Ireland Strategic Investment Fund 2017 UPDATE





National Treasury Management Agency

Ciste Infheistíochta Straitéisí d'Éirinn Ireland Strategic Investment Fund

Executive Summary



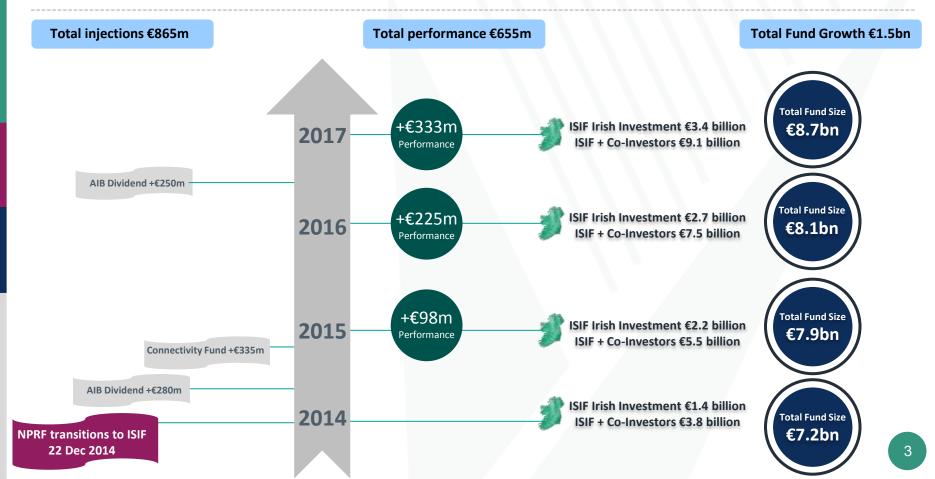
Material gaps still remain particularly in certain sectors (housing, SMEs and long term project capital)

Many sectors need long term patient capital

2

ISIF Timeline

ISIF established to invest on a commercial basis to support economic activity & employment in Ireland



Double Bottom Line Mandate

Delivering on Double Bottom Line Mandate through 3 Strategic Drivers





Enabling competitiveness of the economy

Supporting engines of economic growth

Positioning key sectors to lead, innovate and compete on a global level



2017 - Delivering on Double Bottom Line

Performance 2017¹ & H1 2017 Economic Impact Results





¹ December 2017, preliminary and unaudited data

Adding €655 million to Fund Value Since December 2014

Investment Returns

Economic Impact

Conservative and active management of capital that will underpin future deployment in Ireland



Global Portfolio Transition Strategy (GPTS) transitions the ISIF from a Global Portfolio into an Irish Portfolio as investment opportunities in Ireland are executed and capital drawn down over the short to medium term

The overall objective of the GPTS is to ensure capital is available as required to fund Irish investments while earning a return on these global assets in the interim, as compared with the alternative approach of converting all global assets to cash at the outset

ISIF adding **€655 million** of value since

December 2014

+4.0% in 2017, 2.8% p.a. since inception & increasing

Global Portfolio adding

€435 million

+4.1% in 2017 & 2.2% p.a. since inception

Early positive returns from the Irish
Portfolio

€220 million

+3.4% in 2017 & 6.6% p.a. since inception



Significant Economic Impact Progress to Date

Across a broad range of sectors

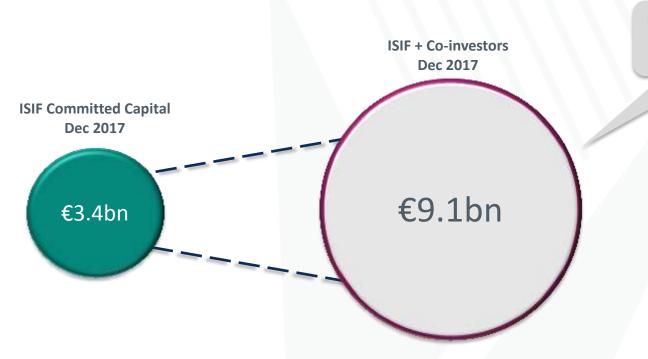






ISIF - Crowding in Capital to Investments in Ireland

Leveraging Capital for Maximum Economic Impact from ISIF Resources



Multiplying the impact of ISIF investment by 2.7x

ISIF Investing Across 3 Strategic Drivers

ISIF committed €667 million to new investments in 2017, with a total of €1.6 billion invested including third party capital.





