



Australian Government

Australian Research Council

Academia-Industry Linkages Forum
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An ARC Perspective on Research Partnerships

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RESEARCH *in the national interest - enabling the future*



Australian Research Council Overview

- Federal Government agency supporting all R&D
 - except medical and dental research
 - competitive, peer-reviewed proposals by investigators
 - limited strategic direction in specific fields
- Annual funding to University sector ~\$600m (FY08/09)
 - about 10% of total Federal spend on R&D
 - increase from ~\$250m in FY02/03
 - by FY10/11 will increase to ~\$750m/yr
 - assess >5,500 proposals per year
 - 35 Centres of Excellence, Special or Co-funded Centres
 - 25 Research Networks
- Mission
 - to advance Australia's research excellence to be globally competitive and to deliver benefits – public good and commercial – to the community





Importance of Co-Funding

- Co-funding is a “revealed preference”
 - confirmation of research need
 - “pre-selection” process
- Co-funding is quantifiable
 - $\$ \text{ARC} + \$ \text{co-funder} = \$ \text{project}$



- Happy co-funders are influential spokespersons
 - to whom others really listen



Research Partnerships

Competitive Schemes

	CRC Programme	ARC Centres of Excellence	ARC LP Scheme
Duration (years)	Min: 7 Max: 14 to ?	Min: 5 Max: 8-9	Min: 1 Max: 5
C'wlth \$/Centre	\$2m to \$4m per year	Min: ~\$1m/yr Max: ~\$3m/yr	Min: \$20k/yr Max: \$2m/yr
No of Industry Partners	Required Av: 7-9 per CRC	Not Required Av: 4-6 per CoE	Required Av: 2 per grant
Focus	programmatic, thematic	programmatic, thematic	project, thematic
Call Frequency	2 years	2-3 years	6 months
Success Rate	10%-20%	< 10%	40%-50%
C'wlth \$/year	~\$200m	~\$65m	~\$120m





ARC Research Centres

Materials Oriented

1997

Subatomic Structure of Matter (UAdel, Flind, UMelb, UTas, UNSW, ANU)

2000

Green Chemistry (Monash, UNew, UWA)

Particle and Material Interfaces (UniSA)

Particulate Fluids Processing (UMelb)

2003

Advanced Silicon Photovoltaics & Photonics (UNSW)

Quantum Computer Technology (UNSW, UQld, UMelb, ANU)

Solar Energy Systems (ANU)

Functional Nanomaterials (UQld, UNSW, ANU, UWSyd)

Ultra-high Bandwidth Devices (USyd, ANU, UTS, MacU, Swin, RMIT)

2005

Anti-Matter Matter Studies (ANU, Murdoch, Flind, UAdel, UWA, CDU, JCU, Open)

Design in Light Metals (Monash, Deak, UQld, UNSW, USyd, UMelb)

Electromaterials Science (UWoll, Monash)

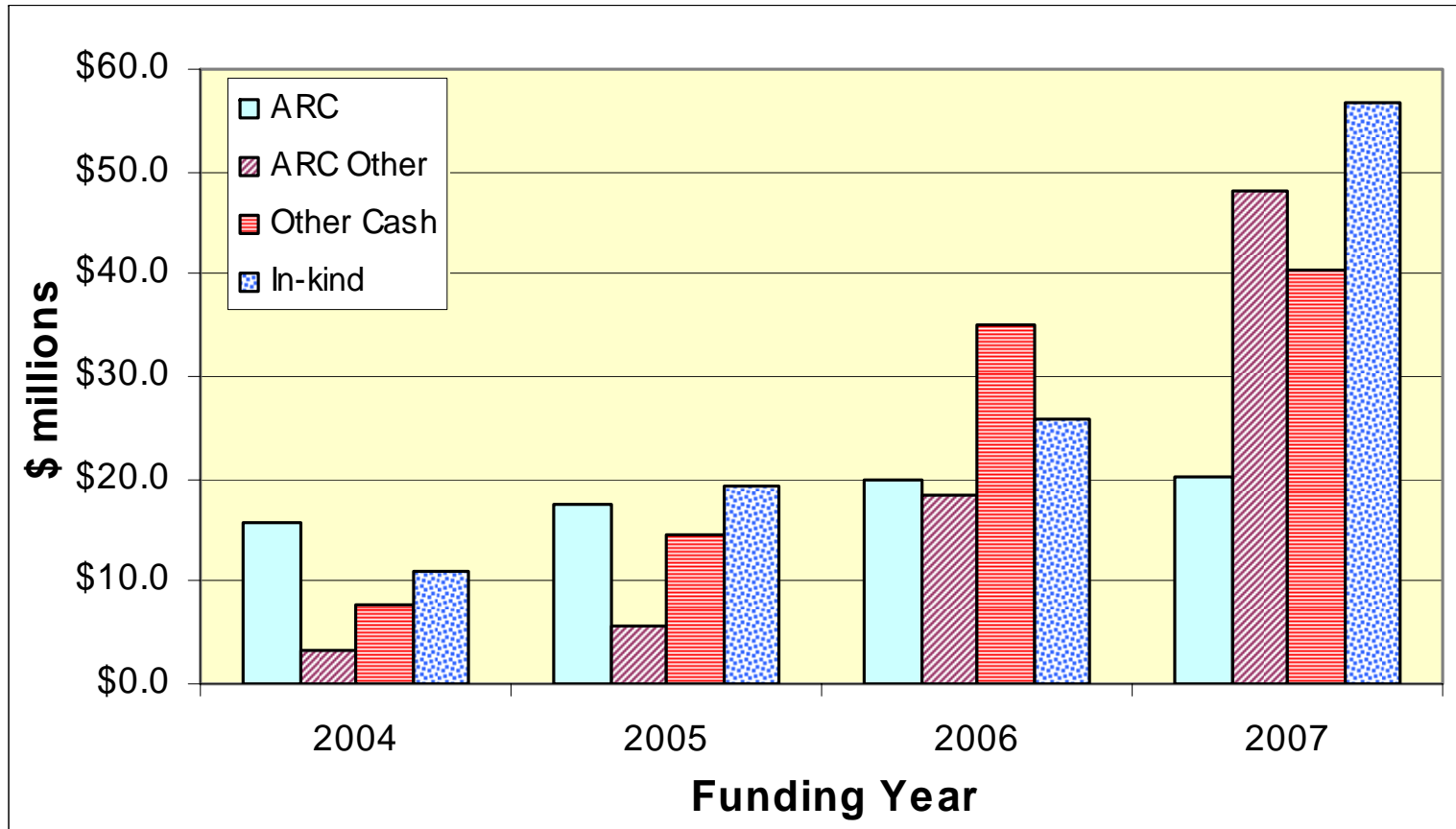
Networks: Advanced Materials (ARNAM) and Nanotechnology (ARCNN)





