

Comment

Estimated order of magnitude cost of management is €500,000/year.

Identifier

Opp8

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

Type of financial impact driver

Increased revenue through demand for lower emissions products and services

Company- specific description

Product labeling regulations, for example, labeling regarding energy or resource efficiency could affect one or more of Arcadis clients, in some cases at a local, national and international level. Monitoring changes and having an understanding of the regulations which impose these labeling requirements will provide our clients with a competitive advantage. This opportunity is geographic-specific and regulation-specific as our practice is global and we serve clients globally on most if not all aspects of climate change regulations.

Time horizon

Long-term

Likelihood

About as likely as not

Magnitude of impact

Low

Potential financial impact

8000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% increase in our Environmental Business Line would increase revenue by €8m.

Strategy to realize opportunity

In order to best serve our clients, Arcadis monitors changes in product labeling regulations and standards. This includes CLS and GHS regulation. Our product labeling experts monitor developments, disseminating information to senior management and the organization as a whole. Services are updated as needed to suit changes in regulation or client needs.

Cost to realize opportunity

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Opp9

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Type of financial impact driver

Increased revenue through new solutions to adaptation needs (e.g., insurance risk transfer products and services)

Company- specific description

The voluntary agreement of governments with companies with regards climate change matters will affect one or more of Arcadis clients, in some cases at a local or national-level. Understanding voluntary agreements will allow us to better serve our client needs. This opportunity is specific to the government authority and private company involved in the voluntary agreement, at least for those agreements affecting our clients.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Low

Potential financial impact

8000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% increase in our Environmental Business Line would increase revenue by €8m.

Strategy to realize opportunity

Some of our clients already participate in voluntary carbon agreements. In order to best serve our clients, Arcadis monitors and tracks voluntary carbon agreements primarily in Europe, the UK, and the US. Some employees participate in meetings, taskforces and steering committees in order to demonstrate our sustainability commitments, find common grounds to address sustainability challenges, and keep up to date with important new developments.

Cost to realize opportunity

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Opp10

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Type of financial impact driver

Increased revenue through demand for lower emissions products and services

Company- specific description

As a leader in the environmental space, Arcadis routinely works with clients to comply with environmental regulation, providing our clients with regulatory expertise at the local, state, regional, national, and international level. Changes in environmental regulation will impact a majority if not all of our clients and therefore, it is important Arcadis monitor any changes to environmental regulation. This opportunity is geographic-specific and sector-specific, linked to the regulation itself.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium-low

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% increase in our Business Lines addressing regulatory compliance on a routine basis (Environment, Water, and Infrastructure) would increase revenue by €32m.

Strategy to realize opportunity

In order to serve our client needs and maintain a competitive advantage, ARCADIS monitors changes to environmental regulation at the local, national and international level. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts responsible for regulatory compliance keep up to date with new regulations and developments on a routine basis, disseminating information to senior management and the organization as a whole. Environmental regulation is core to our business.

Cost to realize opportunity

500000

Comment

Estimated order of magnitude cost of management is €500,000/year.

Identifier

Opp11

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

Type of financial impact driver

Increased revenue through new solutions to adaptation needs (e.g., insurance risk transfer products and services)

Company- specific description

As an environmental consulting company, Arcadis already works with many our clients to varying degrees on climate-related issues. Understanding changes in the mean average temperature will directly benefit many of our clients, at the local, national and international level. Like all climate related issues, this opportunity is specific to geography, as impacts associated with temperature change will affect different geographies with different intensities.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% increase in our business would increase revenue by €32m.

Strategy to realize opportunity

Whether its helping a water utility deal with drought, designing a building to withstand the effects of climate change, or helping a client improve resource efficiencies, pro-active planning is the best approach to mitigating the effects of climate change. Arcadis offers its clients' a full suite of climate change related services including climate change modeling, energy efficiency, resource conservation, flood and coastal protection, water management, and disaster preparedness. By offering a wide range of climate

related services, staying up to date on potential impacts of climate change, working on a wide variety of projects in Water, Environment, Infrastructure, and Buildings, and global information sharing, Arcadis will continue to be positioned to serve our clients' needs. Arcadis continually monitors climate change activity by maintaining memberships and partnerships with organizations, participating in meetings, taskforces and steering committees, and participating in key projects that help shape regulation. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts keep up to date with new developments on a routine basis, disseminating any uncertainty to senior management and individuals responsible for informing our clients on climate change related issues.

Cost to realize opportunity

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Opp12

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

Type of financial impact driver

Increased revenue through new solutions to adaptation needs (e.g., insurance risk transfer products and services)

Company- specific description

As an environmental consulting company, Arcadis already works with many our clients to varying degrees on climate-related issues. Monitoring changes in temperature extremes will directly benefit many of our clients, at the local, national and international level. Considering temperature extremes in our Health & Safety plans will continue to keep our staff safe when working in the field or at project sites. Like all climate related issues, this opportunity is specific to geography, as impacts associated with temperature extreme will affect different geographies with different intensities.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% increase in our business would increase revenue by €32m.

Strategy to realize opportunity

Whether its helping a water utility deal with drought, designing a building to withstand the effects of climate change, or helping a client improve resource efficiencies, pro-active planning is the best approach to mitigating the effects of climate change. Arcadis offers its clients' a full suite of climate change related services including climate change modeling, energy efficiency, resource conservation, flood and coastal protection, water management, and disaster preparedness. By offering a wide range of climate related services, staying up to date on potential impacts of climate change, working on a wide variety of projects in Water, Environment, Infrastructure, and Buildings, and global information sharing, Arcadis will continue to be positioned to serve our clients' needs. Arcadis continually monitors climate change activity by maintaining memberships and partnerships with organizations, participating in meetings, taskforces and steering committees, and participating in key projects that help shape regulation. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts keep up to date with new developments on a routine basis, disseminating any uncertainty to senior management and individuals responsible for informing our clients on climate change related issues.

Cost to realize opportunity

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Opp13

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

Type of financial impact driver

Increased revenue through new solutions to adaptation needs (e.g., insurance risk transfer products and services)

Company- specific description

As an environmental consulting company, Arcadis already works with many our clients to varying degrees on climate-related issues. Understanding changes in the mean average precipitation will directly benefit many of our clients, at the local, national and international level. Like all climate related issues, this opportunity is specific to geography, as impacts associated with precipitation change will affect different geographies with different intensities.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% increase in our business would increase revenue by €32m.

Strategy to realize opportunity

Whether its helping a water utility deal with drought, designing a building to withstand the effects of climate change, or helping a client improve resource efficiencies, pro-active planning is the best approach to mitigating the effects of climate change. Arcadis offers its clients' a full suite of climate change related services including climate change modeling, energy efficiency, resource conservation, flood and coastal protection, water management, and disaster preparedness. By offering a wide range of climate related services, staying up to date on potential impacts of climate change, working on a wide variety of projects in Water, Environment, Infrastructure, and Buildings, and global information sharing, Arcadis will continue to be positioned to serve our clients' needs. Arcadis continually monitors climate change activity by maintaining memberships and partnerships with organizations, participating in meetings, taskforces and steering committees, and participating in key projects that help shape regulation. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts keep up to date with new developments on a routine basis, disseminating any uncertainty to senior management and individuals responsible for informing our clients on climate change related issues.