€10m



€14m





Follow-on

€12m





Innovation



Other

€94m







€4m

€2m

¹Transaction details to be announced shortly

Sustainability & Responsible Investment (S&RI) Strategy

Environmental, Social & Governance (ES&G) considerations are at the core of ISIF's investment activities

2015 to PHASE 1 mid 2016

Focus on establishing the Fund and Deployment

Exclusions: Cluster Munitions & Anti-Personnel Mines

Active ownership: Voting & Engagement

Sustainability & Responsible Investment Strategy - development

Mid 2016 PHASE 2 to 2017

Implementation & refinement of S&RI Strategy

Major reconfiguring of Global Portfolio

Exclusions extended: Tobacco Manufacturing, Highest Carbon Producers and Processors

Fossil Fuel Divestment Bill in progress

Portfolio Analytics, Voting & Engagement services implemented

2018 & Beyond

Implementation of ESG Framework for Irish Portfolio

PHASE 3

Integrate ESG into investment processes, portfolio monitoring & reporting

Signatory of:





Service Providers:







ISIF Double Bottom Line Mandate

Delivering on Double Bottom Line Mandate through 3 Strategic Drivers



ENABLING IRELAND

Enabling competitiveness of the economy

GROWING IRELAND

Supporting engines of economic growth

LEADING EDGE IRELAND

Positioning key sectors to lead, innovate and compete on a global level





Water



Infrastructure



SME



Direct Equity



Food & Agri





Venture





Other

ISIF **Differentiators** **Flexibility**

Long term timeframe

Sovereign partner to businesses and co-investors

Enabling Ireland

ISIF – Future Proofing & Strengthening the Economy



Responding to Housing Crisis

- Backed 5 residential housing platforms which have funding already committed / sites acquired to deliver >9,500 homes by 2021 as well as further financial capacity
- €52m debt for infrastructure at the Cherrywood SDZ in south Dublin potential to unlock over 4,000 residential units
- Investment in DCU student accommodation business has helped enable DCU's overall €230m campus development plan potential to deliver 3,200 student accommodation beds
- Bancroft in Tallaght €8m pilot investment in social and affordable housing
- ISIF is actively seeking opportunities to further deploy capital to accelerate the delivery of residential units

ISIF as a capital provider adopts a multi strand approach to the residential housing sector to maximise impact given the significant gap in housing supply

Financing Across the Capital Structure

Equity €38m

Equity for the delivery of Build to Sell and Social and Affordable housing units

Mezzanine & Stretch Senior Debt €382m

Backing Residential Housing Platforms that Provide Mezzanine and Stretch Senior Debt for Small, Medium and Large Developers

Bespoke Debt for Enabling Infrastructure €52m

Flexible debt facility to fund construction of essential enabling infrastructure to unlock housing units

Long Term Debt for Student Accommodation €54m

Long term debt to support the delivery of student accommodation beds

Enabling Ireland

ISIF – Future Proofing & Strengthening the Economy



Enhancing the Infrastructure & Connectivity of the State

Connectivity Fund

- Established as a sub-fund of the ISIF in 2015 to invest the €335m proceeds from the sale of the State's shareholding in Aer Lingus with the aim of enabling and enhancing Ireland's physical, virtual and energy connectivity
- In 2017, the ISIF completed a further two investments from this sub-fund bringing the total investments to combined value of €93m
- Supported the upgrade of the existing runway in Shannon Airport and provided flexible debt funding solution to support the relocation of Port of Cork to Ringaskiddy

Urban regeneration

• €25m Finegrain for regional industrial and €2m to date to the Smithwicks brewery site in Kilkenny