ARC Centres Funding Profile

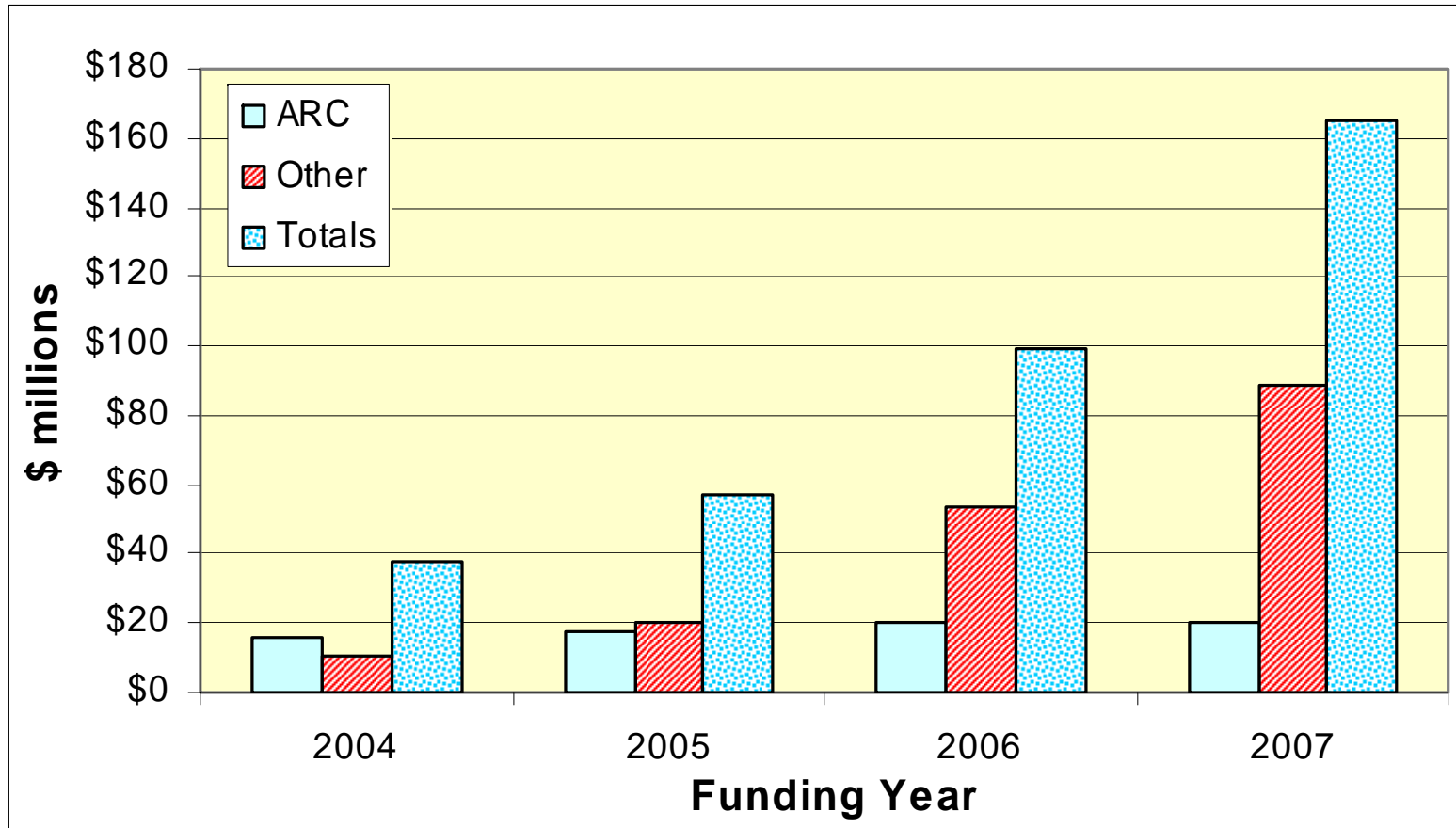
Materials related





ARC Centres Funding Profile

Materials related



Leverage 4:1 to 8:1

RESEARCH in the national interest - enabling the future

Graeme Clark Research Outcomes Forum



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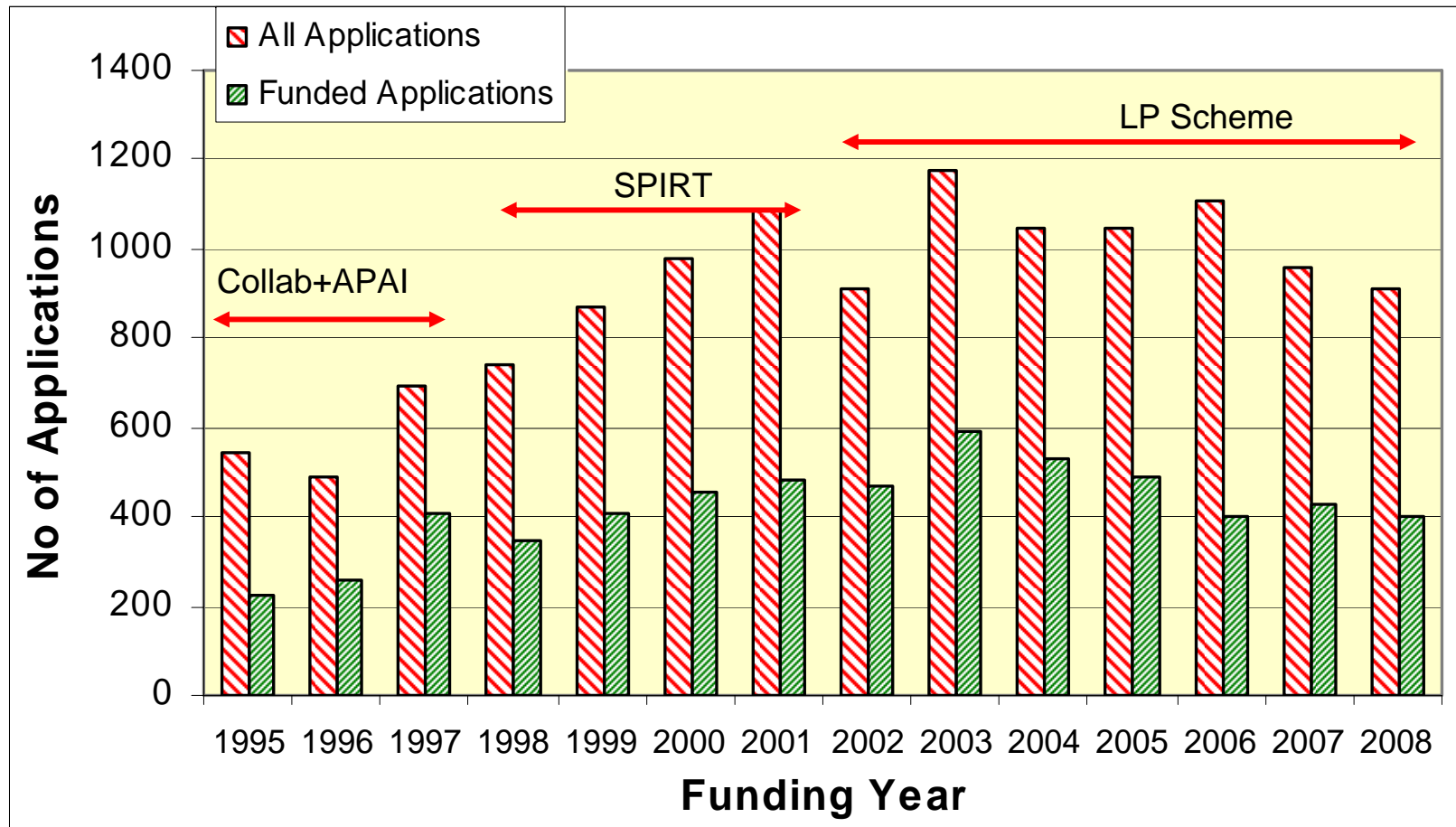


Linkage Projects

- **Primary aim**
 - Encourage and extend cooperative approaches to research by strengthening links within Australia's innovation system and within innovation systems internationally
 - Economic, social, environmental, policy or scientific benefit
- **Participant roles**
 - Chief Investigator, Partner Investigator
 - APAI (Aust. Postgraduate Award, Industry)
 - APDI (< 3 years from PhD),
 - Linkage Industry Fellowships (LIF)
- **Partners**
 - Private sector; private non-profit organisation; a Govt org with funds not committed to internal research or any other purpose of research, evaluation and/or consultancy.
 - Does not fund medical and dental research & training