Cost to realize opportunity

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Opp14

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

Type of financial impact driver

Increased revenue through new solutions to adaptation needs (e.g., insurance risk transfer products and services)

Company- specific description

As an environmental consulting company, Arcadis already works with many our clients to varying degrees on climate-related issues. Monitoring changes in the precipitation patterns will directly benefit many of our clients, at the local, national and international level. Considering changes in precipitation patterns in our Health & Safety plans will continue to keep our staff safe when working in the field or at project sites. Like all climate related issues, this opportunity is specific to geography, as impacts associated with precipitation patterns will affect different geographies with different intensities.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium

Potential financial impact

32000000

Explanation of financial impact

Financial implications will vary. A 1% increase in our business would increase revenue by €32m.

Strategy to realize opportunity

Whether its helping a water utility deal with drought, designing a building to withstand the effects of climate change, or helping a client improve resource efficiencies, pro-active planning is the best approach to mitigating the effects of climate change. Arcadis offers its clients' a full suite of climate change related services including climate change modeling, energy efficiency, resource conservation, flood and coastal protection, water management, and disaster preparedness. By offering a wide range of climate related services, staying up to date on potential impacts of climate change, working on a wide variety of projects in Water, Environment, Infrastructure, and Buildings, and global information sharing, Arcadis will continue to be positioned to serve our clients' needs. Arcadis continually monitors climate change activity by maintaining memberships and partnerships with organizations, participating in meetings, taskforces and steering committees, and participating in key projects that help shape regulation. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts keep up to date with new developments on a routine basis, disseminating any uncertainty to senior management and individuals responsible for informing our clients on climate change related issues.

Cost to realize opportunity

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Opp15

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

Type of financial impact driver

Increased revenue through new solutions to adaptation needs (e.g., insurance risk transfer products and services)

Company- specific description

As an environmental consulting company, Arcadis already works with many our clients to varying degrees on climate-related issues. Monitoring changes in the precipitation extremes and droughts will directly benefit many of our clients, at the local, national and international level. Considering areas prone to precipitation extremes in our Health & Safety plans will continue to keep our staff safe when working in the field or at project sites. Like all climate related issues, this opportunity is specific to geography, as impacts associated with precipitation extremes and droughts will affect different geographies with different intensities.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium

Potential financial impact

32000000

Explanation of financial impact

Financial implications will vary. A 1% increase in our business would increase revenue by €32m.

Strategy to realize opportunity

Whether its helping a water utility deal with drought, designing a building to withstand the effects of climate change, or helping a client improve resource efficiencies, pro-active planning is the best approach to mitigating the effects of climate change. Arcadis offers its clients' a full suite of climate change related services including climate change modeling, energy efficiency, resource conservation, flood and coastal protection, water management, and disaster preparedness. By offering a wide range of climate related services, staying up to date on potential impacts of climate change, working on a wide variety of projects in Water, Environment, Infrastructure, and Buildings, and global information sharing, Arcadis will continue to be positioned to serve our clients' needs. Arcadis continually monitors climate change activity by maintaining memberships and partnerships with organizations, participating in meetings, taskforces and steering committees, and participating in key projects that help shape regulation. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts keep up to date with new developments on a routine basis, disseminating any uncertainty to senior management and individuals responsible for informing our clients on climate change related issues.

Cost to realize opportunity

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Opp16

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Other

Type of financial impact driver

Other, please specify (Increased demand for goods and services)

Company- specific description

As an environmental consulting company, Arcadis already works with many our clients with issues related to changes in the availability of natural resources (e.g., water, metals, forests, fossil fuels). Understanding changes in the availability of natural resources will directly benefit many of our clients, at the local, national and international level. This opportunity is specific to geography and business, as impacts will affect different geographies and different industries with varying intensity.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% increase in our business would increase revenue by €32m.

Strategy to realize opportunity

Whether its helping a water utility deal with drought, designing a building to withstand the effects of climate change, or helping a

client improve resource efficiencies, pro-active planning is the best approach to mitigating the effects of climate change. Arcadis offers its clients' a full suite of climate change related services including climate change modeling, energy efficiency, resource conservation, flood and coastal protection, water management, and disaster preparedness. By offering a wide range of climate related services, staying up to date on potential impacts of climate change, working on a wide variety of projects in Water, Environment, Infrastructure, and Buildings, and global information sharing, Arcadis will continue to be positioned to serve our clients' needs. Arcadis continually monitors climate change activity by maintaining memberships and partnerships with organizations, participating in meetings, taskforces and steering committees, and participating in key projects that help shape regulation. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts keep up to date with new developments on a routine basis, disseminating any uncertainty to senior management and individuals responsible for informing our clients on climate change related issues.

Cost to realize opportunity

100000

Comment

Estimated order of magnitude cost of management is €100,000/year.

Identifier

Opp17

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Markets

Primary climate-related opportunity driver

Access to new markets

Type of financial impact driver

Increased revenues through access to new and emerging markets (e.g., partnerships with governments, development banks)

Company- specific description

Arcadis is a consulting company that is deeply involved in providing expertise to clients on a variety of environmental topics including climate change. Arcadis has the opportunity to increase its reputation in our marketplace by enhancing our ability to serve clients at a high performance level for issues associated with climate change.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Medium

Potential financial impact

32000000

Explanation of financial impact

Order of magnitude estimate. Financial implications will vary. A 1% increase in our business would increase revenue by €32m.

Strategy to realize opportunity

Whether its helping a water utility deal with drought, designing a building to withstand the effects of climate change, or helping a client improve resource efficiencies, the environment and potential changes to our environment is embedded into everything we do. We strive to provide our clients with comprehensive solutions that provide sustainable benefit their organization and the communities and environments in which we live and work. We do this by monitoring all aspects of climate change by maintaining memberships and partnerships with key organizations, participating in meetings, taskforces and steering committees, and participating in key projects that help shape regulation. Our Technical Knowledge and Innovation (TKI) Community of Practice (CoP) experts keep up to date in their areas of expertise, disseminating any large developments to senior management and individuals responsible for assisting our clients with climate change related matters.

Cost to realize opportunity

1000000

Comment

Estimated order of magnitude cost of management is €1,000,000/year.

C2.5

(C2.5) Describe where and how the identified risks and opportunities have impacted your business.

	Impact	Description
Products and services	Impacted for some suppliers, facilities, or product lines	Climate risks and opportunities have increased demand for engineering services (e.g., sustainable design, increased energy efficiency).
Supply chain and/or value chain	Impacted for some suppliers, facilities, or product lines	Climate risks and opportunities have improved communication between Arcadis and its supply chain (up and downstream).
Adaptation and mitigation activities	Impacted for some suppliers, facilities, or product lines	Climate risks and opportunities have increased demand from our clients for more sustainable design.
Investment in R&D	Impacted for some suppliers, facilities, or product lines	Climate risks and opportunities have increased client demand for sustainable design driving investment in R&D and innovation.
Operations	Impacted for some suppliers, facilities, or product lines	Climate risks and opportunities have improved Arcadis internal operations and carbon footprint.
Other, please specify	Please select	

C2.6

(C2.6) Describe where and how the identified risks and opportunities have factored into your financial planning process.

