# AFRICA INTEGRAS

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## AFRICA IS THE NEXT BIG GLOBAL OPPORTUNITY...

Leading African Economies Expected to Outperform BRICs Real GDP Growth by 2015



#### ACCORDING TO MCKINSEY'S 2011 AFRICA REPORT

- Total foreign capital flows into Africa rose from \$15 billion in 2000 to a peak of \$87 billion in 2007.
- Today the rate of return on foreign investment in Africa is higher than in any other developing region.
- At least four groups of industries (consumerfacing, agriculture, resources, and infrastructure) are projected to generate as much as \$2.6 trillion in revenue annually by 2020, an increase of \$1 trillion from today.

## EXPLOSIVE POPULATION GROWTH AND A GROWING MIDDLE CLASS REQUIRE SIGNIFICANT SOCIAL INFRASTRUCTURE TO SUSTAIN AFRICA'S GDP GROWTH

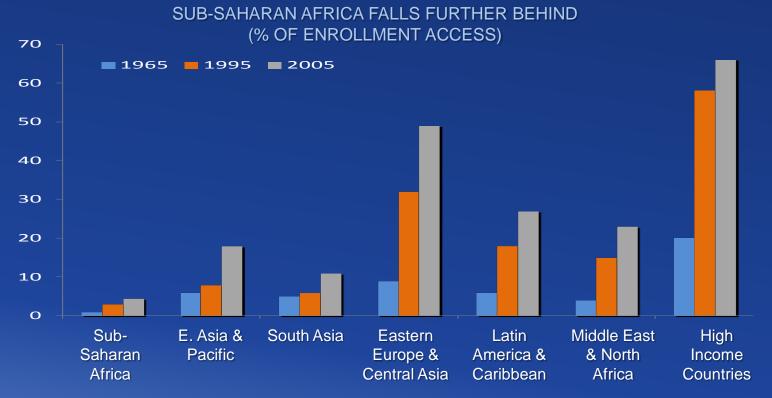
EXPLOSIVE POPULATION GROWTH	<ul> <li>Population expected to double to two billion by 2050, accounting for 20% of the world population.*</li> <li>The majority of sub-Saharan cities of a million or more people are expected to grow by an average of 32 per cent between 2010 to 2020.*</li> </ul>
STRONG URBAN MIGRATION TRENDS	• The average growth for the 10 proportionally fastest growing cities in Africa is approximately 51% though 70% of all African urban population growth is expected to occur in smaller cities and those with populations of less than half a million.*
DEMAND FOR SOCIAL INFRASTRUCTURE	<ul> <li>African families will often forego a minimum of a meal a day in order to fund primary or secondary school fees in recognition that especially education access has become a life or death consideration.</li> </ul>
	<ul> <li>By 2030, Africa's largest 18 cities could have a combined spending power of \$1.3 trillion.**</li> </ul>
INCREASED ECONOMIC ACTIVITY	<ul> <li>The number of households with discretionary income will rise by 50% over the next 10 years, reaching 128 million.**</li> </ul>
	<ul> <li>Target countries such as Rwanda have seen strong demand for quality housing and commercial buildings supporting unleveraged yields from 6% to 14%.***</li> </ul>

- UN Habitat, The State of African Cities 2010
- \*\* McKinsey, June 2010
- \*\*\*\*Rwanda Social Security Fund

## AFRICA'S SOCIAL INFRASTRUCTURE NEEDS PROVIDE INVESTORS WITH A NEW SECTOR THAT OFFERS LONG-TERM, STABLE, CASH-GENERATING INVESTMENTS

RESILIENT UNCORRELATED DEMAND	•	Universities provide stable, uncorrelated and secure cash flows to mitigate risk in frontier markets. African universities have resilient demand even in major political crises or economic shocks.
PENT UP DEMAND FOR FACILITIES	•	Significant expansion of primary and secondary school enrollment across the continent is increasing pressure on universities to expand enrollment. Many universities double enrollment every five years.
ATTRACTIVE RISK ADJUSTED RETURNS	•	Universities' access to operating revenues (tuition) and limited access to financing for facilities creates strong partnership opportunities for private investors with projected net returns for build-operate-transfer (BOT) projects pegged at a minimum of 20%.
CREATION OF A NEW INVESTMENT SECTOR	•	In-fra-struc-ture (noun) 1. the basic physical and organizational structures and facilities (e.g., buildings, roads, and power supplies) needed for the operation of a society or enterprise.

