









They Have A Name For Great Golf Courses.



Dear Reader,



Andrea Sartori
Partner, KPMG Advisory Ltd.
Head of KPMG's Golf Advisory Practice
in Europe, Middle East and Africa

info@golfbenchmark.com

I am pleased to present the third edition of the Golf Course Development Cost Survey, prepared by KPMG's Golf Advisory Practice in Europe, Middle East and Africa (EMA). Based on the responses of owners and developers of over 100 recently constructed/under development golf facilities, this report provides information on the planning and construction costs of golf courses in various locations of EMA, as well as typical development timeframes. Furthermore, we identify issues and challenges which typically arise during the development process.

After a few very tough years following the global credit crunch and the wider unfolding of the economic downturn in 2008, it is good to see stronger activity in today's lifestyle real estate market and a revival of golf projects, with some prominent transactions taking place in various parts of the world. Nevertheless, the last 5 years have left their mark on the golf market, with supply growth significantly slowing down and participation rates decreasing in many regions. Against this background, we have still managed to identify more than 400 golf projects in the EMA region since early 2008, including new developments as well as full renovations or extensions of existing facilities.

International experience proves that when combined with real estate and/or a touristic development, a golf course can still offer an exciting investment opportunity. Having comparable primary information on golf course development costs can be of key importance to developers, financiers and operators, as well as public institutions when thinking strategically about golf development.

Together with other research regularly published at www.golfbenchmark.com, this study aims to provide investors, developers and other industry stakeholders with a better understanding of the factors that influence the construction costs of golf courses, typical full-project development timing and the process of selecting golf course architects and construction companies. In addition, we have also provided an insight into the added value that a golf course and a broadly acknowledged golf designer can give to a surrounding real estate development.

I hope you will find our results both interesting and enlightening. I would like to take this opportunity to thank all the golf course developers, owners, operators and golf course architects who have participated in our research for their valuable input. Furthermore, I would like to express my sincere gratitude to the sponsors and supporters of this research.

If you would like to receive any clarification or discuss the survey results, please feel free to contact the KPMG Golf Benchmark Team or myself.

Yours sincerely,

Andrea Sartori

Table of contents

Objectives and methodology		5
Profile of our sample		6
Overview of the EMA golf market		7
An insight into global golf development		10
Developing a golf course – from concept to realization		12
How much does it cost?	17	
Design fees – from qualified architects to signature designers	20	
Golf and real estate	21	
Clubhouse development	23	
Conclusion	24	1

Objectives and methodology

Similarly to the previous two editions (2005 and 2008), we have conducted the Golf Course Development Cost Survey with the objective of finding out the following information:

- Where were golf course developments concentrated in the last 6 years?
- Where will be the golf development hot spots for the next 5 years?
- What motivates investors to develop a golf course and how do they select key suppliers?
- How long does it take to develop a new golf course and what are the major difficulties developers usually face in different geographical locations?
- How much does it cost to develop a golf course in the EMA region?
- How much value can the name/brand of a renowned architect bring to a golf course development?
- What premium can a golf course add to adjacent real estate prices?

The countries which are home to the golf courses that have participated in this survey were clustered into sub-regions based on geographical proximity and similarity in economic development. As such, the following groups were defined:

Regions	Countries/Sub-regions
Great Britain and Ireland	England, Scotland, Wales, Ireland
Northern Europe	Denmark, Finland, Norway, Sweden
Central Europe	Belgium, Germany, Netherlands, Switzerland
Western Europe & South-East Mediterranean Europe	France, Italy, Portugal, Spain, Cyprus
Eastern Europe	Bulgaria, Croatia, Czech Republic, Estonia, Poland, Russia & CIS, Slovakia
Middle East and North Africa	Egypt, Morocco, UAE
Sub-Saharan Africa	Kenya, Mauritius, South Africa

Methodology

The analysis presented in this report has been prepared based on a questionnaire survey of developers and operators of golf courses which opened after 1 January 2008 or are currently under development (the data collection period was February-March 2014). We sent questionnaires to more than 400 golf course owners/developers and recorded a 25% response rate from 32 countries in the EMA region. The golf courses constituting the base of our sample were identified by comprehensive secondary research.

In order to complement the findings of our survey we have also sought the

opinion of 40 golf course architects belonging to the American Society of Golf Course Architects (ASGCA) or the European Institute of Golf Course Architects (EIGCA). By addressing a set of specific questions to designers, we have collected their views about golf course development costs as well as their professional opinion about the issues covered by this survey.

We wish to highlight some specific characteristics and limiting factors of the survey:

- In order to allow more significant comparison between different courses that are part of this
- research, our survey focuses only on golf course development costs and excludes investments related to land acquisition and other facilities such as clubhouses, car parking or driving ranges, as well as investments in maintenance equipment, cart fleets or working capital.
- Differences in time of development, fluctuation of exchange rates and inflation, as well as differences in the development stage of the various countries involved in the research are limiting factors that we could not overcome.

Profile of our sample

This third edition of the Golf Course Development Cost Survey in EMA is based on the responses of owners and developers of over 100 recently constructed/under development golf facilities. We have received responses from 32 different countries in EMA. Eighty-three percent of the participating golf courses were located in Europe, 6% in the Middle East and North Africa and 11% in Sub-Saharan Africa.