	Relevance	Description
Revenues	Impacted for some suppliers, facilities, or product lines	Climate risks and opportunities have increased revenue through climate related engineering services.
Operating costs	Impacted for some suppliers, facilities, or product lines	Climate risks and opportunities have decreased operational costs through internal environmental conservation initiatives.
Capital expenditures / capital allocation	Impacted for some suppliers, facilities, or product lines	Climate risks and opportunities have been used to inform decisions concerning capital expenditures / capital allocation.
Acquisitions and divestments	Impacted for some suppliers, facilities, or product lines	Climate risks and opportunities have been used to inform decisions concerning acquisitions and divestments.
Access to capital	Impacted for some suppliers, facilities, or product lines	Climate risks and opportunities have been used to inform decisions concerning access to capital.
Assets	Impacted for some suppliers, facilities, or product lines	Climate risks and opportunities have been used to inform decisions concerning assets.
Liabilities	Impacted for some suppliers, facilities, or product lines	Climate risks and opportunities have been used to inform decisions concerning liabilities.
Other	Please select	

C3. Business Strategy

C3.1

(C3.1) Are climate-related issues integrated into your business strategy?

Yes

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?

Yes, qualitative and quantitative

C3.1c

(C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.

At a global-level, our Strategy is formally updated on a three-year cycle, with annual review and consideration of short-term changes, if any are required.

CLIMATE CHANGE

Arcadis has broad consulting capabilities related to climate change. This ranges from strategy development and carbon footprint reporting to consulting on preventing or reducing the causes of climate change. The Paris climate accord represents a significant opportunity for Arcadis, as it requires both governments and private companies to take steps to significantly reduce carbon outputs over the next decades.

In response to this development, Arcadis developed a Sustainability and Climate Change strategy within our strategic environmental consulting activities. This bundles our sustainability and climate change activities under a combined offer, thereby creating better access to these capabilities for clients, and more visibility for our extensive knowledge base in this area. Our strength in sustainability and climate change consulting mainly lies in helping clients address these issues in their operations to create a lasting positive impact. This can range from climate change mitigation strategies in supply chains and energy efficiency solutions in industrial processes, all the way through to embedded carbon analysis in material choices and energy efficient designs in buildings and infrastructure.

For many of our industrial clients, climate change has a major impact on their assets and liabilities. Given the consulting nature of our activities, this impact is negligible for Arcadis and therefore not listed as a risk to the firm, but rather as an opportunity. However, where possible, the Company is addressing climate change in its operations through actions directed at reducing its carbon footprint.

C3.1d

(C3.1d) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios	Details
Other, please specify (Situation dependent, see details)	Intelligent risk management plays a vital role in enabling Arcadis to achieve its long-term strategic objectives. After potential risks are identified, they are analyzed to determine the likelihood and magnitude of impact to the organization. The process for analyzing climate related risks varies and could include any or all of the following: literature reviews, market studies, materiality assessments, and/or desktop evaluations / modeling.

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Scope

Scope 1 +2 (market-based)

% emissions in Scope

21

% reduction from base year

30

Base year

2010

Start year

2012

Base year emissions covered by target (metric tons CO₂e)

8348

Target year

2020

Is this a science-based target?

No, but we anticipate setting one in the next 2 years

% achieved (emissions)

100

Target status

Underway

Please explain

Arcadis' global position on targets focuses on a process of continuous improvement within its environmental metrics, similar to that done in our Health & Safety approach (with considerable success). In 2015, the Netherlands achieved its 2012-2015 emissions reduction goals previously set and updated its goals to reflect a longer term vision of continuous improvement (30% reduction compared against its 2010 baseline year). In 2016, Arcadis began assessing whether these rigorous goals aligned with science-based targets which is anticipated to continue into 2018. To date, the Netherlands achieved its goal (50% reduction compared against its 2010 baseline year).

C4.2

(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.

Target

Renewable energy consumption

KPI – Metric numerator

Percent renewable electricity consumption

KPI – Metric denominator (intensity targets only)

Base year

2014

Start year

2014

Target year

2020

KPI in baseline year

42

KPI in target year

100

% achieved in reporting year

84

Target Status

Underway

Please explain

In recent years Arcadis Netherlands and some other countries in the region have been purchasing part of its electricity from “Green” sources. Green Power is, in the case of Netherlands, power from wind energy with the Dutch environmental quality label for sustainable products and services (SMK). In 2014 this was approximately 42% of the total amount of electricity purchased. For 2020 the ambition is to consume 100% Green Power (with quality label) of which a portion will be self-generated. In 2017, Arcadis Netherlands consumed 84% green electricity of which 3% was self-generated.

Part of emissions target

Is this target part of an overarching initiative?

Please select

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	5	66000
To be implemented*	8	4000
Implementation commenced*	8	8000
Implemented*	2	4000
Not to be implemented	0	

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Activity type

Process emissions reductions

Description of activity

Changes in operations

Estimated annual CO2e savings (metric tonnes CO2e)

500

Scope

Scope 1

Scope 3

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

1000000

Investment required (unit currency – as specified in CC0.4)

100000

Payback period

<1 year

Estimated lifetime of the initiative

Ongoing

Comment

REDUCING EMPLOYEE COMMUTING Arcadis encourages its employees to cycle, walk, and carpool to work and hold virtual meetings when possible. The estimated savings is based on activities within the Arcadis reporting boundaries and does not include emissions from employees commuting. Monetary savings and investments are order of magnitude estimates. Depending on the region and specific program, employees can receive incentives when alternative forms of travel are used. Some employees also take advantage of working from home, eliminating the use of transport all together. Commuting to and from work is not included within the ARCADIS reporting boundaries but does result in overall emission reductions. When possible, new offices are located near rail stations and easily accessible through use of public transport. Home working is supported through the agile working set up. The utilization of video and tele-conferencing is encouraged and facilities are accessible across all offices. In the Netherlands, the CARS project was started. Through the intranet employees can see where colleagues live and are going and whether they could travel together. A variety of similar initiatives are in varying stages of implementation throughout the organization.

Activity type

Energy efficiency: Building fabric

Description of activity

Other, please specify (Sustainable Offices)

Estimated annual CO2e savings (metric tonnes CO2e)

500

Scope

Scope 1

Scope 2 (market-based)

Scope 3

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

100000

Investment required (unit currency – as specified in CC0.4)

10000

Payback period

<1 year

Estimated lifetime of the initiative

Ongoing

Comment

SUSTAINABLE OFFICES Arcadis incorporates energy reduction principles into the work place by embarking on an office program centered around environmental sustainability and creating a positive working environment for employees. The program identifies key components of environmental sustainability that should be considered when leasing new office spaces. The estimated savings is based on Scope 2 activities but is likely to have benefits on Scope 1 and 3 activities (reduce travel) as well. Monetary savings and investments are order of magnitude estimates. Many factors are considered when selecting building locations including proximity to clients and employee residences. A variety of similar initiatives are in varying stages of implementation throughout the organization.