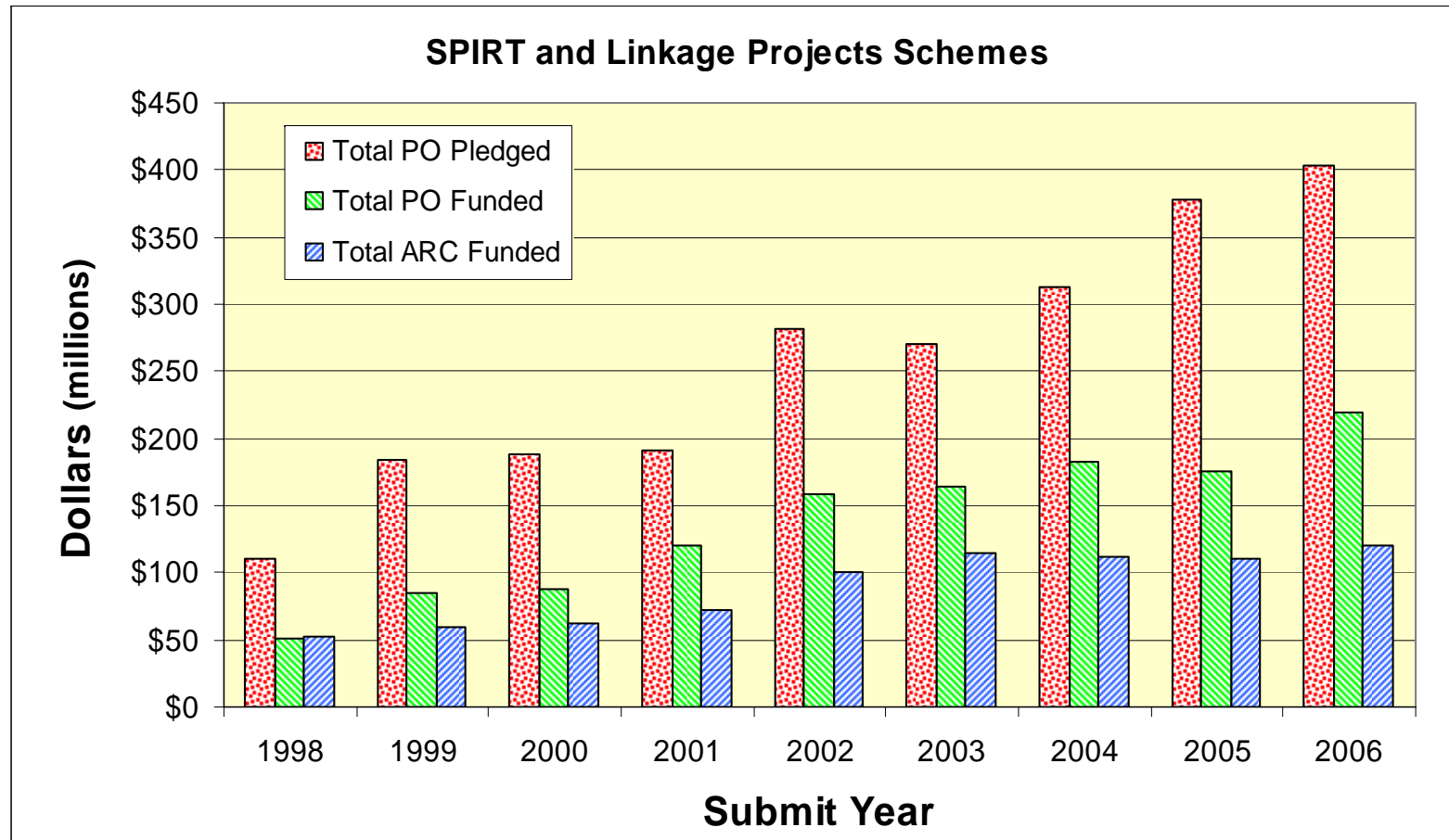


ARC Collaborative Projects (All Fields)



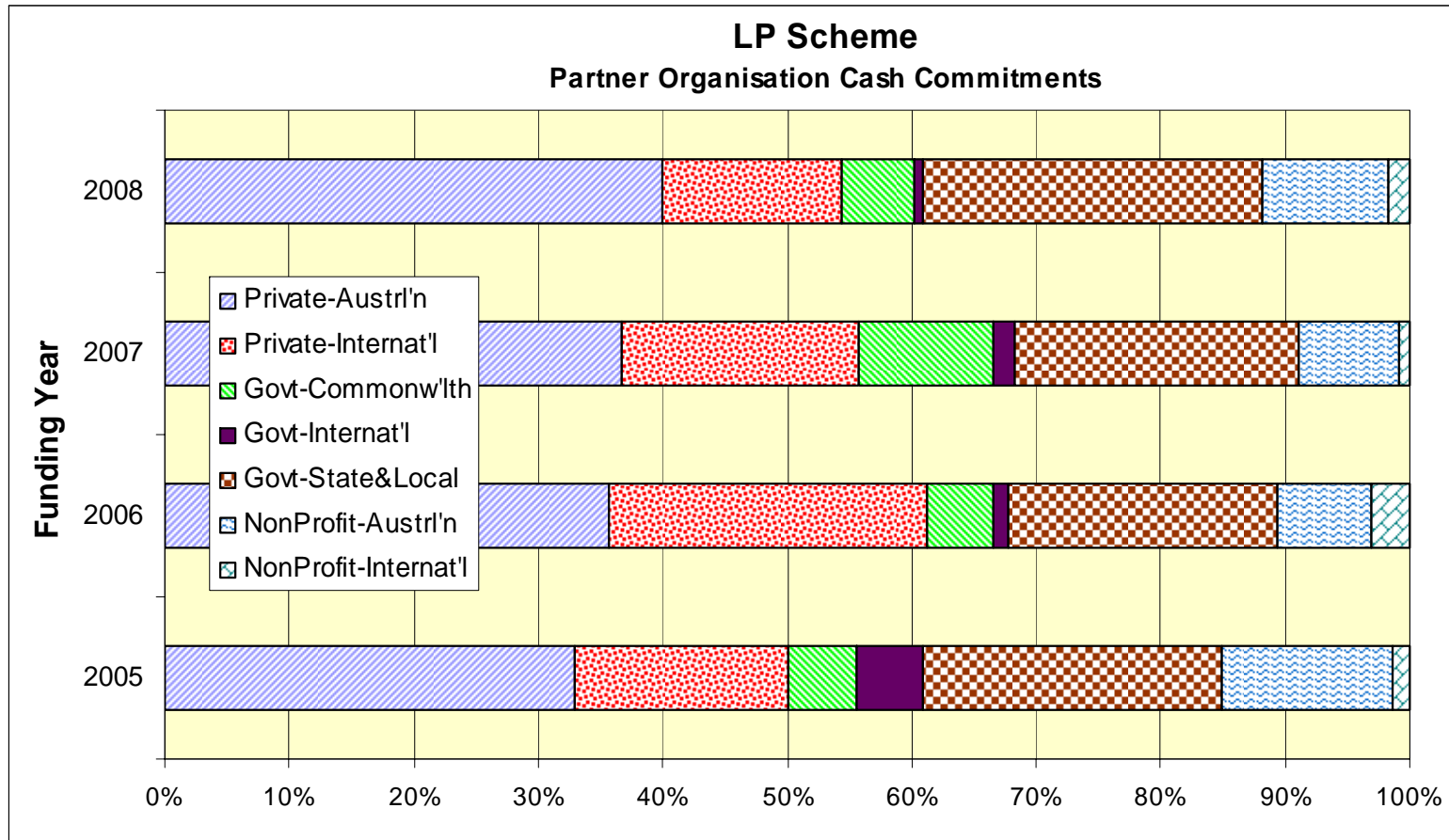


Partner Organisation Commitment (Cash + In-kind)