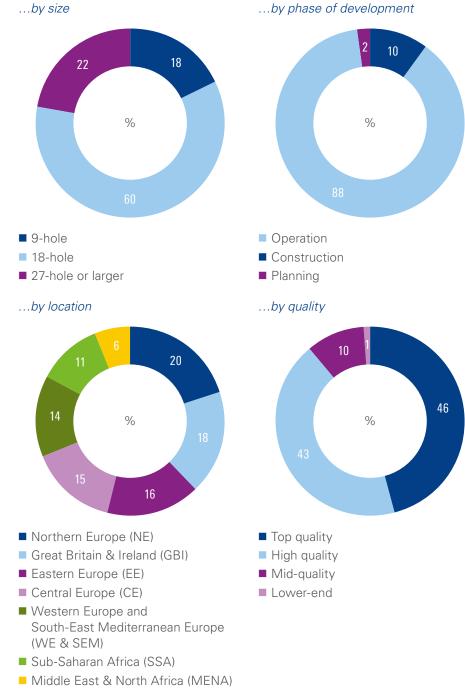
Sixty percent of the respondents were 18-hole golf courses, 18% were 9-hole facilities and 22% were 27-hole or larger courses.

More than half of the responding course operators were linked to tourist resorts or residential communities, while 46% were stand-alone golf courses. However, it should be noted that when considering only newly constructed facilities, there appears to be an even higher prevalence for the development of golfing facilities as part of housing communities or touristic resorts. In our 2008 sample only 42% of the golf courses were part of mixused developments.

In our sample, 88% of the facilities were already in operation, 10% were at the construction phase while 2% of the golf courses were under advanced planning. Nearly a fifth of the developers of new facilities had outsourced (or were planning to outsource) the operation of the golf course to a professional management company. The vast majority of the survey respondents operate on a membership & daily fee basis. Only 6% are private clubs for members only.

Respective quality ratings were also reported by the developers/owners participating in the research. Our sample included four types of courses from "top quality" to "lowerend" golf courses. The vast majority (89%) of our survey participants rated their development as high-end courses (high quality or top quality).

Distribution of the participating golf courses



We also noted that the share of lower-end and mid-quality courses has shrunk significantly since our previous survey. It appears that both integrated developments and stand-

Source: Golf Course Development Cost Survey

alone facilities are trying to differentiate themselves by being associated with higher standards and often with certain brands and extra features.

Overview of the EMA golf market

The number of golf courses in Europe, the Middle East and Africa has, on average, been growing by less than 1% annually since 2008, resulting in a total of 7,300¹ golf courses operating in the region at the end of 2013. This is a small growth in overall supply, especially when compared to the 3.3% annual growth achieved between 1990 and 2008. In fact, several countries, notably Great Britain & Ireland and Spain, have witnessed several closures of golf facilities in recent years.

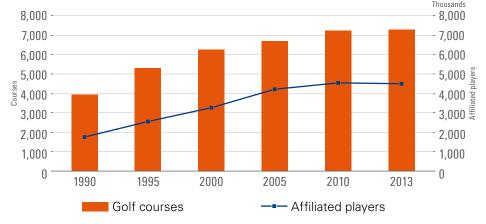
In the course of our research we have identified close to 400 new golf facilities in the EMA region which have opened after 2008 or started development since. Even though the pace of development has slowed, mainly as a result of the credit crunch, there is still activity in the market.

Between 1990 and 2008, demand for the game of golf – reflected in the number of affiliated golf players – increased on average at an annual rate of over 5%. This was followed by a period of complete stagnation between 2008 and 2013. Today, the EMA region has around 4.5 million affiliated golfers².

Golf course projects in EMA in the period 2008-2013



Development of supply and demand in Europe, the Middle East and Africa (1990-2013)



Source: European Golf Association (EGA), national golf federations, KPMG research

- 1 Total supply of golf facilities in EMA (7,300 units) includes par-3 courses, executive courses, practice ranges and other golf facilities. However, in our survey we only analyze facilities that are of full length.
- 2 Statistics on the number of players mainly cover affiliated/registered golfers. The definition of who can be considered a golfer above and beyond affiliated players is fairly subjective. Statistics on non-affiliated players are very limited in most countries. However, based on feedback from different golf bodies, we can assume that in the EMA region an additional 35–40% plays golf on a casual basis, without being affiliated to a golf union.



The map on the right shows the maturity of the golf markets in countries of EMA, according to the number of inhabitants per golf course (thus reflecting the maturity of supply), and the proportion of the population who play golf (golf participation rate).

Europe has over 90% of the golf supply and demand in the EMA region. The golf market has reached a challenging stage here with the development of the game having slowed down or being entirely stagnant in several countries. The decrease in the number of affiliated golfers can be partially attributed to the economic crisis but also to the change in lifestyle, work and golfing patterns. Specifically, in Great Britain and Ireland, where golfers do not need to be registered to play, more and more golfers choose to play on a casual basis, rather than paying club membership.

Great Britain and Ireland comprise by far the largest golf market in Europe, with approximately 3,000 regular courses and around 1.25 million affiliated players. While golf has traditionally been a popular sport in Great Britain and Ireland, it has also grown to become popular in other countries of Europe, such as Germany, France, the Netherlands and the Nordic countries. In Sweden, participation rates are significantly higher than in the rest of the EMA region (5% of Sweden's population are affiliated golfers). Denmark and the Netherlands have witnessed an impressive increase in their golf course supply in the last 6 years, with the opening of some 20 and 30 new golf facilities in each of these countries, respectively. Interestingly, about half of these courses have less than 18 holes.

In an effort to increase golf participation, France, the host country of the 2018 Ryder Cup, has made a commitment to increase its golf course supply with 100 new six- and nine-hole urban golf courses by the time of the event. Therefore, golf course supply has been growing rapidly in France in recent years, with many of the newly opened facilities being Par 3 courses and practice facilities.

Golf supply (inhabitants per course) in Europe, Middle East and Africa

- **Mature** ≤ 25,000 people
- **Developed** 25,000 100,000
- **Immature** 100,000 300,000
- Infant > 300,000



Golf demand (participation rate) in Europe, Middle East and Africa

- **Mature** ≥ 3%
- **Developed** 1% 3%
- **Immature** 0.2% 1%
- Infant < 0.2%



Source: European Golf Association (EGA), national golf federations, KPMG research

In the Czech Republic, the most mature golf market in Eastern Europe, we have identified some 20 new course openings since 2008. As such, it can be considered among the growing markets in EMA. Since 2008, the Czech Republic has seen an average annual growth of over 9% in registered players.