Activity type

Process emissions reductions

Description of activity

New equipment

Estimated annual CO2e savings (metric tonnes CO2e)

500

Scope

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

100000

Investment required (unit currency – as specified in CC0.4)

10000

Payback period

<1 year

Estimated lifetime of the initiative

Ongoing

Comment

LEASING GREENER VEHICLES Some Arcadis office lease company vehicles. Working in collaboration with the leasing organizations, Arcadis strives for a fuel efficient fleet by offering management incentives to lease fuel efficient vehicles. In some cases, a "tax" is placed on vehicles with low fuel efficiencies. The surcharge is levied in addition to the individual's personal contribution and ranges from €30 to €120, depending on the vehicle's energy label. Other office are working to offer employees greener choices when hiring vehicles. The estimated savings is based on Scope 1 activities. Monetary savings and investments are order of magnitude estimates. A variety of similar initiatives are in varying stages of implementation throughout the organization.

Activity type

Other, please specify (Behavioral Change)

Description of activity

<Not Applicable>

Estimated annual CO2e savings (metric tonnes CO2e)

20

Scope

Scope 3

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

10000

Investment required (unit currency – as specified in CC0.4)

1000

Payback period

<1 year

Estimated lifetime of the initiative

Ongoing

Comment

PAPER REDUCTION AND OFFICE RECYCLING Employees are encouraged to print only as needed and double-sided. The reduction effort also encourages employees to work with clients to produce electronic reports and invoices. The plan also includes review and rationalization of printers, replacing older machines with more efficient newer models. Systems are in place to collate and report accurate paper usage and spend, the data are used to establish a benchmark and reported internally. New recycling programs are being implemented throughout Arcadis offices every year. The number of offices with recycling programs continues to increase along with the number of items that can be recycled (i.e., batteries and e-waste). These emission reductions do not fall within the Arcadis reporting boundaries but result in emission reductions. Annual carbon savings from paper reduction efforts has been estimated but due to the magnitude of emissions, is not included within Arcadis Scope 3 reporting boundaries at this time. Monetary savings and investments are order of magnitude estimates. A variety of similar initiatives are in varying stages of implementation throughout the organization.

Activity type

Low-carbon energy purchase

Description of activity

Other, please specify (Renewable Energy Purchase / Consumption)

Estimated annual CO2e savings (metric tonnes CO2e)

500

Scope

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

10000

Investment required (unit currency – as specified in CC0.4)

10000

Payback period

<1 year

Estimated lifetime of the initiative

6-10 years

Comment

RENEWABLE ENERGY PURCHASE / CONSUMPTION Some offices and operating companies set goals to purchase a portion of their energy from renewable energy suppliers. Additionally, some offices elect to generate renewable energy onsite. These initiatives are site-specific. Arcadis Netherlands and other countries and offices purchase green power. Arcadis Netherlands purchases SMK certified green power. Arcadis is in the process of reviewing other green purchase agreements to verify conformance with green energy standards. Indirect monetary savings and investments are order of magnitude estimates.

Activity type

Energy efficiency: Building services

Description of activity

Other, please specify (Sustainable Offices)

Estimated annual CO2e savings (metric tonnes CO2e)

500

Scope

Scope 1

Scope 2 (market-based)

Scope 3

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

100000

Investment required (unit currency – as specified in CC0.4)

10000

Payback period

1-3 years

Estimated lifetime of the initiative

Ongoing

Comment

SUSTAINABLE OFFICES Arcadis incorporates energy reduction principles into the work place by embarking on an office program centered around environmental sustainability and creating a positive working environment for employees. The program identifies key components of environmental sustainability that should be considered when leasing new office spaces. The estimated savings is based on Scope 2 activities but is likely to have benefits on Scope 1 and 3 activities (reduce travel) as well. Monetary savings and investments are order of magnitude estimates. Many factors are considered when selecting building locations including proximity to clients and employee residences. A variety of similar initiatives are in varying stages of implementation throughout the organization.

Activity type

Energy efficiency: Processes

Description of activity

Other, please specify (Sustainable Offices)

Estimated annual CO2e savings (metric tonnes CO2e)

500

Scope

Scope 1

Scope 2 (market-based)

Scope 3

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

100000

Investment required (unit currency – as specified in CC0.4)

10000

Payback period

1-3 years

Estimated lifetime of the initiative

Ongoing

Comment

SUSTAINABLE OFFICES Arcadis incorporates energy reduction principles into the work place by embarking on an office program centered around environmental sustainability and creating a positive working environment for employees. The program identifies key components of environmental sustainability that should be considered when leasing new office spaces. The estimated savings is based on Scope 2 activities but is likely to have benefits on Scope 1 and 3 activities (reduce travel) as well. Monetary savings and investments are order of magnitude estimates. Many factors are considered when selecting building locations including proximity to clients and employee residences. A variety of similar initiatives are in varying stages of implementation throughout the organization.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Internal incentives/recognition programs	
Employee engagement	
Dedicated budget for energy efficiency	
Compliance with regulatory requirements/standards	
Dedicated budget for other emissions reduction activities	

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation

Group of products

Description of product/Group of products

Arcadis works with our clients to solve some of the biggest issues facing our world – megatrends that impact us all – such as sustainability, urbanization, asset productivity, resource scarcity, and climate change. We do that by delivering comprehensive solutions that provide sustainable benefit to our clients, and the communities and environments in which we live and work. Often the solutions enable our clients' GHG emissions to be reduced or avoided. Our Water Business Line focuses on providing clients with the most energy-efficient water supply, transmission, treatment, recycling and discharge systems to our clients. Where feasible, we incorporate energy efficient pumps into our water designs. Our Water Business line also works with wastewater clients to capture and burn methane emissions generated from wastewater treatment processes. In our Environment Business Line, we assist clients in developing climate strategies and inventories for quantifying and addressing emission sources (carbon footprinting). In many cases, this involves switching to cleaner sources of energy and improving the efficiency of industrial processes. In our Buildings Business Line, we provide our clients with energy efficiency expertise and Sustainable Design of Buildings in recognition of LEED and other National sustainable design concepts. Providing renewable energy (e.g., wind, hydroelectric, solar, biomass) expertise and design services has helped clients move to more sustainable energy sources for their processes. In the UK, a dedicated sustainability team and Whole Life Costing team work across industry sectors and with a range of clients seeking to understand the whole life carbon and cost implications of different materials and building specifications. The teams support clients by helping them understand the cost and material impact of decisions they make. This team has also developed a "dual-currency" model that explicitly focuses on the carbon and cost impact of different building systems. At present, Arcadis quantifies avoided emissions as warranted by specific projects. Arcadis has started collaborating with some of its clients to offset emissions resulting from project-related work. The generation of CERs or ERUs within the framework of CDM or JI (UNFCCC) has not been considered at the corporate level at present.

Are these low-carbon product(s) or do they enable avoided emissions?