## THERE IS A LARGE UNMET DEMAND FOR HIGHER EDUCATION SEATS DUE TO LACK OF FINANCING



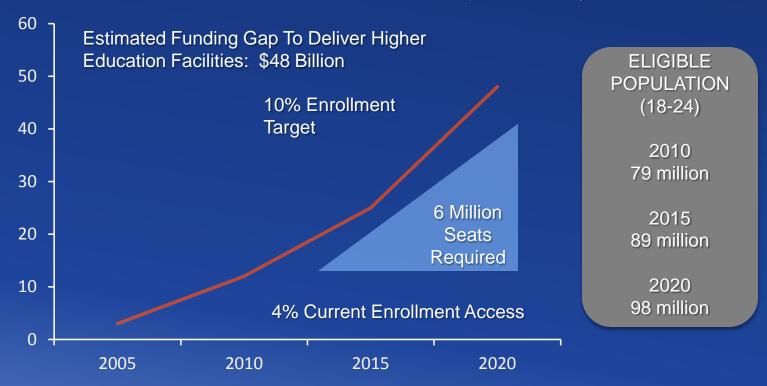
• Enrollment ratios in higher education in Sub-Saharan Africa are the lowest in the world at only 4%. They are below South Asia (10%), the Middle East (23%) and the developed world (60%) and well below levels necessary to accelerate long-term GDP growth.\*

 70% of university students are not able to reside in university housing due to lack of facilities and many students are forced to share beds.\* Kenyan public universities in past have restricted enrollment to only those students able to reside on campus despite limited dormitory beds.

\*Data compiled by Christie management from university surveys conducted by management and from UNESCO

#### ...A DEMAND WHICH GOVERNMENTS AND DONORS ARE MOTIVATED TO MEET

#### FUNDING REQUIREMENT FOR HIGHER EDUCATION ENROLLMENT TARGETS IN AFRICA BY 2020 (IN BILLIONS)



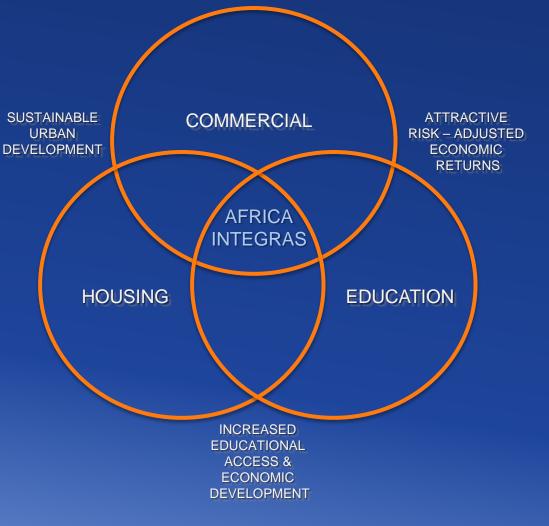
- Government/Donor Target University Gross Enrollment Ratio: **10%**
- Estimated Cost to Deliver Facilities to Meet Target Gross Enrollment Ratio: \$48 Billion
- Projected International Funding Allocated to Facilities: \$500 Million
- Total Number of New Seats Needed to Deliver Enrollment Goals: Over 6 million

Data compiled by Christie management from various sources

## AFRICA INTEGRAS WAS CREATED TO BRING PROVEN FINANCING STRUCTURES TO THESE EDUCATION INVESTMENT OPPORTUNITIES

Africa Integras invests early-risk capital for the development of master-planned university communities, using the "INTEGRAS" public-private partnership strategy.

- Target of net 20% IRR allows for economic sustainability and scalability.
- Proven financial BOT structure ensures each project meets the highest affordability for universities compared to alternative financing options.
- Africa Integras is managed by the Christie Company. AECOM and Broll Facilities Management Ltd. serve on the management team and partner on project implementation.



## THE INTEGRAS MODEL FOCUSES ON A MUTUAL BENEFITS APPROACH

#### CO-LOCATION AND CROSS-FINANCING

Co-locate academic facilities with retail, office, housing, and private enterprises to cross-finance the construction of education facilities.

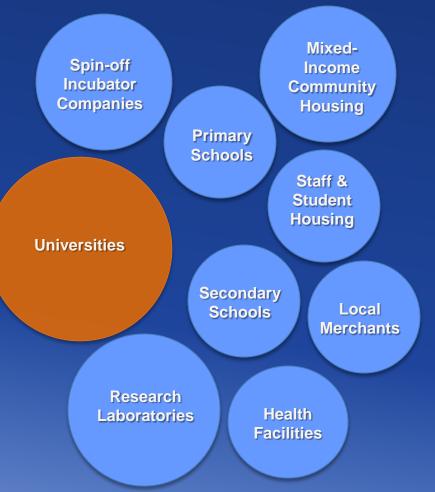
#### BUILD-OPERATE TRANSFER (BOT) STRUCTURE

Invest in projects that create stable cash flows for investors over long-term leases.