As far as golf tourism is concerned, Europe's most popular golf tourism destinations continue to be Spain and Portugal, followed by Scotland and Turkey. Other increasingly popular destinations include Italy and Bulgaria, the newly emerging golf tourism hot spots of Europe.

In **Africa**, South Africa continues to be the most dominant golf market, with close to 450 golf courses. Along with a strong local demand for golf (circa 129,000 registered golfers), golf courses benefit from South Africa's reputation as a high profile tourist destination. While the number of courses in South Africa has dropped slightly in recent years, golf is still an increasingly popular component of residential community developments in the country.

In addition to South Africa, Zimbabwe, Egypt, Mauritius and Morocco also contribute notably to Africa's golf supply, although these countries are home to less than 50 golf courses each. Other countries such as Tunisia and Kenya seek to capitalize on the benefits golf tourism can bring to their economies by offering a growing number of golf resorts. In the rest of the African continent the potential for golf development is virtually untapped.

Instrumental to the growth of the game in the Middle East has been the increase of the expatriate population from traditional golfing markets such as Great Britain, Ireland and the USA. The region is currently witnessing a revival in the property market after a number of years of uncertainty. The UAE is still considered to be at the forefront of golf development, with more than half of the region's grass courses located in the country. Typically high-end, integrated golf developments which also offer a number of other features and residential real estate opportunities have helped to position the UAE as a premier golf tourism destination.



syngenta.

For further information please refer to Syngenta details in the GBF conference brochure, or contact: Syngenta Crop Protection A.G., Scharzwaldailee 215, 4002 Basel, Switzerland Telephone: + 41 613231111, www.syngenta.com



An insight into global golf development

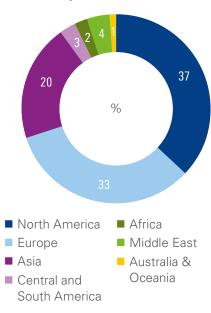
As part of our research into golf course development, we have consulted golf course architects - members of the American Society of Golf Course Architects (ASGCA) and the European Institute of Golf Course Architects (EIGCA) - and asked them about their assignments during the last six years. On average, the responding golf course architects and designers have been engaged in 16 assignments each from 2008 to 2013 (2.7 per annum each), with about 40% of all projects located in the EMA region. In the period 2004-2008, the average number of projects per architect was 26 (5.2 per annum each). It is apparent from these statistics how the economic downturn has negatively affected the development of golf supply. About 40% of architects have reported stagnation in their business in the last 6 years and 18% a decline in turnover. We also noted that several architects have changed business direction or closed down their business. Nevertheless, a quarter of the surveyed architects achieved a turnover growth in excess of 20% in the last 5 years.

Based on our interviews, those architects that recorded a notable increase in turnover have typically sought projects in emerging golf markets, where there is the

opportunity to provide additional assistance besides the typical architectural services. Such services include project management as well as assistance with contracting construction companies and other suppliers. In the developed golf markets, competition is fierce and, as a result, prices are depressed. We have also noted that the share of new developments has decreased in the last six years versus the re-designs of existing facilities; previously, new developments accounted for 60% and this has now decreased to 50%.

The majority of the golf projects worked on by our surveyed architects are located in North America and Europe (37% and 33%, respectively). In North America, these golf projects are largely dominated by renovation or rebranding schemes. Asia has gained a larger proportion of architects' work: 20% compared to 15% in 2004-2008. Golf developments were mainly concentrated in China (despite the moratorium on golf course construction), followed by South Korea, Myanmar and elsewhere in South-East Asia. In the Middle East, the development of high-end projects continued. Only a few of the surveyed architects had projects in Africa.

Regional breakdown of golf designers assignments in the 2008-2013 period



Many projects were previously put on hold during the economic downturn; therefore, it is encouraging to see that more than 42% of the courses designed by the responding architects between 2008 and 2013 are now already in operation, despite continued economic difficulties. Another 18% are currently under construction, and the remaining 40% are still at the planning phase. For the first time in several years there appears to be stronger activity in golfrelated real estate sales; in recent years several large transactions and projects have been successfully negotiated and initiated in various parts of the world.

Last 5 years projects of the surveyed golf course architects



Source: Golf Course Development Cost Survey

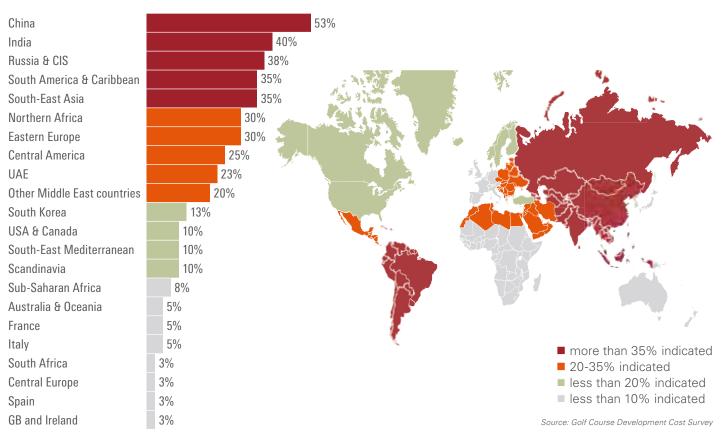
Future hot spots

When surveying golf course architects we asked in which markets they foresee the most significant growth in golf course development in the next 5 years. As in our previous survey in 2008, China was again the most

selected location, followed closely by India, Russia and the Commonwealth of Independent States (CIS), South America & the Caribbean, and South-East Asia. Eastern Europe and the UAE were seen as being less dynamic compared to our last survey, but these, as well as other countries of the MENA region, are to some extent still considered by golf architects to be among the hot spots.