Low-carbon product and avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Please select

% revenue from low carbon product(s) in the reporting year

Comment

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start

January 1 2008

Base year end

December 31 2008

Base year emissions (metric tons CO2e)

20158

Comment

Scope 2 (location-based)

Base year start

January 1 2008

Base year end

December 31 2008

Base year emissions (metric tons CO2e)

33419

Comment

Scope 2 (market-based)

Base year start

January 1 2008

Base year end

December 31 2008

Base year emissions (metric tons CO2e)

33419

Comment

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Row 1

Gross global Scope 1 emissions (metric tons CO2e)

12164

End-year of reporting period

<Not Applicable>

Comment

Row 2

Gross global Scope 1 emissions (metric tons CO2e)

13478

End-year of reporting period

2016

Comment

Row 3

Gross global Scope 1 emissions (metric tons CO2e)

15600

End-year of reporting period

2015

Comment

Row 4

Gross global Scope 1 emissions (metric tons CO2e)

15572

End-year of reporting period

2014

Comment

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Row 1

Scope 2, location-based

22453

Scope 2, market-based (if applicable)

21004

End-year of reporting period

<Not Applicable>

Comment

Row 2

Scope 2, location-based

21653

Scope 2, market-based (if applicable)

20929

End-year of reporting period

2016

Comment

Row 3

Scope 2, location-based

25971

Scope 2, market-based (if applicable)

25247

End-year of reporting period

2015

Comment

Row 4

Scope 2, location-based

28792

Scope 2, market-based (if applicable)

28068

End-year of reporting period

2014

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source

Emissions from portions of Romania, Slovakia, Italy, UAE, Peru, Canada, Russia, Oman, India, Virgin Islands, and Puerto Rico

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)

Emissions are not relevant

Explain why the source is excluded

Leased vehicle and electricity emissions are estimated to be less than 2% of the total emissions.

Source

Executive offices with less than 10 employees

Relevance of Scope 1 emissions from this source

No emissions excluded

Relevance of location-based Scope 2 emissions from this source

Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)

Emissions are not relevant

Explain why the source is excluded

Electricity emissions are estimated to be less than 1% of the total emissions.

Source

CH4 and N2O vehicle emission in select countries

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

No emissions excluded

Relevance of market-based Scope 2 emissions from this source (if applicable)

No emissions excluded

Explain why the source is excluded

Leased vehicle CH4 and N2O emissions are estimated to be less than 1% of the total emissions.

Source

Miscellaneous office equipment (refrigerators and fire extinguishers)

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

No emissions excluded

Relevance of market-based Scope 2 emissions from this source (if applicable)

No emissions excluded

Explain why the source is excluded

Emissions from office equipment (CO2 and HFCs) are estimated to be less than 1% of the total emissions.

Source

Heat, steam and cooling from select offices

Relevance of Scope 1 emissions from this source

No emissions excluded

Relevance of location-based Scope 2 emissions from this source

Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)

Emissions are not relevant

Explain why the source is excluded

Inquiries indicated that a majority of offices (if not all of them) utilized electricity, natural gas, and/or fuel oil for heating and cooling. Emissions from any offices utilizing heat, steam, or cooling methods other than those described above are estimated to be less than 1% of the total emissions.

Source

Portions of former Hyder Middle East and Asia operations

Relevance of Scope 1 emissions from this source

Emissions excluded due to recent acquisition

Relevance of location-based Scope 2 emissions from this source

Emissions excluded due to recent acquisition

Relevance of market-based Scope 2 emissions from this source (if applicable)

Emissions excluded due to recent acquisition

Explain why the source is excluded

Former Hyder was acquired in late 2014. Between 2015 and 2017, Arcadis' footprint was updated to reflect a majority of Hyder operations. The few remaining Middle East and Asia operations are anticipated in 2018.

C6.5

(C6.5) Account for your organization's Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Paper is one of Arcadis' largest purchased good. Emissions resulting from paper production are estimated to be de minimis and not included within Arcadis reporting boundaries.

Capital goods

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Arcadis leases its infrastructure and major equipment. Emissions resulting from the manufacture of capital goods are estimated to be de minimis and not included within Arcadis reporting boundaries.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

1067

Emissions calculation methodology

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition) and WBCSD Corporate Value Chain (Scope 3) Accounting and Reporting Standard

Percentage of emissions calculated using data obtained from suppliers or value chain partners

60

Explanation

Some leased buildings use natural gas and fuel oil for heating. Associated emissions have been included in Scope 3.

Upstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Metric tonnes CO₂e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Emissions resulting from upstream transportation and distribution are estimated to be de minimis and not included within Arcadis reporting boundaries.

Waste generated in operations

Evaluation status

Not relevant, explanation provided

Metric tonnes CO₂e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Emissions resulting from waste generated in operations are estimated to be de minimis and not included within Arcadis reporting boundaries.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

31933

Emissions calculation methodology

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition) and WBCSD Corporate Value Chain (Scope 3) Accounting and Reporting Standard

Percentage of emissions calculated using data obtained from suppliers or value chain partners

90

Explanation

Arcadis includes emissions associated with business travel from rental cars, reimbursed personal vehicles, air travel, and the use of public transportation in its Scope 3 emission calculations.

Employee commuting

Evaluation status

Not relevant, explanation provided

Metric tonnes CO₂e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Emissions resulting from employee commuting are not included within Arcadis reporting boundaries (operational control).

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO₂e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Emissions resulting from leased assets are included in Arcadis' Scope 2 reporting boundaries (operational control).

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Metric tonnes CO₂e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Emissions resulting from package delivery is tracked in United States but are not included within Arcadis reporting boundaries at this time (de minimis).

Processing of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO₂e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Emissions resulting from processing of sold products are estimated to be de minimis and are not included within Arcadis reporting boundaries.

Use of sold products

Evaluation status

Relevant, not yet calculated

Metric tonnes CO₂e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Emissions resulting from Arcadis-designed infrastructure are tracked on a project by project basis as requested by clients but are not included within Arcadis reporting boundaries at this time.

End of life treatment of sold products

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Emissions resulting from end of life treatment of Arcadis-designed infrastructure are not included within Arcadis reporting boundaries at this time.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Any assets leased through Arcadis are estimated to be de minimis and not included in the Arcadis reporting boundaries.

Franchises

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Arcadis is not a franchise organization.

Investments

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Emissions resulting from investments are estimated to be de minimis and are not included in Arcadis reporting boundaries.

Other (upstream)

Evaluation status

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Other (downstream)

Evaluation status

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

C6.7

(C6.7) Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

Yes

C6.7a

(C6.7a) Provide the emissions from biologically sequestered carbon relevant to your organization in metric tons CO2.