Driving a resilient & renewable focused energy landscape

- ISIF has invested in funds and businesses which own and manage 376MW of renewable energy which generates clean renewable electricity for over 165,000 homes
- Dublin Waste to Energy now operational with designed capacity to process up to 600,000 tonnes of waste. The facility will generate clean renewable electricity for an additional 80,000 homes

Growing Ireland

Supporting engines of growth across the economy using natural competitive advantages and ISIF's patient, diverse capital

€663m €176m €177m

Food & Agriculture

Filling funding gaps for SMEs - equity & debt

- €663m of ISIF commitments supporting almost 1,737 SMEs across the capital structure
- ISIF has backed 9 SME platforms in the Irish market diversifying the
 Irish SME financing landscape and targeting an increased equity
 culture for SMEs to increase resilience in the future
- In 2017 ISIF backed:
 - €125m to BGF Ireland, the largest ever Irish equity growth capital Fund that will provide long-term patient capital to growth oriented Irish SME's
 - €45m to Muzinich to provide growth capital to Irish SMEs and corporates principally in the form of senior, unitranche and mezzanine debt
 - US\$100m to Insight Venture Partners to focus on investments in growth-stage software companies filling a major funding gap for growing and scaling Irish software businesses

Direct investment in scaling Irish businesses

SMF

- Long term patient capital for private companies with growth or scaling strategies that need to be implemented on a steady and sustainable basis over an extended timeframe
- AMCS ISIF investment in 2015 accelerated the growth of this Limerick based software business which since then has become the global leader in the waste management software sector
- Cubic Telecom €10m investment in an Irish company with strong competitive advantages and the potential to become a leader providing global mobile connectivity solutions for the world's leading automotive and device manufacturers
- Kaseya €20m investment in the leading provider of complete IT management solutions for managed service providers and midsized enterprises that is locating European operations in Ireland

Direct Equity

Growing Ireland

Supporting engines of growth across the economy using natural competitive advantages and ISIF's patient, diverse capital



Food & Agriculture – investing in scaling primary producers and food manufacturing

- ISIF co-designed & implemented a structured financing product to support Dairy expansion funding the working capital requirements of 60 million litres of increased milk production over the peak milk processing period during 2017
- €14m investment in Panelto, an Irish food manufacturer, to fund the expansion of production facilities at its headquarters in Longford
- MilkFlex fund offers flexible, unsecured and competitively-priced loans with repayments varying according to milk price, allowing for improved capital planning and greater investment on Irish farms flexible funding supporting up to 1,000 farmers
- Commitment of €55m to the €112m Dasos Timberland Fund II to consolidate the fragmented private forestry estate and over time deliver 2,800 hectares of afforestation in Ireland assisting the delivery of Government Strategy and Ireland's transition to a low carbon economy
- Finistere Irish AgTech Fund potential to deliver strong commercial return, stimulate the growth of the Irish AgTech sector, and support the commercialisation of the state's significant investment in this sector



Other

Attracting High Quality Global Investors to invest in Irish Life Sciences and Technology Opportunities

- Venture Capital plays a critical role in providing risk capital to entrepreneurs, in particular early stage businesses without operating track records
- ISIF has developed a mature portfolio of c.€539m commitments across 28 Venture Capital
 platforms that provide risk capital, deep networks and vast experience to high potential/high
 growth technology and healthcare opportunities in Ireland, as well as seeking opportunities to
 expand international companies here
- ISIF's portfolio promotes a vibrant funding landscape for Ireland-based innovative growth companies

ISIF - Venture Funds

Innovation

Venture



LEADING EDGE IRELAND

Innovation - Positioning Ireland at the global forefront of innovation and technological advancements for years to come



- ISIF Innovation strategy targets 'transformational' impact in Ireland, leveraging the long-term, strategic nature of the Fund
- Innovation 'themes' underpinned by long-term macro trends, and where Ireland could take a leadership position
- Significant opportunity for Ireland at the convergence of new technologies with existing sectors of the economy