Hot spots for golf development

(% of golf architects who indicated the following countries/regions)



Developing a golf course – from concept to realization

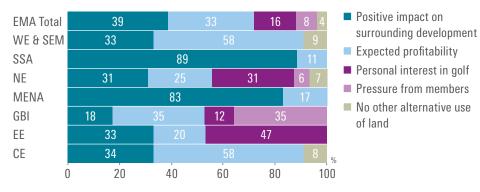
Key motivations

From a pure investment perspective, we see four strong motivating factors behind a decision to include golf in a broader development, namely:

- Golf courses have a strong track record of providing an increase in selling prices and sales velocity of adjacent residential real estate;
- Golf can help drive demand for onsite hospitality functions such as hotels and serviced apartments;
- Golf courses can act as a useful "positioning tool" for upscale developments;
- If designed, built and operated in a professional manner (and with favourable market characteristics), golf courses can provide a viable return on investment in their own right.

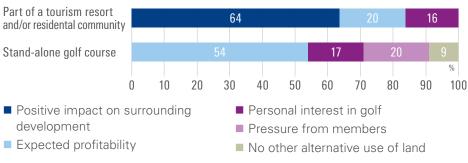
Our survey of golf course developers shows that in 39% of the cases the main aim of the golf course development was to add value to the surrounding real estate development, while a third of the projects were driven primarily by profit-seeking objectives. In the MENA region and in Sub-Saharan Africa, where the vast majority of newly developed courses are part of tourist resorts or residential communities, each project was driven by a real estate price uplift. The proportion of mainly profit-driven golf course developments was the highest in Central Europe and Western Europe, 58% in each of these two regions.

Key motivational factors for developing/extending a golf course (EMA region)



Source: Golf Course Development Cost Survey

Key motivational factors - Integrated vs. stand-alone



Source: Golf Course Development Cost Survey

In comparison to 25% in the 2008 edition of this research, only 16% of the surveyed developers were motivated by personal interest in golf. A surprisingly high 47% of respondents in Eastern Europe indicated their own golf interest as their primary motivation for the development, followed by 31% in Northern Europe and 12% in Great Britain and Ireland, where golf has great tradition and participation rates

are especially high. In the GBI region, more than a third of the respondents highlighted that the improvements were made to meet demands from club members.

In some of the cases land was utilized for golf course development as there was no alternative option. Not a single respondent was primarily motivated by making use of funds and subsidies.

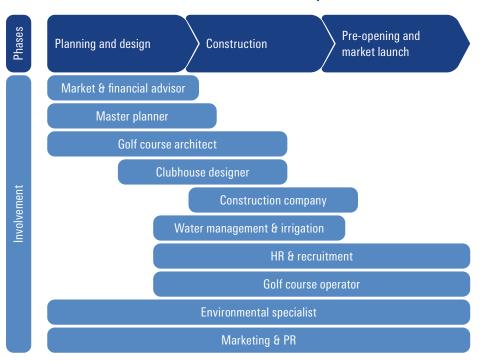
Selecting suppliers

During the development of a golf course the project team can involve a number of different skilled members, as illustrated in the chart below. While every project is different, this chart suggests the various professionals to be involved at the main stages of a golf course development.

When the golf course is part of a broader real estate development, there is an increased role for master planners and financial advisors to create a sustainable concept.

Focusing on the golf course element itself within a broader real estate development, in the planning and construction phases the golf course designer and the construction company play a crucial role. There are specialized golf course construction companies (as opposed to non-specialists) which developers often employ, especially in the case of higher quality golf courses. As part of our research, we asked the survey participants what their rationale had been when choosing the golf course designers and the construction companies for their development.

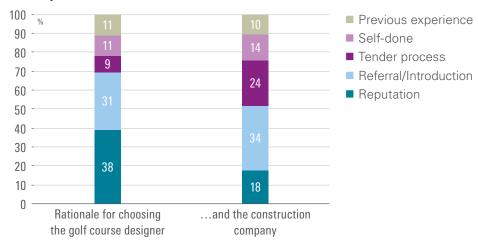
Involvement of the various members of the development team



 $Source: A\ Blueprint\ of\ Successful\ Golf\ Course\ Development\ (KPMG),\ available\ on\ www.golfbenchmark.com$

As with our findings in previous years, our recent survey also demonstrates that the selection of key suppliers often happens through informal channels, based on referrals or reputation. In many cases the golf architect introduces the construction company to the developer. Subcontractors were also chosen via open tender, while in about a tenth of the cases the design and/or construction works were done in-house. In some cases, the developers or project managers had previously worked with the selected supplier.

How did developers choose their key suppliers for the golf course development?



Source: Golf Course Development Cost Survey

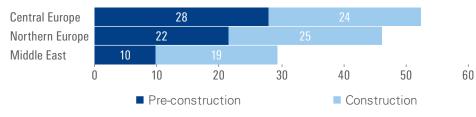
How long does it take to develop a golf course?

It usually takes 4-5 years to develop a golf course from concept to realization. Within this, the length of the permitting procedure can vary significantly depending on the country concerned, the nature of the site and the characteristics of the planned development. In some areas (e.g. the Middle East), all necessary permits for a course development can be obtained

within a few months, especially if the development is in line with a government plan/strategy. On the other hand, in Northern and Central Europe, golf developers often face very strict planning regulations and environmental opposition, and in extreme cases permitting can take up to 3-4 years.

Planning and design is mostly done within one year; the construction work typically takes 2-2.5 years, depending on the topography of the site, the quality of soil, the availability of water, the climatic conditions and of course the expected quality, complexity or playing difficulty of the designed golf course.

Average length of development stages in selected sub-regions (months)



Source: Golf Course Development Cost Survey

For 9-hole courses, construction work takes 5-6 months less on average than for 18-hole courses, and both planning and design can generally be completed in a shorter period as well.