Partner Organisation Profile 2005-2008





Partner Organisation Contributions 2005-2008 (millions)

	Cash	%	In-kind	%	Total	%
Private Sector						
Australian	\$89.8	36.5%	\$164.5	37.1%	\$254.3	36.9%
Overseas	\$46.9	19.1%	\$68.6	15.5%	\$115.6	16.8%
Sub-total	\$136.7	55.6%	\$233.1	52.6%	\$369.9	53.7%
Government Sector						
Australian	\$17.2	7.0%	\$21.3	4.8%	\$38.5	5.6%
State & Local	\$58.9	23.9%	\$126.1	28.5%	\$184.9	26.8%
Overseas	\$5.1	2.1%	\$5.1	1.2%	\$10.2	1.5%
Sub-total	\$81.2	33.0%	\$152.4	34.4%	\$233.7	33.9%
Non-Profit Sector						
Australian	\$23.7	9.6%	\$50.9	11.5%	\$74.6	10.8%
Overseas	\$4.3	1.8%	\$6.5	1.5%	\$10.9	1.6%
Sub-total	\$28.1	11.4%	\$57.4	13.0%	\$85.5	12.4%
Totals	\$246.0	100.0%	\$443.0	100.0%	\$689.0	100.0%

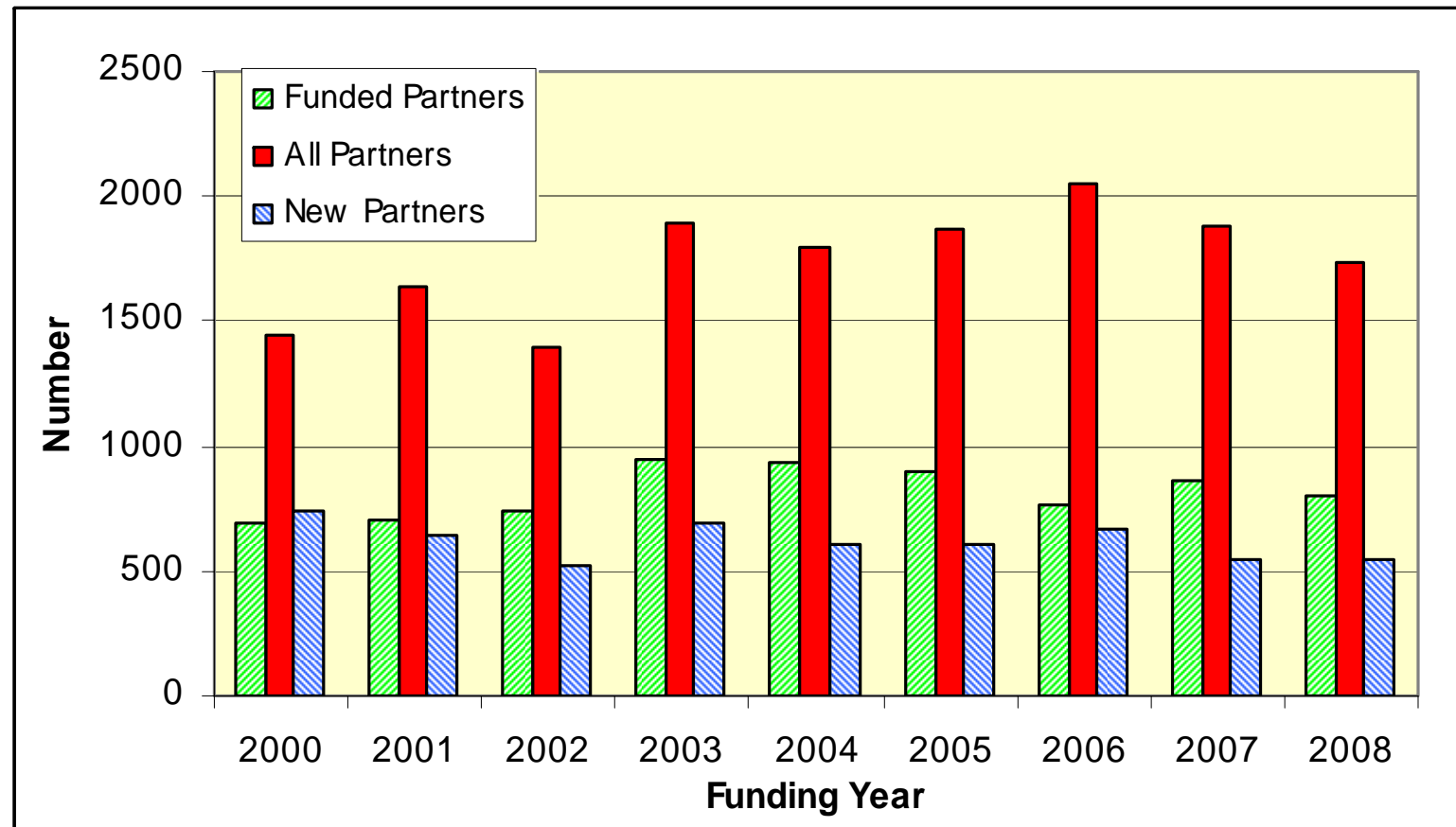
Total ARC Commitment: \$467.5m





Partner Organisation Participation

Linkage Projects Scheme



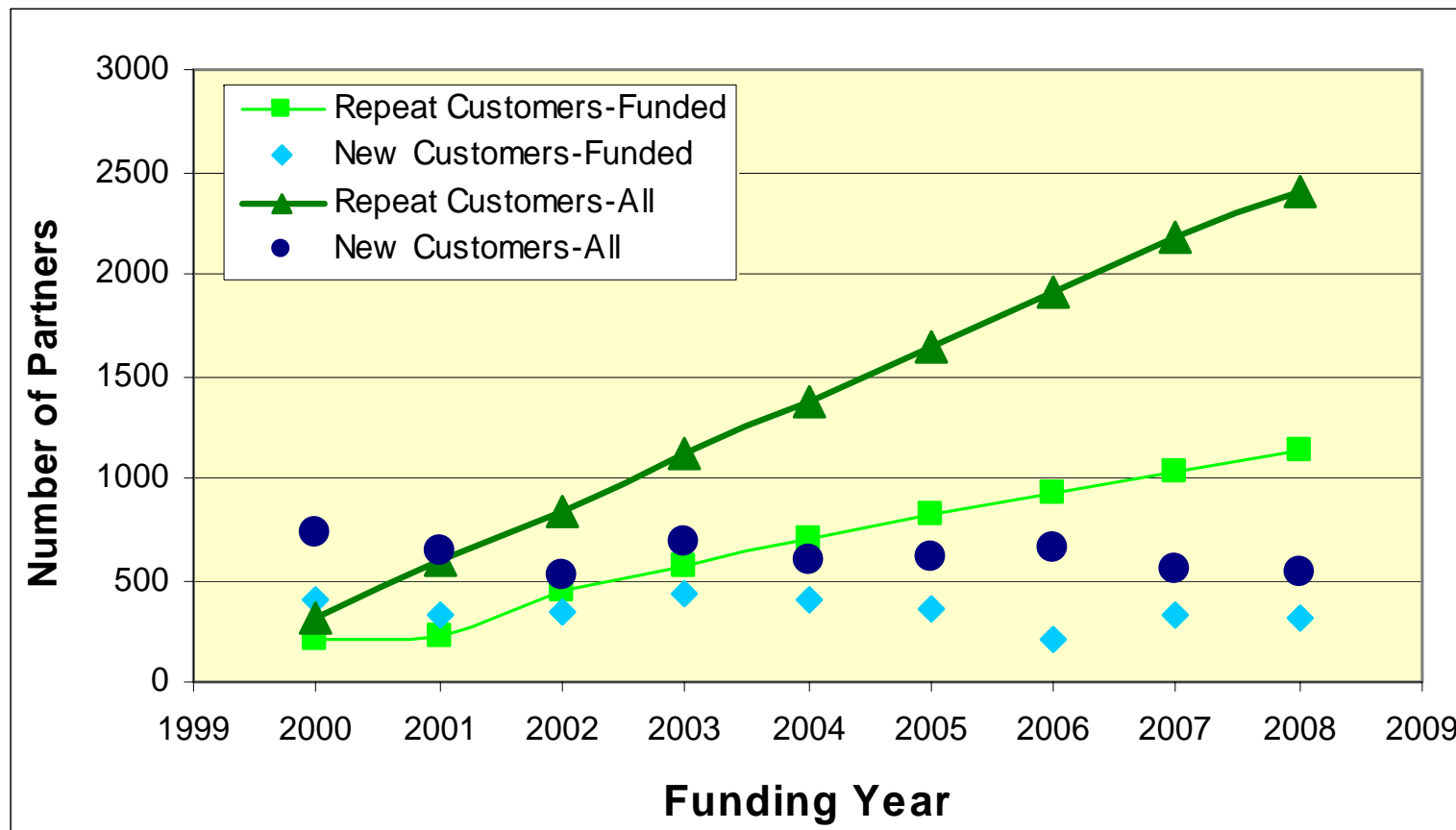
*New Partners: first occurrence as Partner Organisation on any project (since 1995)
Total for Period: 3,118 (funded)