Initial Focus Areas

Healthcare & Life-Sciences

New technology, personalised medicine, new business models and infrastructure that enhance quality and length of life

DecarbonisationDriving the transition to a low-carbon future

Example of Investments

Genomics Medicine Ireland - population scale genomics business that seeks to build and leverage Irish genomic database to advance research in healthcare and life sciences

Nautilus Data Technologies — innovative water-cooled data centres that reduce the carbon footprint and resource intensity of the data centre industry







H1 2017 Economic Impact Highlights

Reflects detailed survey data as at 30 June 2017. Given the quantum of surveys and the comprehensive analysis completed, the finalisation and publication of this economic impact data lags 6 months behind. Detailed year end economic impact data will be published in July 2018.



Year on Year +9,492 jobs



Employment by Region 45% Dublin/55% ex-Dublin Year on Year Geographically balanced



Gross Value Add (GVA) €449 million Year on Year+€145 million



Wage Bill €424 million Year on Year +€96 million



Turnover €725 million Year on Year +€141 million



Exports €199 million Year on Year +€7 million

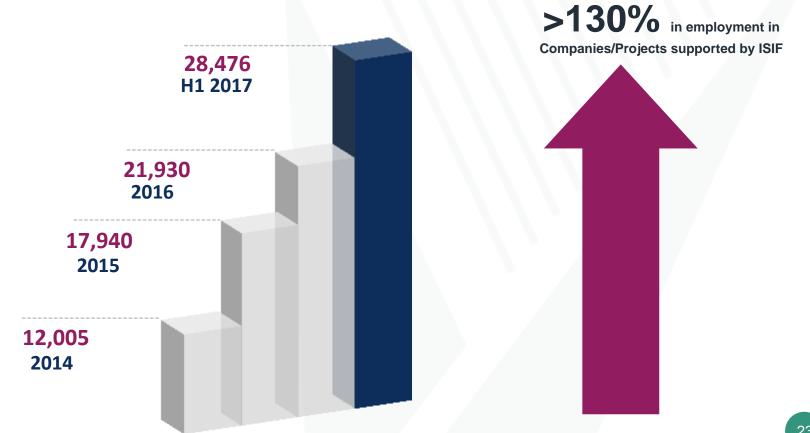
Strong Underlying Employment Growth



Wages H1 2017 €424 million +€96 million on H1 2016

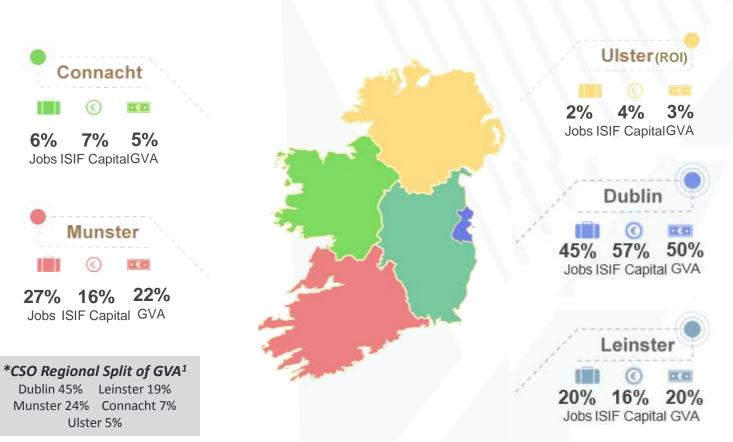
ISIF Capital underpinning Irish based employment

>130% Growth in Employment Supported Since 2014



Regional impact of investments

Geographically Balanced, broadly in line with regional economic activity*



¹ Gross Value Added (GVA) is the enterprise or sector level measure of goods or services produced which, when aggregated across all enterprises and adjusted for taxes and subsidies, equals Gross Domestic Product (GDP)