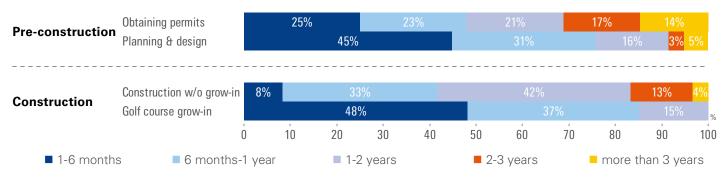
Understanding the market and financial feasibility of a development

Besides planning issues, availability of water and assessment of the characteristics of terrain, all of which can have a significant impact on the development cost of a golf course, the economic and financial aspects of the project should be investigated in a very early stage of the development. In this regard, the following questions should be answered, ideally with the support of professional advisors:

- Is your site suitable for a golf development in terms of its location, accessibility and proximity to demand generators?
- What is the competitive environment in terms of current and future supply of golf facilities?
- What is the market potential of your project in terms of current and future demand?
- What is the optimal project concept in terms of market characteristics, your financing capabilities and your risk/return expectations?
- Is the project financially viable?
- What is the expected return of investment form the project?

Source: A Blueprint of Successful Golf Course Development (KPMG), available on www.golfbenchmark.com

Length of the various phases of development – 18-hole courses (EMA region)



Source: Golf Course Development Cost Survey

What are the main difficulties encountered during the development of a golf course?

Developers can face a number of unexpected difficulties during a golf course construction project, all of which can affect the length of time for development.

Rejection of permit applications can delay and even block the entire project. Developers are aware that even the most spectacular design is worthless if they cannot obtain permits.

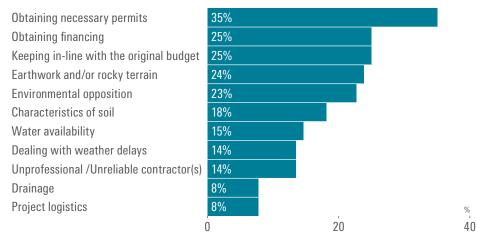
As with the findings of our previous surveys, obtaining the necessary permits was the most frequently

mentioned problem faced during the development of golf courses in EMA (35%), and even more so in Western Europe (50%).

Developers seem to have faced financing issues more commonly than before, as 25% indicated this in their responses. Similarly, 25% of them had difficulties keeping within their original budgets. In this regard it is worthwhile mentioning that having access to bank financing has become far more difficult than in pre-crisis

years. Earthwork and rocky terrain was a typical problem in Western Europe, whereas environmental opposition was a difficulty for a number of developers, mostly in Northern Europe. Unfavorable weather conditions were hard to deal with in Great Britain and Ireland, as well as in Northern and Eastern Europe. Unsurprisingly, in the Middle East, the biggest difficulty appears to have been the limited availability of water.

What were the most difficult issues to overcome during your development? (multiple answer allowed)



Maximising Returns for Owners.

Offering a comprehensive menu of services tailored to individual owners and developer's needs, Troon® has for over 20 years been the global leader in upscale golf course management, development and marketing. Our impressive track record of delivering profitability and return on investment whilst ensuring an unmatched guest experience has led us to work with many of the world's best venues.

Contact us at 00.41.22.770.5050 or visit via the website www.troongolf.eu

Clockwise below. Abu Dhabi Golf Club, Abu Dhabi, United Arab Emirates; Turnberry Resart, Ayrshire, Scotland; La Reserva de Satagrande Golf Club, Sotogrande, San Roque Codiz, Spain.



AUSTRALIA - AZERBAIJAN - BAHAMAS - CHINA - EGYPT - ENGLAND - FRANCE - GREECE - HONDURAS - INDIA

ITALY - KINGDOM OF BAHRAIN - MALAYSIA - MALDIVES - MEXICO - MOROCCO - NORWAY - PANAMA - PUERTO RICO - RUSSIA

SCOTLAND - SOUTH KOREA - SPAIN - ST. CROIX - ST. LUCIA - UNITED ARAB EMIRATES - UNITED STATES OF AMERICA



How much does it cost?3

As with the findings of the previous editions of the Golf Course Development Cost Survey, our research demonstrates that although varying from project to project, about 10-15% of the total budget is spent on pre-construction work when developing an 18-hole golf course and 85-90% is spent on the actual construction.

Pre-construction costs include planning and design fees, professional fees

for engineering, feasibility studies, legal advice and the cost of obtaining permits. Of these costs, typically course design requires the highest investment, making up more than half of the total pre-construction costs.

The following should be considered as integral to the construction costs:

- Earthwork and shaping, which account on average for one-third of the total construction costs;
- Irrigation and drainage, making up about a quarter of the average construction costs;
- A third of the costs can be divided between three components: clearance and preparation of the site, grassing of greens, fairways and tee boxes, and surface landscaping;
- Creation of cart paths, if applicable, makes up around 10% to the total costs.

Breakdown of development costs of newly constructed 18-hole courses (EMA region)

- Obtaining permits
- Professional fees
- Golf course design





Development costs by region

Based on the responses of our survey participants, we have calculated the average cost of developing a golf hole, considering golf courses of different sizes. Looking at the entire EMA region, the cost of a golf hole was EUR 328,000 on average, which is a significant increase (more than 50%) compared to our last survey in 2008. As our survey also reflects, this is mainly due to the fact that recent golf course developments include many more high-end golf courses, which are more expensive to develop.

The most expensive region for the development of a golf hole in EMA is still the Middle East & North Africa (EUR 531,000 per hole on average). To a certain extent, this is due to the high concentration of signature and high-end golf courses. The development cost of a hole in Western Europe is around EUR 450,000, significantly higher than in other parts of Europe, as developments here also include a number of high-end integrated tourist resorts.