Partner Organisation Participation

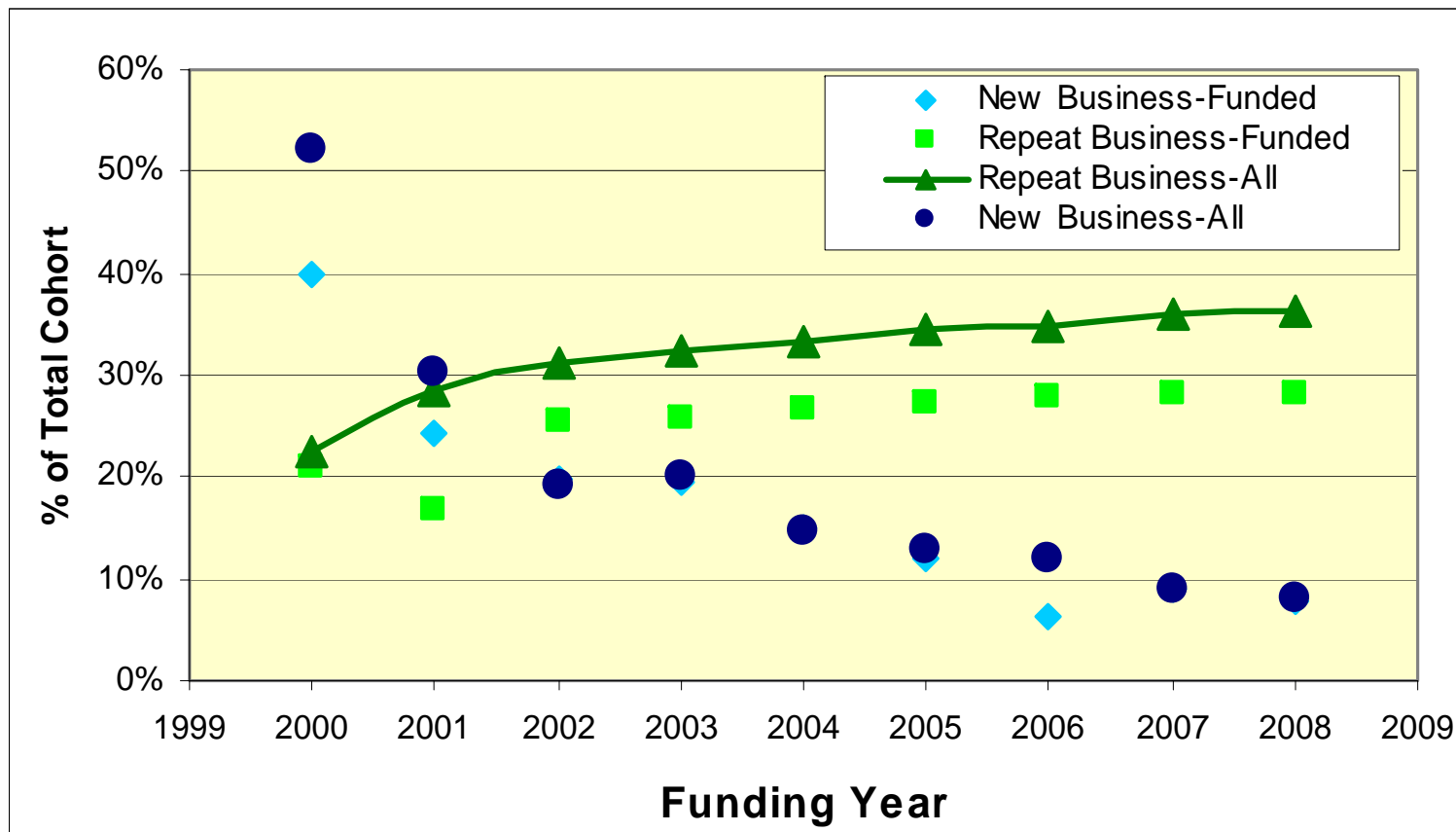
Linkage Projects Scheme





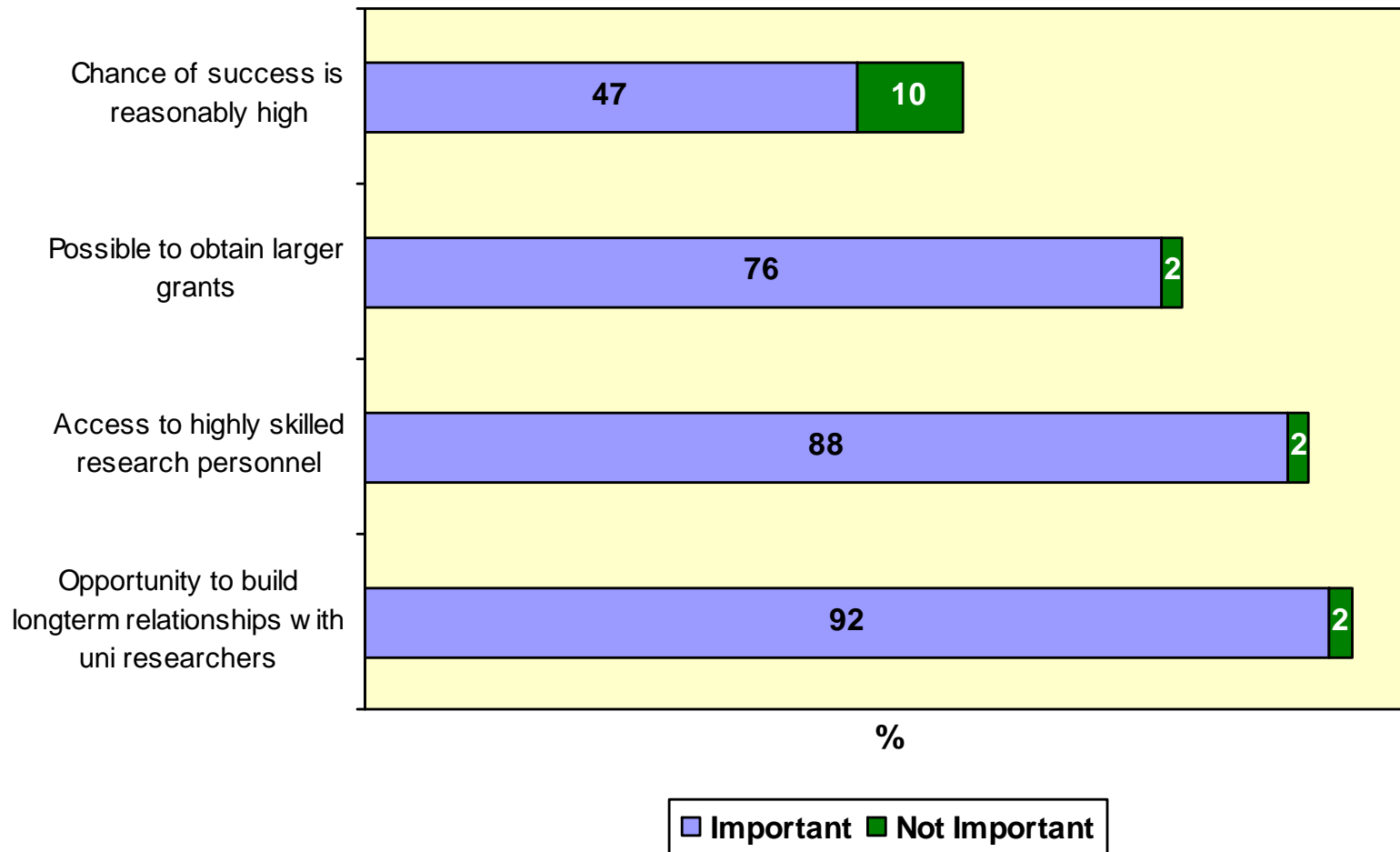
Partner Organisation Participation

Linkage Projects Scheme





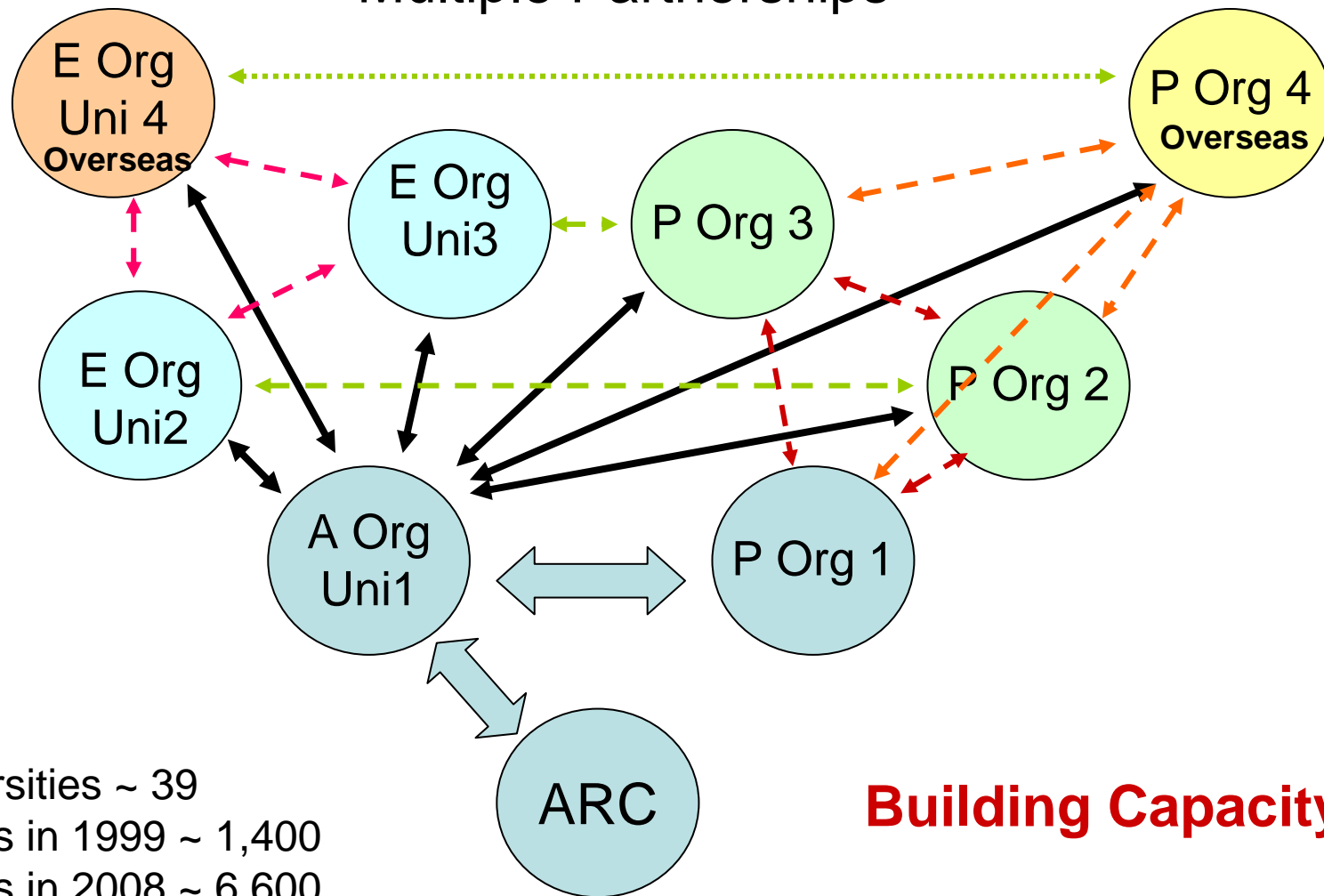
Partner Organisation Views: Why Use LP Scheme ?





Linkage Projects Scheme

Multiple Partnerships



Universities ~ 39
P Orgs in 1999 ~ 1,400
P Orgs in 2008 ~ 6,600

Building Capacity



Summary

- Centres of Excellence Scheme
 - highly competitive and collaborative
 - end-user engagement; mutual associations
 - typical leverage 4x
- Linkage Projects Scheme
 - 50%-60% of total PO cohort is private sector
 - 20%-25% of total PO cohort is international
 - > 3,000 new POs in R&D between 2000–2008
 - repeat business >30% for past seven years
- Factors in Research Partnerships
 - roles and responsibilities – academic; industry
 - long-term strategic R&D & commitment
 - relationships – building, maintaining and enhancing



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Thank You