Snapshot of Underlying Investees 2017





Carrick

Atlantic therapeutics

StitcherAds

SERVISION

QUADRANT

Malwarebytes

iCabbi

dairysold

UISCE

WATER

cubic telecom

AMCS

payzone

NOVAERUS

BXEVER

CLAVIS INSIGHT

MALIME

Blue Tree Systems



Ferfics

excelsys

INFLAZOME

Roomex.com

rainmaker

business technologies ltd

DIONA

HG HYPERGRID

AA

MAINSTAY



HEYSTAKS

Kenmare Bay Hotel & Resort

DIGIT

PageFair

davra networks

AQUACOMMS

FieldAware

CivicConnect

SIGMA WIRELESS

erifly



INFLECTION

BIZIMPLY

 \mathbb{D}

*** ****

INEUROMOD

Ardstone Capital

....

Cherrywood

Hines

glantus

CleverCards

Dovetail



MACNET



LINEN













ISIF supporting 1,850 Irish-based companies/ projects through commercial investments (Appendix 2 for list)



Appendix 1 – Assumptions, Methodology and Disclaimer

The NTMA adopts a conservative approach to all data and in many cases excludes data where ISIF does have an impact but it is difficult to quantify.

Assumptions and Methodology

- 1. The NTMA collected data on underlying investees. While economic impact data is somewhat complicated, the NTMA has adopted a structured approach to the collection and analysis of the data.
- 2. Underlying investees are either direct or indirect (i.e. through Funds), the economic impact data is gathered through a semi-annual survey process of the direct and indirect underlying investees. The economic impact of an underlying investee is only included once i.e. where the ISIF has more than one indirect investment in an underlying investee the duplicate economic impact is removed from the analysis.
- 3. In cases where ISIF finances a specific project in a large entity, the NTMA only captures the economic impact for the project and not any benefits it may bring to the wider corporate entity.
- 4. The Fund does not capture the economic impact from investments the ISIF has exited which could be significant.
- 5. There is some time lag between the achievement of economic impact and the commitment to a investment. Typically, economic impact is generated when there is a draw down on committed capital and this can be months/years after a commitment to an investment.
- 6. The NTMA completes a check of all survey data for reasonableness. However, the NTMA is reliant on the underlying investees to provide accurate data and is not in a position to verify the data submitted.
- 7. Surveys provided in USD were converted to EUR, income statement metrics were converted to EUR using a 6 month average FX rate sourced from Bloomberg.
- 8. The regional distribution of capital deployed is weighted based on the capital deployed as at 30 June 2017 and based on the underlying investees detailing the location/regional activities of the underlying investee/project. Where underlying investees operate on a nationwide basis, the capital deployed is weighted by population, this population data is sourced from the Central Statistics Office.
- 9. The regional distribution of underlying investees employment and gross value added is based on data provided by the underlying investees detailing the number of jobs and earnings generated regionally.

 Where underlying investees operate on a nationwide basis and a reliable regional employment split is unavailable, the total jobs and gross value added is weighted by population.
- 10. The majority of underlying investees provided the number of jobs and wages paid as at 30 June 2017 directly. There are some exceptional cases where the data was unavailable and the following assumptions were applied:
 - In a very small number of construction projects (2) where reliable headcount was not available, we evaluated the drawn capital of the project over the 6 month period to 30 June 2017 and applied a Construction Industry Federation multiplier to the capital expenditure to estimate the number of employees.
 - II. In the case of construction projects where third party/contracted headcount was provided but a wage bill was not available, an average wage was applied to the third party/contracted headcount. The average wage by sector was sourced from the CSO.
- 11. In line with industry standards, an indirect employment multiplier is applied to direct jobs. The NTMA calculation of employment multipliers is based on CSO methodology and verified by CSO.
- 12. Exports are weighted based on turnover and an estimate provided by the underlying investee of the percentage of turnover generated from exports.

Disclaimer: The information in this presentation is issued by the National Treasury Management Agency (NTMA) for informational purposes. The NTMA makes no warranty, express or implied, nor assumes any liability or responsibility for the accuracy, correctness, completeness, availability, fitness for purpose or use of any information that is available in this presentation nor represents that its use would not infringe other proprietary rights. The information contained in this presentation speaks only as of the particular date or dates included in the accompanying slides. The NTMA undertakes no obligation to, and disclaims any duty to, update any of the information provided. The contents of this presentation should not be construed as legal, business or tax advice.