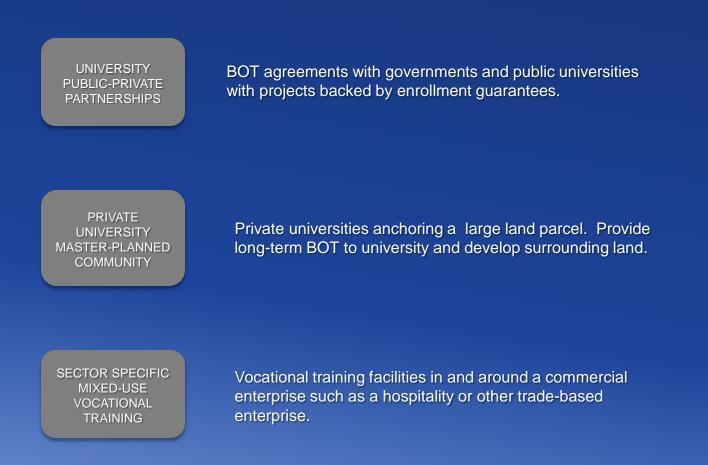
#### **PROFIT-SHARING**

Allocate a portion of project profits to a fund for the university to align stakeholder interests towards maximizing long-term investment returns.

#### **UNIVERSITY CITIES**



## AFRICA INTEGRAS HAS THREE PRIMARY INVESTMENT TARGETS



## ...AND THREE SECONDARY TARGETS THAT COMPLEMENT THE PRIMARY INVESTMENT TARGETS

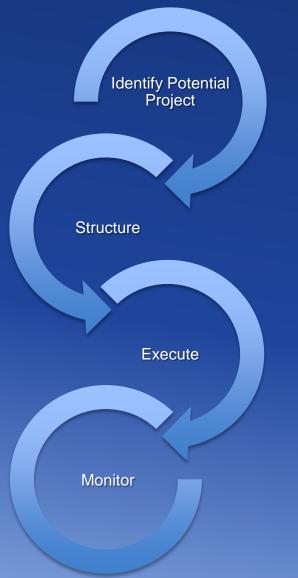
DISTANCE LEARNING PROGRAMS Invest in the creation or expansion of distance learning programs affiliated with partner universities in which the universities share in the profits from enrollment and students attend special on-site programs during vacation breaks to enhance revenues on dormitory facilities.

PRIVATE STUDENT FINANCING PRODUCTS Partner with local banks and pension funds to introduce pilot student loan programs at partner universities that are carefully screened and guaranteed by students' local communities and further credit-enhanced by local pension funds.

INCUBATOR ENTERPRISES AND LOCAL MERCHANTS Invest in viable spin-off businesses developed at partner universities as well as synergistic retailers and companies that can employ students and graduates and have scalable growth potential across the portfolio of university investments.

#### **INVESTMENT STRATEGY**

#### AFRICA INTEGRAS BUSINESS MODEL



- Source potential projects and lead due-diligence to ensure investment viability.
- Lead negotiations with counterparty to secure exclusive development rights.
- Lead pre-development activities and provide early-risk capital to cover third-party expenses to complete conditions precedent to secure financing commitment.
- Raise additional equity and debt required for the project.
- Lead negotiations with senior lender and university to bring project to financial close.
- Convene implementation team and oversee project delivery through occupancy by university.
- Oversee project monitoring to ensure compliance with contractual obligations with the university and the senior lender.
- Negotiate preferred valuation for early-risk investment on behalf of Africa Integras upon financial close. Secure 25% of shares in the project SPV in exchange for sweat equity, IP, and early-risk investment to bring project to execution.

#### **INVESTMENT STRATEGY**

**COMPETITOR COMPARISON** 

MIXED-USE INVESTMENTS • Virtually no existing local investors or developers currently making investments in African universities are investing beyond the student hostels sector. However, students hostels are subsidized and generate low returns as stand-alone investments.

Africa Integras combines student hostels with academic facilities because the latter has a higher potential return profile. Combined, the project returns meet the investor requirements and the universities gains capital financing for a larger portion of its infrastructure needs.

ALIGNMENT WITH UNIVERSITY REVENUES • Most local investors negotiate with universities based on market rents. This does not align university revenues and expenses for projects with long-term leases.

Africa Integras calculates the rent as a percentage of tuition revenues to ensure long-term alignment of revenues and expenses and also to give the investors upside potential for making additional investments that enhance the university's reputation, enrollment growth, and tuition growth.

PROFIT SHARING TO ALIGN INTERESTS Most projects in the market today reflect a local investor or developer that seeks to
maximize their return without checks and balances. This makes universities hesitant to
close because they feel they are not getting a fair deal or are being exploited by investors
with purely commercial interests.

Africa Integras creates a shared appreciation fund with the university partner recognizing that if the university honors its obligations and creates upside for the investor beyond expectations, it deserves to share in that upside. The result is an endowment that gives the university a strong incentive to protect the success of the investment.

## INVESTMENT STRATEGY EXIT STRATEGIES

SECURITIZATION	<ul> <li>Infrastructure projects based on a BOT structure create long-term stable</li></ul>
OR BOND	cash flows that can be potentially syndicated and/or securitized locally,
ISSUANCE	regionally and in international capital markets.
PRIVATE	<ul> <li>Many African-based REITs and international and local pension funds.</li></ul>
PLACEMENT OR	There is also the potential to raise a fund against the right to develop
SALE TO FUND	future project phases.
COMMERCIAL PORTFOLIO SALE	<ul> <li>First-mover advantage on large-scale land holdings and development rights with planning consent is attractive to regional investment funds seeking medium-term investments with diversified sources of return.</li> </ul>
LOCAL OR INTERNATIONAL PUBLIC LISTING	<ul> <li>Local, regional and international listings of both project and fund debt and equity will provide attractive returns to emerging market debt and equity funds seeking steady returns with exceptional potential for capital appreciation.</li> </ul>

## DIRECT SOCIAL, ECONOMIC, AND EDUCATION IMPACT OF THE INVESTMENT PIPELINE

Education and Public Benefits Including for Bottom of the Pyramid (BOP) Residents

Expand university infrastructure by 50,000 student seats and vocational schools by 10,000 seats, targeting 50% gender parity. A total of 450,000 additional graduates over the 30-year BOT period.

Expand K-12 infrastructure for higher education feeder schools by 5,000 students.

Promote university-industry collaboration by developing facilities for private sector companies to locate on campus and establishing business incubator facilities to encourage spin-off businesses from the university and K-12 schools.

Create female graduate and gender parity benchmarks for university investment targets as a pre-condition for investment.

Enhance the technology infrastructure on each education campus.

Increase the number and depth of collaborations with international universities and foundations on scientific research initiatives.

Facilitate investment in incubator spin-offs from university faculty or students

Transfer hundreds of millions in endowment principal to universities upon completion of BOT period along with transfer of valuable commercial portfolio.

#### ESTIMATED ECONOMIC IMPACT OF THE AGGREGATE AFRICA INTEGRAS PORTFOLIO INVESTMENTS

Job Creation	Number Across Portfolio	Percentage of BoP Exposure
Construction Workers (50% skilled, 50% unskilled)	5,000 laborers	50%
Additional Permanent University Employees	2,000 staff	30%
Part-time Student Jobs and Internships	10,000 students	75%
Commercial Tenant Employees	5,000 employees	40%
SMEs Impacted by Expanded Enrollment	500 SMEs	50%

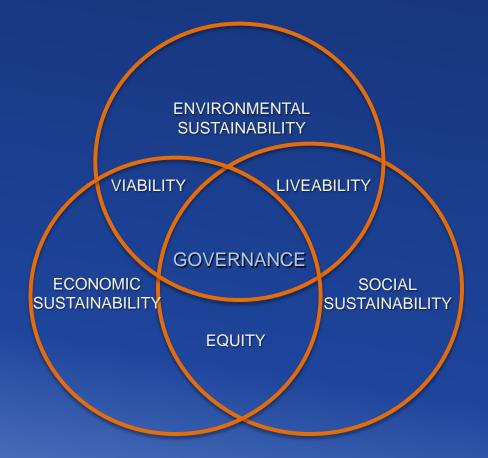
#### ESTIMATED DIRECT INCOME TAX REVENUES FROM AN INCREASE OF 50,000 UNIVERSITY

Years Out from Project Completion	Estimated Annual Tax Revenues from Increased Graduate Pool Assuming 20% Employment Among Graduates*	Employment Rate Among Graduates for PV Calculation	Present Value of Tax Revenues over 30 years
5	\$14 million	20%	\$193 million
10	\$38 million	40%	\$385 million
20	\$146 million	60%	\$578 million
30	\$418 billion	80%	\$781 million

\*Assumes a starting salary of \$2,834, 6.50% annual growth rate, 3% decrease annually due to attrition, a discount rate of 16.50%, and a 30% income tax rate. Data compiled by Management based on various sources.

### AFRICA INTEGRAS INVESTS IN CREATING HEALTHY, SUSTAINABLE "KNOWLEDGE COMMUNITIES"

- STRONG HUMAN CAPITAL AND TALENT advancing local economic and social progress.
- SUSTAINABLE economic, social and ecological design.
- MIX OF USES that encourage interactions and overlaps between universities and businesses, work and leisure activities, and students and residents.



STRONG UNIVERSITY TOWNS MITIGATE IMPACT OF URBAN MIGRATION TO MEGA-CITIES BY ATTRACTING POPULATION TOWARDS SMALLER INSTITUTIONALLY-ANCHORED COMMUNITIES.