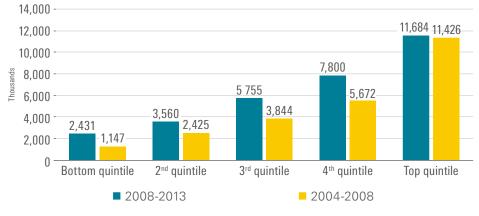
In our previous survey, Eastern Europe was the least expensive region to develop a golf course, with an average cost of EUR 106,000 per hole. However, recent developments in this region were typically of higher quality, especially in countries like Russia and Belarus, but also in Poland and Bulgaria. Therefore, the average development cost per hole (EUR 367,000) in the region in the period of 2008-2013 was three times higher than in preceding years, when lower-quality facilities were being developed. In other parts of Europe costs remained lower, at EUR 220-230 thousand per hole on average. In Sub-Saharan Africa, a high percentage of high-end and signature courses have been developed, mostly as part of golf resorts or golf communities. The average cost per hole in the region was EUR 320,000.

Average development cost for a golf hole, by sub-regions; based on courses of all sizes (EUR)

Region	2008-13	2004-08	Change
Northern Europe	219,000	162,000	35%
GB & Ireland	220,000	205,000	7%
Central Europe	233,000	214,000	9%
Sub-Saharan Africa	320,000	292,000	10%
Eastern Europe	367,000	106,000	346%
Western Europe & SEM	450,000	344,000	31%
Middle East & North Africa	531,000	528,000	-
EMA Total	328,000	217,000	51%

Source: Golf Course Development Cost Survey

Highest and lowest average development costs of new 18-hole courses in our sample (EUR '000)



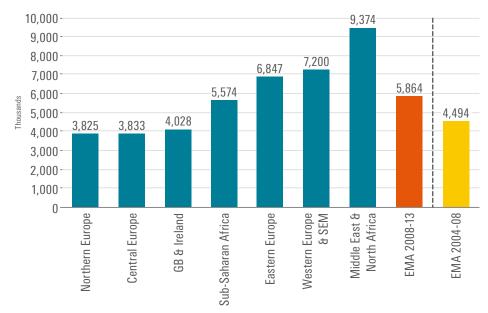
Source: Golf Course Development Cost Survey

In the EMA region it costs on average 3-4 times less to develop a 9-hole golf course than an 18-hole golf course: typically between EUR 1.5 and 2 million.



When looking at total construction costs of 18-hole golf courses, we can observe that in Europe the average costs range between EUR 3.8 million and EUR 7.2 million depending on the location and the quality of the golf course. In Sub-Saharan Africa, the construction costs for an 18-hole golf course are in excess of EUR 5.6 million and in the Middle East & North Africa it reaches the highest level with an average of EUR 9.4 million.

Average development cost for a new 18-hole golf course by region (EUR '000)



Source: Golf Course Development Cost Survey

Development costs by quality

The total cost of a development is intrinsically dependent on the quality of the golf course. In some cases, the cost of a high-end golf course can be as much as five times more than a course of lower-quality. On the other hand, the construction of a signature course costs some 40-50% more than a "non-branded" top quality golf course, according to our sample.

Based on our survey, the least expensive 18-hole courses often designed and constructed in-house without the appointment of professional service providers - have been developed for just over EUR 2 million, while the most expensive courses cost over EUR 10 million. We also learned about some extreme cases where the development cost of a golf course exceeded EUR 25 million.

Average development cost for a golf hole, by quality of golf course, including courses of all sizes (EUR)

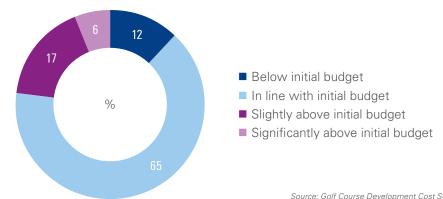
Region	2008-2013
Signature golf courses	505,000
Top quality golf courses	353,000
High-end golf courses	319,000
Average EMA	328,000

Source: Golf Course Development Cost Survey

Staying within the planned budget

We asked our survey participants whether they had stayed within their initially planned budget. About two-thirds of the developers responded that they had stayed within their set budget, and 12% even spent less than planned, often because they found ways to do some of the work in-house. However, almost a quarter of the developers went over their planned budget, either slightly (17%) or significantly (6%), due to unexpected extra costs or unprofessional initial planning.

Did you stay within your planned budget?



Design fees – from qualified architects to signature designers

While a golf course can offer an acceptable return in its own right, in recent times golf has become a prestige facility for luxury communities, placing the golf course architect at the heart of new residential and resort facilities worldwide. In most cases, the architect must artfully weave course design into the residential component of a development. It pays to hire the golf course architect or designer as early as possible, preferably in the first stages of the project. The architect's advice on site selection and its cost estimation and coordination with other project consultants could save the developer time and money overall. The architect can help guide the project from start to completion.

Design fees can vary significantly depending on the qualification, the experience and the brand recognition of a golf course architect or design company. Developers often choose a signature designer to benefit from their experience and the premium that a signature designer's name can add to their development. When selecting a signature designer, a developer has to be prepared for the fact that the average fee of a signature designer can be several times more than that of a non-signature architect.

We asked three worldwide renowned signature golf designers, and three reputable non-signature golf course architects (for confidentiality, named here A, B and C) to provide us their typical design fees and an estimate of the construction cost of the most expensive, the average and the least expensive 18-hole golf courses designed by their companies in the past five years. The tables below summarize our findings.

The average construction cost for the most expensive golf courses was three times as much in the case of signature designers (EUR 19 million) than in the case of non-signature architects (EUR 7 million). Similarly, standard golf courses designed by signature designers cost EUR 8-9 million on average, while those designed by non-signature architects cost approximately EUR 3 million on average. The difference was somewhat smaller when considering low-budget golf courses.

We noted that designer fees have significantly decreased since 2008, by about 15% for qualified nonsignature architects and by over 20% for signature designers.