Appendix 2 – Summary of Underlying Investments at 30 June 2017 (1/5)

Fund/Company/Project	Company/Project	Principal Product/Service
	mADme	Mobile advertising platform
ACT	ServisBOT	Al enhanced customer messaging platform
	Silvercloud	Online health and eTherapy platform provider
Activate	Activate (Seven sites with activity as at 31/06/17)	Residential Development Finance
AMCS	AMCS	Supplier of smart resource software and vehicle technology solutions for the waste, recycling and resource industry
Aquacomms	Aquacomms	Specialist sub-sea cable connecting New York and Ireland with onward connections to London
	Carrick Therapeutics	Drug development targeting cancer resistance
Arch	Genomics Medicine Ireland	Products and services derived from advanced genomic research, analysis & global partnerships
Ardstone	Ardstone	Residential Development Finance
	Accuris Networks	WiFi off-load and roaming technologies
	Boxfish	Second screen big data analytics
	Civic Connect	Internet of things
Atlantic Bridge	Fieldaware	Mobile field service management
	Hypergrid	Private cloud and security software
	Swrve	Mobile marketing automation
	Novaerus	Plasma generating technology
	Abrakebabra Investments	Leading fast food franchise owner and operator in Ireland with five trading businesses
	BB Muffins	Chain of coffee and muffin retail stores across the UK and Ireland
	Carne Global Financial Services	Provider of governance and oversight solutions within the asset management industry
	Centric Health	Healthcare services business providing (i) diagnostic imaging; (ii) primary care and (iii) medical recruitment services
	Excelsys	Designer and manufacturer of high power density high efficiency power supplies
	Irishrelo Group (Onomah)	Employee relocation support
DI (D1004)	Kardomagh Holdings	Sale and hire of fast track building solutions
Bluebay (BICC 1)	Kenmare Bay	Hotel accommodation, Food & Beverage, Leisure Centre, Self-Catering
	Knockfargal Ltd	4* hotel in Kinsale, Co. Cork
	Mainstream Renewable Power	Leading player in the global renewable energy development market focusing on wind (onshore and offshore) and solar power
	Magnet	Irish telecommunications company providing data, voice and IP services to business and residential customers .
	Mater Private	Provision of healthcare services
	Rye River	Irish Craft Beer brewer and agent distributor
	Sigma Communications	Seller of professional communications systems

Appendix 2 – Summary of Underlying Investments at 30 June 2017 (2/5)

Fund/Company/Project	Company/Project	Principal Product/Service
	Adtower	Out of home advertising
	Blue Tree Systems Limited	Trailer and vehicle telematics solutions
	Coolnagour T/A iCabbi	Taxi dispatch software
	Glantus	Developer and supplier of software solutions
	Obelisk	Professional engineering services
BMS	Platform Capital	Wholesale financial services
	RAPT Touch Ltd	Touch Technology
	Urban Volt	Light as a service
	Welltel	Communications hard and services
	Wide Eye Media	Cinema Advertising
	XS Direct	Car Insurance
	AA Ireland	Insurance brokers and roadside assistance providers
	Abtran	Business Process Outsourcing
	Carroll Cuisine	Production and distribution of sliced cooked ham and other food products
Carlyle Cardinal Ireland	General Secure Logistics Services (GSLS)	Cash-in-transit and money processing
	Lily O'Briens	Manufacturer and distributor of chocolate
	Payzone	Multi-channel payment solutions
	BB Muffins	Chain of coffee and muffin retail stores across the UK and Ireland
Causeway Capital	Bizimply	Time and attendance software
	Harkglade Limited (T/A Celtic Linen)	Commercial laundry business
Covanta	Dublin Waste to Energy Limited	Waste treatment, power and heat production
Daa	Dublin Airport	Commercial semi-state airport company
	Betapond Clavis	Marketing app provider for social networks Reference data quality solutions
	Cleverbug (CleverCards)	Personalised greeting cards and gifts
	Davra Networks	Management system for Internet of Things devices for Cisco distributed networks
	Digit Game Studios	Online multiplayer multiplatform games
Delta Partners	Homestay	Accommodation portal
Delta Partners	Luzern Solutions	Online retailer and online store provider for new and refurbished goods
	mADme	Mobile advertising solutions
	Mobatravel (MobaCar)	Online car rental software platform
	Sim Local	Local sims for international travellers
	What Clinic	Medical treatment search portal
	Zapa Technologies	Telecom expense and value management

Appendix 2 – Summary of Underlying Investments at 30 June 2017 (3/5)

Fund/Company/Project	Company/Project	Principal Product/Service	
Draper Esprit	Clavis	Reference data quality solutions	
Draper Esprit	CurrencyFair Ltd	P2P Currency Exchange	
Finance Ireland*	1,700 companies supported		
First Forestry Fund	First Forestry Fund	Invests directly in forestry plantations diversified across Ireland	
	Inflection Biosciences	Developing small molecule therapeutics for the treatment of cancer.	
	Inflazome	Inhibitors of the NLRP3 inflammasone	
Farmetala	Mainstay Medical	Manufacturer of medical device for treatment of chronic lower back pain	
Fountain	Neuromod Devices Limited	Medical devices	
	Opsona Therapeutics	Developer of drugs for the treatment of autoimmune and inflammatory diseases	
	Vivasure Medical	Research and Development medical device company	
	AQ Metrics	Risk/Compliance technology	
	Boxever Ltd	SaaS customer intelligence platform for airline and travel industry	
	Boxfish	Second screen big data analytics	
	BuildingEye	Planning permission technology	
	CurrencyFair Ltd	P2P Currency Exchange	
	Drop	Connected kitchen products	
Frontline	Linked Finance	P2P SME Lending Marketplace	
Frontine	PageFair Ltd.	Adblocking Software	
	Pointy	Putting shops online automatically	
	Qstream	Mobile sales enabling service	
	Roomex	Hotel Booking Platform	
	Siren	Business intelligence	
	Verifly	Drone technology	
GMI	Genomics Medicine Ireland	Creation of population database	
Greencoat Renewable	Greencoat Renewable	Renewable energy infrastructure company	
Highland Europe	AMCS	Software solutions for the waste management industry	
gdia Europe	Malwarebytes	Anti-malware software	
InsideSales	InsideSales	Sales acceleration software	
	Convention Centre Dublin	Ireland's only purpose built convention centre positioned on the banks of the River Liffey in the centre of Dublin	
Irish Infrastructure Fund	Cyclone Wind Farm Portfolio	Portfolio of 10 wind farms located in both the RoI and NI, generating electricity for sale into the Single Electricity Market	
man minastructure runu	Towercom Limited	Largest independent telecom tower / mast owner in the Republic of Ireland and owns/controls 406 telecom tower/mast sites	
	Valley Healthcare	Primary care centres	
Irish Water	Irish Water	National service provider of water and treatment of wastewater	
	Alexo Therapeutics	Developer of novel biologics with goal of discovering new drugs to help the human immune system to eradicate cancer	
Lightstone Ventures	FIRE1	Developing a novel, therapeutic medical device for a major unmet medical need	
	Carrick Therapeutics Limited	Developer of novel biologics with goal of discovering new drugs to help the human immune system to eradicate cancer	
	<u> </u>		

Appendix 2 – Summary of Underlying Investments at 30 June 2017 (4/5)