65

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.0000103

Metric numerator (Gross global combined Scope 1 and 2 emissions)

33168

Metric denominator

unit total revenue

Metric denominator: Unit total

3219000000

Scope 2 figure used

Market-based

% change from previous year

0

Direction of change

No change

Reason for change

Emissions and revenue decreased proportionally (3%)

Intensity figure

1.21

Metric numerator (Gross global combined Scope 1 and 2 emissions)

33168

Metric denominator

full time equivalent (FTE) employee

Metric denominator: Unit total

27327

Scope 2 figure used

Market-based

% change from previous year

4

Direction of change

Decreased

Reason for change

The average number of employees increased by 1 percent while Scope 1 and 2 emissions decreased by 3 percent due to decreased revenue and emission reduction activities implemented during the year primarily through increased office space utilization and efforts to reduce travel.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization have greenhouse gas emissions other than carbon dioxide?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	12112	IPCC Second Assessment Report (SAR - 100 year)
CH4	13	IPCC Second Assessment Report (SAR - 100 year)
N2O	39	IPCC Second Assessment Report (SAR - 100 year)
HFCs	0	IPCC Second Assessment Report (SAR - 100 year)
PFCs	0	IPCC Second Assessment Report (SAR - 100 year)
SF6	0	IPCC Second Assessment Report (SAR - 100 year)
NF3	0	IPCC Second Assessment Report (SAR - 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
Belgium	1377
Brazil	69
Chile	0
France	533
Germany	1134
Netherlands	3775
Czechia	72
Poland	245
United Kingdom of Great Britain and Northern Ireland	441
North America	3988
Australia	254
Middle East	6
Other, please specify (Asia)	270

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division

By activity

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
Asia	271
Australia	254
Europe	7576
Latin America	69
Middle East	6
North America	3983
CallisonRTKL	5

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Leased vehicle travel for business purposes	10774
Leased vehicle travel for office commuting and personal reasons	1390

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Belgium	140	117		
Brazil	262	262		
Chile	309	309		
France	59	38		
Germany	356	235		
Netherlands	1636	444		
Czechia	24	24		
Poland	61	61		
United Kingdom of Great Britain and Northern Ireland	1803	1803		
North America	13645	13645		
Australia	848	848		
Other, please specify (Asia)	2943	2943		
Middle East	276	276		

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

- By business division
- By activity

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Asia	2348	2348
Australia	848	848
Europe	3874	2425
Latin America	571	571
Middle East	276	276
North America	10288	10288
CallisonRTKL	4249	4249

C7.6c

(C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Activity	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Electricity consumption	22453	21004

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	725	Decreased	2	Increase in renewable energy consumption decreased emissions by 725 MT CO2e (2%).
Other emissions reduction activities	300	Decreased	1	Due to emission reduction activities implemented throughout the year, emissions have not grown as high as could be expected. Last year, an estimated 300 tCO2e were reduced by our Scope 1 and 2 emissions reduction projects ($300 / 34,407 * 100 = 2\%$).
Divestment	0	No change	0	As per the GHG protocol, the baseline and previous reporting years were updated for any divestments that occurred in 2017. As per the protocol, previous reporting years were NOT updated as a result of organic growth.
Acquisitions	0	No change	0	As per the GHG protocol, the baseline and previous reporting years emissions were updated acquisitions that occurred in 2017. As per the protocol, previous reporting years were NOT updated as a result of organic growth.
Mergers	0	No change	0	As per the GHG protocol, the baseline and previous reporting years were updated for any mergers that occurred in 2017. As per the protocol, previous reporting years were NOT updated as a result of organic growth.
Change in output	214	Decreased	1	In 2017, remaining decrease in emissions was attributed change in output ($34,407 - 33,168 - 725 - 300 = 214$ tCO2e or 1%).
Change in methodology	0	No change	0	As per the GHG protocol, the baseline and previous reporting years were updated for any change in methodology that occurred in 2017. As per the protocol, previous reporting years were NOT updated as a result of organic growth.
Change in boundary	0	No change	0	The reporting methodology remained the same in 2017.
Change in physical operating conditions	0	No change	0	The reporting methodology remained the same in 2017.
Unidentified		<Not Applicable>		
Other		<Not Applicable>		

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertakes this energy-related activity
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	Yes
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	Yes
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization’s energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	436	54771	55207
Consumption of purchased or acquired electricity	<Not Applicable>	3370	39430	42800
Consumption of purchased or acquired heat	<Not Applicable>	0	300	300
Consumption of purchased or acquired steam	<Not Applicable>	0	300	300
Consumption of purchased or acquired cooling	<Not Applicable>	0	600	600
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	119	<Not Applicable>	119
Total energy consumption	<Not Applicable>	3925	95401	99326

C8.2b

(C8.2b) Select the applications of your organization’s consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	No
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks)

Motor Gasoline

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

35803

MWh fuel consumed for the self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Fuels (excluding feedstocks)

Diesel

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

15987

MWh fuel consumed for the self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Fuels (excluding feedstocks)

Liquefied Petroleum Gas (LPG)

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

2982

MWh fuel consumed for the self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Fuels (excluding feedstocks)

Other, please specify (Ethanol)

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

436

MWh fuel consumed for the self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

C8.2d

(C8.2d) List the average emission factors of the fuels reported in C8.2c.

Diesel

Emission factor

2.68

Unit

kg CO2e per liter

Emission factor source

World Resources Institute (2008). GHG Protocol Tool for Mobile Combustion. Version 2.0

Comment

Liquefied Petroleum Gas (LPG)

Emission factor

1.53

Unit

kg CO2e per liter

Emission factor source

World Resources Institute (2008). GHG Protocol Tool for Mobile Combustion. Version 2.0

Comment

Motor Gasoline

Emission factor

2.33

Unit

kg CO2e per liter

Emission factor source

World Resources Institute (2008). GHG Protocol Tool for Mobile Combustion. Version 2.0

Comment

Other

Emission factor

1.47

Unit

kg CO2e per liter

Emission factor source

The Climate Registry: General Reporting Protocol

Comment

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	119	119	119	119
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2f

(C8.2f) Provide details on the electricity, heat, steam and/or cooling amounts that were accounted for at a low-carbon emission factor in the market-based Scope 2 figure reported in C6.3.

Basis for applying a low-carbon emission factor

Power Purchase Agreement (PPA) with energy attribute certificates

Low-carbon technology type

Other low-carbon technology, please specify (Renewable mix)

MWh consumed associated with low-carbon electricity, heat, steam or cooling

3251

Emission factor (in units of metric tons CO₂e per MWh)

0

Comment

SMK certified renewable energy in Netherlands; renewable energy purchases in Germany and France as well

Basis for applying a low-carbon emission factor

Other, please specify (Self-generated solar)

Low-carbon technology type

Solar PV

MWh consumed associated with low-carbon electricity, heat, steam or cooling

119

Emission factor (in units of metric tons CO₂e per MWh)

0

Comment

self-generated power in Netherlands

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description

Please select

Metric value

Metric numerator

Metric denominator (intensity metric only)

% change from previous year

Direction of change

<Not Applicable>

Please explain

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 and/or Scope 2 emissions and attach the relevant statements.