Typical design fees of 3 signature architects for 18-hole courses (thousand EURs)

	Α	В	С	Average
Fee of 3 signature designers	400	1,090	1,180	890

Typical design fees of 3 non-signature architects for 18-hole courses (thousand EURs)

	Α	В	С	Average
Fee of 3 qualified golf course architects	185	250	435	290

Average construction costs of 18-hole courses by type of designer (million EUR)

	Most expensive course	Standard golf course	Least expensive course
Signature designers – average costs	19.3	8.4	4.2
Qualified golf course architects – average costs	6.7	3.0	1.8

Source: Golf Course Development Cost Survey

What kind of land is best for a golf course?

Gently rolling terrain that requires minimal earthmoving is best. You ideally want nice vegetation and well-drained, sandy soils with plentiful good water. Good quality turf is easier and less expensive to grow and maintain in these conditions. Quality turf can be achieved on just about any site using proper construction and agromitic practices, but it may be more costly to do so.

Do I need a championship course?

This depends entirely upon the developer's needs, the local or regional market demand, and the property's characteristics.

How long will the design process take?

Typically it should take between three and six months, assuming all topographic and property boundary information is available for use.

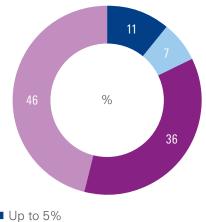
By Nicklaus Design

Golf and real estate

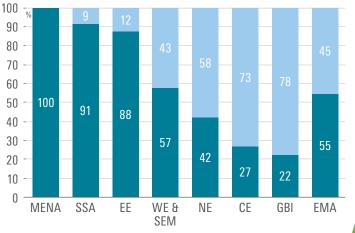
Golf and real estate have been closely linked topics in recent years. Worldwide, you can now find several hundred real estate developments with a golf component. Although the residential golf community concept has a much shorter history in EMA than in North America, it is widely recognized that – when properly planned - the location of houses alongside golf courses can help developers to increase sales velocity and add a

sales premium to real estate prices. Numerous studies have indicated that golf courses come second only to a waterfront as the most desirable location for a housing community. However, golf, as part of a real estate or touristic complex, is not only an added value because of the facility itself, but mostly due to the beautiful, calm scenery and landscape a golf course provides.

What premium has the golf course element brought to the selling price of the related real estate units?



Stand-alone vs. integrated golf courses in our sample



 golf course
 Part of a tourist resort and/or residential community

Stand-alone

Up to 5%Between 6-10%Between 11-20%Above 20%



Fifty-four percent of the respondents in our sample were developers of golf courses connected either to tourist resorts or real estate communities. We asked these respondents about the value that golf has brought to the surrounding real estate.

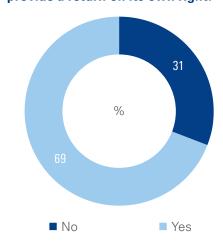
With only a couple of exceptions, nearly all respondents achieved a premium on the sales price of associated real estate units. Close to half of the respondents with an integrated real estate development estimated this premium to be more than 20% in comparison to the selling price of a similar real estate unit in the neighborhood but without the golf course connection. Over a third of the respondents estimated the premium to

be between 11% and 20%, while 18% estimated an added value of less than 10%.

In addition to the expected profitability associated with the sales of real estate units, over two-thirds of the respondents expect the golf course to provide a satisfactory return on investment in its own right as well.

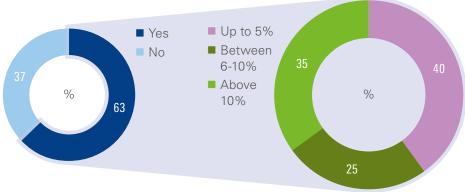
We also asked survey participants whether the name of the golf course architect added a premium to the real estate selling prices. Sixty-three percent responded positively, with 35% estimating this premium to be above 10%, and a quarter placing it between 6% and 10%.

Do you expect the golf course element of your development to provide a return on its own right?



Source: Golf Course Development Cost Survey

Has the name of the golf architect brought a premium to the selling price of the surrounding real estate units?



all of the developers who chose a signature architect to design their golf courses experienced an additional premium of above 10% on the real estate unit prices.

In the case of signature architects,

© 2014 KPMG Tanácsadó Kft., a Hungarian limited liability company and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG

national"), a Swiss entity. All rights r

Clubhouse development⁴

As stated earlier, we did not consider the development of clubhouses in our survey analysis to better allow comparison of costs. Nevertheless. the clubhouse is an important element in golf course development, whether a stand-alone golf course or part of a residential community or tourist resort.

The clubhouse is the golfer's first and last impression when playing a round. Certainly the golf course is generally why people come, but a poorly designed clubhouse can adversely affect their overall experience. Care must be taken to ensure that a clubhouse complements the course and is an enjoyable place to be - and this in turn should drive increased revenue.

A successful golf clubhouse is not too big, nor too small; not cavernous with wasted space, nor constrained

and lacking in facilities. It should be designed in harmony with its setting and purpose.

A solid understanding of golf operations, food service requirements and other clubhouse functions can save the developer hundreds of square meters delivering significant savings on the investment. Some points to keep in mind when planning clubhouse space include:

- Visitors today want more social opportunities, a family atmosphere and an emphasis on wellness;
- It pays to create multiple dining venues, with the flexibility for these to function separately or together;
- · Building clubhouse facilities in a village format enables construction to be phased to match sales flow;

- Kitchens and restroom facilities are the most expensive spaces to build. Where possible, provide a single centralized kitchen, and avoid overdesigning these "wet areas";
- Women have become more involved in golf and golf clubs, and though their dedicated space may often be proportionately less than men's, they should always have equivalent and desirable amenities.

Based on our research, the cost of building a very basic clubhouse of 200-250m² starts at EUR 300,000. Nevertheless, some high-end clubhouses, which are also much larger in size (often well above 2,000m²) and offer extensive sport, leisure, and recreational facilities, can cost several millions to build.