Fund/Company/Project	Company/Project	Principal Product/Service
	Accuris Networks	WiFi off-load and roaming technologies
	AMCS	Software solutions for the waste management industry
	Betapond Ltd	Marketing app provider for social networks
	BlueTree	Developer of GPS fleet software, telematics and vehicle tracking solutions
	Davra Networks	Management system for Internet of Things devices for Cisco distributed networks
	Diona Technologies	Diona is addressing the demand for mobile solutions in the HHS market
	Ferfics	The company designs and develops components (radio frequency switches)
Investec Ventures	HeyStaks Technologies	HeyStaks enables users to collaboratively search the web using search engines
investec ventures	Hypergrid	Private cloud and security software
	Mick's Garage	The company e-tails car parts and is Ireland's leading on-line car-parts retailer
	Rainmaker Business Technologies	Provider of business intelligence and performance software to the airline sector
	RAPT Touch	Develops multi-touch screen technologies for incorporation into large screens
	SilverCloud Health	SilverCloud Health Limited provides online therapeutic solutions via tailored clinical programs
	Terminal Four Solutions	Developer of enterprise web content management software for the higher education market globally
	Vearsa	Helps traditional publishers distribute electronic copies of their books ("eBooks")
	Zamano	Zamano is a mobile marketing and mobile products company
	AN2H Discovery	Designs novel small molecule therapeutics
ng-tt-	NeuVT Limited	Develops vascular devices
Malin	Seranus	Specialises in in-licensing, registering and commercialising certain approved therapeutics to address unmet needs in the African market
	3D4 Medical	Develops medical, educational and health fitness apps
MilkFlex	MilkFlex	Dairy loan repayment fund
NTR Wind 1	2 Rol Projects	Wind Energy
	Boxever	SaaS customer intelligence platform for airline and travel industry
	Novaerus	Manufacturer of wall mounted airborne pathogen control devices
Polaris Partners	InsideSales	Sales acceleration software
	Profitero	Competitive pricing, intelligence and e-commerce insights for brand manufacturers and retailers
	GMI	Human genomic sequencing
	Voysis	Voice Al platform
	•	

Appendix 2 – Summary of Underlying Investments at 30 June 2017 (5/5)

Fund/Company/Project	Company/Project	Principal Product/Service
Quadrant	QREA Financing	Financing office development
RPFP	RPFP	Pilot receivables purchase facility
	Atlantic Therapeutics	Manufacture of Devices for treatment on Incontinence
	Novate Medical	Convertible vena cava filter for prevention of pulmonary embolism
Seroba Kernel	Opsona Therapeutics	Developer of drugs for the treatment of autoimmune and inflammatory diseases
	Veryan Holdings	Development of stents with a unique 3D geometry, for treatment of vascular disease
Silicon Valley Bank*	15 underlying investees – bank confidentiality precludes disclosure of borrower names	
Sofinnova	Innocoll	Collagen based drug delivery platform
Swrve	Swrve	Mobile marketing automation software platform
WLR Cardinal	WLR Cardinal	Financing of commercial real estate

^{*}Note: this appendix does not include a small number of investees where confidentiality precludes disclosure of investee names.

This appendix excludes investments where capital is committed but not invested as at 30 June 2017

Eugene O'Callaghan

Director

T+353 1 238 4066

E eocallaghan@ntma.ie

Kieran Bristow

Head of Investment Strategy T +353 1 238 5058

E kieran.bristow@ntma.ie

Fergal McAleavey

Head of Private Equity T +353 1 238 4432

 $\textbf{E} \ fergal.mcaleavey@ntma.ie\\$

Cathal Fitzgerald

Head of Food and Agriculture Investments

T +353 1 238 5017

E cathal.fitzgerald@ntma.ie

Donal Murphy

Head of Infrastructure and Credit Investments

T+353 1 238 4934

E donal.murphy@ntma.ie

Michael Lee

Head of Origination and Co-Investment Partnerships

T +353 1 238 4937

E michael.lee@ntma.ie

Paul Saunders

Head of Innovation and Special Investments

T+353 1 238 5049

E paul.saunders@ntma.ie

Anne-Marie Whelehan

Head of Business Operations

T +353 1 238 4465

E annemarie.whelehan@ntma.ie

Martin Whelan

Head of Public Affairs and Communications

T +353 1 238 4459

E martin.w.whelan@ntma.ie