Scope

Scope 1

Verification or assurance cycle in place

Triennial process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Verklaring emissie inventaris 3.A.2-2017 Arcadis ISO 14064.pdf

Page/ section reference

entire document

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

31

Scope

Scope 2 market-based

Verification or assurance cycle in place

Triennial process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Verklaring emissie inventaris 3.A.2-2017 Arcadis ISO 14064.pdf

Page/ section reference

entire document

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

2

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope

Scope 3- all relevant categories

Verification or assurance cycle in place

Triennial process

Status in the current reporting year

Complete

Attach the statement

Verklaring emissie inventaris 3.A.2-2017 Arcadis ISO 14064.pdf

Page/section reference

entire document

Relevant standard

ISO14064-3

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C4. Targets and performance	Other, please specify (All of the above)	ISO 50001	Arcadis Netherlands verifies its energy goal, inventory, metrics, and reduction initiatives in accordance with ISO 50001. NETHERLANDS_Certificaat ISO 50001 ANL.PDF
C8. Energy	Other, please specify (All of the above)	ISO 50001	Arcadis Netherlands verifies its energy goal, inventory, metrics, and reduction initiatives in accordance with ISO 50001. NETHERLANDS_Certificaat ISO 50001 ANL.PDF

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, and we do not anticipate being regulated in the next three years

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

Credit origination or credit purchase

Credit purchase

Project type

Other, please specify (Renewable energy and methane capture)

Project identification

Carbonfund, a non-profit organization supports and develops a variety of carbon projects from around the world, all certified, verified, and/or audited to third-party certification standards. Third-party standards include the United Nations Clean Development Mechanism, Climate Action Reserve, Verified Carbon Standard, Climate, Community and Biodiversity Standards, and American Carbon Registry.

Verified to which standard

CDM (Clean Development Mechanism)

Number of credits (metric tonnes CO₂e)

109.37

Number of credits (metric tonnes CO₂e): Risk adjusted volume

109.37

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Objective for implementing an internal carbon price

Change internal behavior
Drive energy efficiency
Drive low-carbon investment
Supplier engagement

GHG Scope

Scope 1
Scope 2
Scope 3

Application

At present, an internal price of carbon is used primary as a planning tool to guide decision making at the regional or project level.

Actual price(s) used (Currency /metric ton)

13

Variance of price(s) used

static for planning purposes at this time

Type of internal carbon price

Shadow price
Offsets

Impact & implication

To date, carbon pricing has not driven business decision at the global level but remains a valuable planning tool. Carbon pricing has had some success at the regional and project levels driving renewable energy purchases and carbon offsets for select projects.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers
Yes, our customers

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect climate change and carbon information at least annually from suppliers

% of suppliers by number

10

% total procurement spend (direct and indirect)

5

% Scope 3 emissions as reported in C6.5

60

Rationale for the coverage of your engagement

Arcadis engagement with suppliers is prioritized based on Arcadis' largest emitting activities combined with the biggest opportunities to bring about change. To date, efforts to work with Arcadis suppliers have focused on improving data collection

practices and encouraging suppliers to offer eco-friendly alternatives.

Impact of engagement, including measures of success

Two of the largest emitting activities within the Arcadis organizational boundaries are vehicle emissions and indirect electricity emissions. Since 2008, Arcadis has been working with suppliers to provide green vehicle options and obtain accurate data for which emissions can be calculated. While obtaining utility data from property managers in Europe is rather routine, Arcadis continues to struggle to obtain electricity and fuel data for some of its leased offices. Letters and phone calls have had limited success, but despite these efforts, Arcadis still relies on default electricity intensity factors for some of its offices. Arcadis is also in the process of taking the initiative to incorporate green standards into some of its building contracts. While these initiatives are still in the development phase, Arcadis hopes they will encourage property managers to focus more on energy, water efficiency and the environment in general. Arcadis also continues to increase the number of LEED-certified buildings it leases to reduce its Scope 2 emissions. Globally, Arcadis uses the accuracy of its climate data to measure the success of its supplier engagement. While data accuracy continues to improve each year, more efforts are needed to engage suppliers.

Comment

Percentages cited above are not tracked at the global level. Estimates are provided based on known regional efforts and initiatives to collect climate change related information.

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Offer financial incentives for suppliers who reduce your operational emissions (Scopes 1 & 2)

Offer financial incentives for suppliers who reduce your downstream emissions (Scopes 3)

Offer financial incentives for suppliers who reduce your upstream emissions (Scopes 3)

% of suppliers by number

10

% total procurement spend (direct and indirect)

5

% Scope 3 emissions as reported in C6.5

60

Rationale for the coverage of your engagement

Arcadis engagement with suppliers is prioritized based on Arcadis' largest emitting activities combined with the biggest opportunities to bring about change. To date, efforts to work with Arcadis suppliers have focused on improving data collection practices and encouraging suppliers to offer eco-friendly alternatives.

Impact of engagement, including measures of success

Two of the largest emitting activities within the Arcadis organizational boundaries are vehicle emissions and indirect electricity emissions. Since 2008, Arcadis has been working with suppliers to provide green vehicle options and obtain accurate data for which emissions can be calculated. Arcadis continues to increase the number of LEED-certified buildings, awarding lease contracts to property managers who offer green building options. The same is true for office supply and travel companies that offer green options. Accuracy of climate data and reduced emissions are used as a measure of success.

Comment

Percentages cited above are not tracked at the global level. Estimates are provided based on known regional efforts and initiatives to collect climate change related information.

Type of engagement

Innovation & collaboration (changing markets)

Details of engagement

Run a campaign to encourage innovation to reduce climate impacts on products and services

% of suppliers by number

10

% total procurement spend (direct and indirect)

5

% Scope 3 emissions as reported in C6.5

60

Rationale for the coverage of your engagement

Arcadis engagement with suppliers is prioritized based on Arcadis' largest emitting activities combined with the biggest

opportunities to bring about change. To date, efforts to work with Arcadis suppliers have focused on improving data collection practices and encouraging suppliers to offer eco-friendly alternatives.

Impact of engagement, including measures of success

Two of the largest emitting activities within the Arcadis organizational boundaries are vehicle emissions and indirect electricity emissions. Since 2008, Arcadis has been working with suppliers to provide green vehicle options and obtain accurate data for which emissions can be calculated. Arcadis continues to engage its suppliers to encourage innovation and reduce climate impacts.

Comment

Percentages cited above are not tracked at the global level. Estimates are provided based on known regional efforts and initiatives to collect climate change related information.

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement

Collaboration & innovation

Details of engagement

Run a campaign to encourage innovation to reduce climate change impacts

Size of engagement

10

% Scope 3 emissions as reported in C6.5

0

Please explain the rationale for selecting this group of customers and scope of engagement

Arcadis also engages its clients, focusing on those with established or developing sustainability programs.

Impact of engagement, including measures of success

As each case is unique, Arcadis collaborates with its clients to identify areas where reductions can occur, working to implement change when feasible. Examples of client engagement include reduced travel, emission tracking, carbon offsets, and sustainable design. Measures of success are client and/or project specific. In the beginning, success is usually measured by the implementation of an environmental sustainability initiative. As the program develops, however, success is typically gaged by the reduction of environmental metrics (e.g., greenhouse gas emissions) and continued collaboration with the client.

Type of engagement

Education/information sharing

Details of engagement

Run an engagement campaign to education customers about your climate change performance and strategy

Size of engagement

10

% Scope 3 emissions as reported in C6.5

0

Please explain the rationale for selecting this group of customers and scope of engagement

Arcadis also engages its clients, focusing on those with established or developing sustainability programs.

Impact of engagement, including measures of success

As each case is unique, Arcadis collaborates with its clients to identify areas where reductions can occur, working to implement change when feasible. Examples of client engagement include reduced travel, emission tracking, carbon offsets, and sustainable design. Measures of success are client and/or project specific. In the beginning, success is usually measured by the implementation of an environmental sustainability initiative. As the program develops, however, success is typically gaged by the reduction of environmental metrics (e.g., greenhouse gas emissions) and continued collaboration with the client.

Type of engagement

Education/information sharing

Details of engagement

Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or

services

Size of engagement

10

% Scope 3 emissions as reported in C6.5

0

Please explain the rationale for selecting this group of customers and scope of engagement

Arcadis also engages its clients, focusing on those with established or developing sustainability programs.

Impact of engagement, including measures of success

As each case is unique, Arcadis collaborates with its clients to identify areas where reductions can occur, working to implement change when feasible. Examples of client engagement include reduced travel, emission tracking, carbon offsets, and sustainable design. Measures of success are client and/or project specific. In the beginning, success is usually measured by the implementation of an environmental sustainability initiative. As the program develops, however, success is typically gaged by the reduction of environmental metrics (e.g., greenhouse gas emissions) and continued collaboration with the client.

Type of engagement

Education/information sharing

Details of engagement

Share information about your products and relevant certification schemes (i.e. Energy STAR)

Size of engagement

10

% Scope 3 emissions as reported in C6.5

0

Please explain the rationale for selecting this group of customers and scope of engagement

Arcadis also engages its clients, focusing on those with established or developing sustainability programs.

Impact of engagement, including measures of success

As each case is unique, Arcadis collaborates with its clients to identify areas where reductions can occur, working to implement change when feasible. Examples of client engagement include reduced travel, emission tracking, carbon offsets, and sustainable design. Measures of success are client and/or project specific. In the beginning, success is usually measured by the implementation of an environmental sustainability initiative. As the program develops, however, success is typically gaged by the reduction of environmental metrics (e.g., greenhouse gas emissions) and continued collaboration with the client.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

- Direct engagement with policy makers
- Trade associations
- Funding research organizations

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Other, please specify (Water Conservation and Efficiency)	Support	Arcadis works directly with local, state, and national governments providing design and consultancy expertise as it relates to water conservation and efficiency. Work and guidance provided by Arcadis contributes to the development of sound policy as it relates to climate change and other environmental issues.	Arcadis supports sound water conservation and efficiency policies that reflect social, environmental, and economic conditions of the area.
Adaptation or resilience	Support	Arcadis works directly with local, state, and national governments providing design and consultancy expertise as it relates to climate adaptation resiliency. Work and guidance provided by Arcadis contributes to the development of sound policy as it relates to climate change and other environmental issues.	Arcadis supports sound climate change adaptation policies that reflect social, environmental, and economic conditions of the area.

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association

World Business Council for Sustainable Development (WBCSD)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

WBCSD is involved in a number of key processes and dialogues around the world, particularly the United Nations Framework Convention on Climate Change (UNFCCC). The WBCSD has been present at the annual Convention of Parties (COP) since 1995 and has a leading business role at COP 15 in Copenhagen in 2009. Climate change can only be resolved through cooperation that includes all elements of society, in particular between governments and business. A new global climate agreement will be essential to establishing the right framework conditions that will deliver long-term, large scale greenhouse gas (GHG) reductions. WBCSD's recommendations are based on the view that it is essential that a new international agreement on climate change is agreed in 2010 to provide a framework for climate legislation and action that offers clarity, predictability and a level-playing field for business. This should include: • A global target (cap) on emissions by 2050 and pathways to get there; • Developed country commitments to deep emissions reductions and emissions reduction plans for developing countries; • Establishing a framework that provides strong incentives for the development and deployment of the clean technologies that will be necessary to enable the world to move towards a low carbon economy; • Policy measures to promote technology innovation and diffusion; • A framework to help accelerate clean technology diffusion in developing countries; • A signal that the carbon markets will continue beyond 2012, and that a global carbon market with a price on carbon will be established; • Adaptation funding • Support for reducing emissions for deforestation and forest degradation - REDD. WBCSD believes tackling climate change requires an integrated approach that addresses the issues of competitiveness and economic sustainability, energy security, the environment and development, as well as adaptive capacity for inevitable climate impacts.

How have you, or are you attempting to, influence the position?

In 2014, Arcadis joined the WBCSD. Together with its members, the council applies its respected thought leadership and effective advocacy to generate constructive solutions and take shared action. The Council is made up of 192 global firms and acts as the voice of business in several bodies (e.g. UN Climate Summit, Sustainability Development Goals). ARCADIS was formally admitted into the WBCSD on the 9th of April 2014. Since then it has become actively involved in the following work streams: Water Cluster, Zero Emission Cities Sector Project, Ecosystem & Landscape Management Cluster, and Redefining Value Cross Cutting Project / Natural Capital Protocol. In November 2014, Arcadis CEO Neil McArthur participated in the WBCSD Council Meeting in Atlanta, in the United States, where WBCSD members focused on Redefining Value (moving from financial to natural and social capital) and 'Business Setting the Pace'. In 2015, Arcadis joined global world leaders at the COP in Paris, where Neil McArthur, CEO joined a panel discussion Chaired by UN-Habitat on 'The City We Need'. The purpose of the event was to engage the private sector on cities and climate change. During the event, business and city leaders alike expressed their commitment to solving urban sustainability challenges in advance of the forthcoming United Nations Conference of Housing and Sustainable Urban Development (Habitat III).

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?

No

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

When engaging with organizations, research organizations, and policy makers, Arcadis reflects on its Business Control Framework to ensure our activities and outreach are consistent with our Mission, Vision, Values, and overall strategy, including that of climate change.

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports

Status

Complete

Attach the document

Arcadis Annual Integrated Report 2017.pdf

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Other metrics

Publication

In voluntary communications

Status

Complete

Attach the document

Arcadis Business Operations Impact.pdf

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Other metrics

C14. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C14.1

(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Arcadis CEO	Chief Executive Officer (CEO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

With climate change and the need for sustainability recognized as one of today's most critical global issues, organizations have realized the importance of supporting activities that benefit the world's economic, environmental and social well-being rather than contributing to one at the expense of the others. Companies that track sustainable performance as a core business process are not only having a positive effect on the world, but also on their bottom line and longevity, both of which are ultimately strengthened as a result.

Arcadis is a leader in global design & consultancy. Our passion is to improve the quality of life and be recognized as the best in everything that we do, creating exceptional and sustainable outcomes for our clients in natural and built asset environments. We help our clients solve some of the biggest issues facing our world – such as sustainability, urbanization, asset productivity, resource scarcity, and climate change. We do that by delivering comprehensive solutions that create social, economic and environmental value for our clients and the communities in which we live and work.

To support clients who track sustainable performance metrics, Arcadis quantifies and discloses the impacts its business-related activities have on the carbon footprints of our clients. We continue to refine our inventory and gain a better perspective on how our actions impact our clients. Through innovation and collaboration, we seek to partner with our clients on a project by project basis to identify opportunities to reduce emissions that are mutually beneficial to Arcadis, our clients, and the environment.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	3219000000

SC0.2