⁴ Source: A Blueprint for Successful Golf Course Development (KPMG), available on www.golfbenchmark.com



Conclusion

Despite the continued adversity of financial institutions to provide debt financing for golf related projects, in the last six to twelve months we have observed a more positive attitude toward golf development in most regions of the world. This can be attributed to the enhanced economic prospects in comparison to the period 2008-2012, higher consumer confidence, and the continously increasing spending power of emerging economies.

This is especially true for the development of integrated golf communities and resorts in markets where there is strong domestic demand and tourism appeal to attract international buyers, as well as golf tourists. While golf demand is stagnating and golf course developments have slowed down throughout Europe, the Middle East and Africa as a result of the financial crisis, there is a clear trend towards the development of high-end golf courses, with a high percentage being part of integrated golf resorts and/or residential communities.

The value that a quality golf course can add to a real estate development or a touristic destination is widely recognized. As our survey demonstrates, the resulting price premium can often be more than 20%. In the years to come, we expect more and more integrated developments to be initiated rather than investments in stand-alone golf courses.

Regions seeking to attract the high spending international golf tourist have to develop products of a different type. The Middle East and North Africa, where luxury is a must, still have by far the highest costs of golf development, exceeding 9 million Euros on average for 18 holes. Western Europe and Sub-Saharan Africa have also seen a number of top quality facilities being developed, including several

signature courses, leading to higher average construction costs in these regions than in the rest of EMA. While Northern Europe remained the region with the lowest capital investment in new golf courses, in Eastern Europe the trend of developing budget golf courses seems to have slowed down. New luxurious facilities have been developed in countries including Russia, Belarus, as well as Poland and Bulgaria.

According to the findings of this survey, the average development cost of a golf hole has increased by more than 50% in comparison to the 2008 survey: from EUR 217,000 to EUR 328,000, based on courses of all sizes. This can mainly be explained by the shift towards the development of quality golf courses, which is also reflected in the profile of our survey sample.

Although certain developments can involve expenditure of tens of millions of Euros, our survey once again proves that the business of golf – including golf course development – strongly relies on reputation and informal networking and connections when selecting key suppliers, including golf course designers and construction companies.

And what can we expect in the years to come? While golf course architects see Asia and South America as the new development hot spots, Russia & the CIS are high on the list as well. Eastern Europe and the Middle East & North Africa also offer further development opportunities, according to members of the EIGCA and ASGCA.

KPMG's Golf Advisory Practice and KPMG's Golf Benchmark Team welcome your enquires concerning both the results of this survey and also enquiries concerning possible development strategies for golf-related projects.





Sponsors and supporters of this research



Contact:

Nicklaus Design

11780 U.S. Highway One, Suite 500 North Palm Beach, Florida 33408 **T:** +1 561 227 0300 www.nicklaus.com

Nicklaus Companies

Jack Nicklaus founded Nicklaus Design almost 45 years ago, and since then, the company has designed close to 380 courses open for play in 36 countries and 39 states. Nicklaus Design currently has 55 projects under development, spread across 22 countries. Nicklaus Design has created more than 75 courses ranked in various national and international top 100 lists, and no fewer than 110 Nicklaus Design courses have hosted a combined total of more than 750 professional tournaments or significant national amateur championships worldwide. There are at least 19 Nicklaus Design courses hosting a PGA Touror LPGA-sanctioned event in 2014. This year, the Ryder Cup will be played on a Nicklaus-designed course, the PGA Centenary Course at Gleneagles in Scotland, and the 2015 Presidents Cup will be played at the Jack Nicklaus Golf Club Korea in New Songdo City, outside of Seoul.



Contact:

Syngenta Crop Protection A.G.

Scharzwaldallee 215, 4002 Basel Switzerland **T:** + 41 61 323 1111 www.greencast.co.uk www.greencastonline.com

Syngenta

With a sustained focus over many years on the turf industry we have acquired a wide experience and understanding of the needs of golf course superintendents, club owners and managers and what demands are placed on them. Our market leadership and expertise in turf Syngenta is committed toward creating specialist turf management solutions and services for the golf industry, in environmentally responsible ways.

Our significant investment into research demonstrates that we have a long-term commitment to the future of the game. We're dedicated to delivering innovation, performance, confidence and professional support to help you improve your course reputation.

Syngenta is one of the world's leading companies, with over 27,000 employees in over 90 countries dedicated to bringing plant potential to life.



Contact:

Troon Golf EMEA

Avenue Louis-Casai 53, CH-1216 Cointrin ~ Geneva, Switzerland T: + 41 22 770 5050 www.troongolf.com

Troon

Headquartered in Geneva, Switzerland, Troon Golf EMEA is committed to developing Troon Golf's presence in Europe, Middle East and Africa. This rapidly expanding division now oversees operations at 40 courses in 14 countries including Dubai, Abu Dhabi, England, Russia and Spain with further expansion planned across all regions. Headquartered in Scottsdale, Ariz., Troon is the world's largest golf management company, overseeing operations at Troon Golf (daily-fee & resort) and Troon Privé (private) properties located in 32 states and 28 countries. Additionally, 48 Troon facilities enjoy a Top 100 ranking by national or international publications. Troon properties include The Grove, London, England; Classic Club, Palm Desert, Calif.; and Las Colinas Golf & Country Club, Alicante, Spain.



golfbenchmark.com

For further information please contact the Golf Benchmark Team:

KPMG's Golf Advisory Practice in EMA

T: +36 1 887 7100 **E:** info@golfbenchmark.com

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

 $The \ KPMG \ name, logo \ and \ "cutting \ through \ complexity" \ are \ registered \ trademarks \ or \ trademarks \ of \ KPMG \ International.$

© 2014 KPMG Tanácsadó Kft., a Hungarian limited liability company and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved.