

Hellenic Technology Clusters Initiative

Develop Regionally – Compete Globally

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The Vision



Καινοτομία Συμπληρωματικότητα Πρότυπα Σχέσεις Επικοινωνία Συμμετοχή Προϊόν Οργανισμός Εξέλιξη Συνεργασία Πολυγραμμικότητα Σπείρα Διεύρυνση Παραγωνικότητα Παγκόσμιος Ενίσχυση Μοτίβα Στόχος Νέοι Βιωσιμότητα Κόμβος Ιστός Δημιουργικότητα Αναγνώριση Κύτταρο Σύστημα Τροχιά Τοπικός Πληροφορία Ενέργεια Φύση Kívnon Γειτονιά Στόχος Εργαστήριο Άνοδος Σχηματισμός Στρατηγική Χαρά δημιουργίας Ανάπτυξη Θέληση Δέσμη Πρωτοβουλία Δομή Όφελος Μηχανισμός Δυναμισμός Δράση Πολυφωνικότητα Πρωτοτυπία Εφευρετικότητα Σφαίρα Αμφίδρομο Κύκλωμα Επιστήμη Ροή Ηλεκτρονική Δημοκρατία Άμιλλα Συντονισμός Ομάδα Διαδίκτυο Σύγχρονο Κύκλος Σύγκλιση Διάλογος Διαχείριση Δίκτυο Πολιτική Διαδραστικότητα Ένωση Κοινωνία Ανταγωνισμός Λύσεις Πολυπολιτισμικότητα

Καινοτομία **MADE IN GREECE**



Innovation

MADE IN GREECE





Join us in the **Joy of creation**



Δημιουργούμε

Τοπικά



Develop **Regionally**

Compete

Globally



In Action





A definition of ...

Innovation clusters*

"groupings of independent undertakings (innovative start-ups, small, medium and large undertakings as well as research organisations), operating in a particular sector and region and designed to stimulate innovative activity by promoting intensive interactions, sharing of facilities and exchange of knowledge and expertise and by contributing effectively to technology transfer, networking and information dissemination among the undertakings in the cluster."

Cluster Initiatives (CIs)

"organised efforts to increase growth and competitiveness of clusters within a region, involving cluster firms, government and/or the research community"

* "Community Framework for State Aid for Research and Development and Innovation - 2007-2013"



The HTCI framework

- The Hellenic Technology Clusters Initiative (HTCI) was endorsed in April 2005 by the Ministry of Development
- HTCI targets the establishment and development of competitive clusters in carefully selected sectors where Greece can attain in the near future a worldwide competitive advantage
- For each thematic area, the clustering activities are implemented in phases:
 - Phase-0: Preparation Study (~6 months)
 - Phase-1: Pilot Implementation (~2 years)
 - Phase-2: Wide scale deployment (~5-7 years)



Profile of HTCI Targeted Clusters

- Be **knowledge-driven**, focusing on **Research & Development** of new, innovative products that could generate direct or indirect revenues and/or royalties through the exploitation of their results
- Have strong exports orientation in order to penetrate regional, European, and World
 markets and boost the competitiveness of Greece in the international landscape especially
 since Greek market is very small to accommodate industrialization of innovative R&D
- Possess a few success stories of international caliber in order to credibly "lead-by-example" emerging companies as well as to convince would-be investors that there is world-class potential in Greece for this particular sector ("can-do" philosophy)
- Comprise of **mostly SMEs**, including start-ups and spin-offs, that would be pioneers in their relevant fields while at the same time would benefit most from supportive incubating activities under the cluster umbrella
- Be **cluster-oriented/inclined already**, ("bottom-up" approach rather than "top-down") meaning that the participating members would realize the cluster dynamics as part of e.g. their value-chain operations, forming critical mass and pursuing larger projects, etc
- Strengthening and capitalizing on the already solid base of sciences/engineering and hitech academic R&D and inclination of Greek human capital



The first pilot: Microelectronics Innovation Center







Recently in the International Press

"Greece frames future in technology cluster – Silicon Valley blossoms in Athens suburbs:

Determined to secure a competitive regional position in an increasingly global European electronics market, Greece has launched a national technology initiative focused on semiconductors, microelectronics and embedded systems.

The Hellenic Technology Cluster Initiative, the first of its kind for Greece, was initiated and inspired by the collective vision and bottom-up efforts of a core group of private companies comprising Greece's leading semiconductor industry entrepreneurs, design houses, research institutes and university microelectronics labs.

HTCI's goal is to foster the growth of new and existing technology companies and support centers of excellence in worldclass R&D and product development, and, ultimately, to help transform Greece into an attraction for foreign investors.

The initiative is co-financed by the Hellenic Ministry of Development and by the European Union's 3rd Community Support Framework (regional development funds) under the Operational Programme 'Competitiveness'."



Bird's eye view

Eschorica, the biennist component exhibition, we've put together a series of articles that look at applications tikely to drive the elschorics industry and particularly in Europe. In the future E28 is likely to be machine-2-machine and auto-2-auto (see pages 28, 29, 30, 32, 33, 34).

DEVIL'S IN THE DETAIL: Moore's Law is under threat from nanoscale physics on one side and multibilion transistor complexity on the other, according to

according to
EDA expert Hugo
De Man. The
IMEC research
institute, sees
the creation
of technology-

of technologysware designers as a way for industry to keep if ding the escalator down to smaller geometries (see page 24). But if the design complexity doesn't get you the test complexity will, according to a test conference keynother (see www.ee/mes.et/1935007077). Good VIBRATIONS: Designs based on microelectromechanical systems are pitching to serve as coel latons and displace the use of the piezo-electric properties of quartic crystal. R. Coin. Actinosin books at the offerings from two U.S. startups in the area (see page 40). Theon Sensons is a Greek startup (see below) that its aiming to use MEMS technology for mass flow and air flow applications (see www.eethms.eur) 530-0048).

PILLARS OF WISDOM: Greek academics and business leaders are satempting to tester the growth of electronics companies in the Athens area. Et Times Europe was given an exclusive four of the newly-built Hellenic cluster tacility and briefeld on a new technology inflative (see page 14). Supporters of that inflative will, no doubt wish to work with private equity management firm Gobal Finance, which is raising about \$360 million to back management teams seeking to expand in S.E. Europe (see www.ce/mes.eu/184400075).

Greece frames future in technology cluster

By Richard Wallace

ATHENS — Determined to secure a competitive regional position in an increasingly global European electronics market, Greece has launched a national technology initiatie focused on semiconductors, microelectronics and embedded systems. The Hellenic Technology Cluster Initiative, the first of its kind for Greece, was initiated and inspired by the collective vision and bottom-up efforts of a core group of private companies comprising Greece's leading semiconductor industry entrepreneurs, design houses, research institutes and university microelectronics labs, including the National Tecnical University of Athens and Patras University.

HTCI's goal, which has been endorsed and backed with goxernment support, is to foster the growth of new and existing technology companies and support centers of excellence in world-class R&D and product development, and, ultimately, to help transform Greece into an artaction for foreign investors.

The initiality has entered its pilot phase. It has received 69.5 million (about \$12 million) for two years, with 62.75 million (about \$4.9 million) from the Ministry of Development's funds, 62.75 million (about \$3.5 million) from the European Union's 3rd Community



While global companies like Atmel, Photonics and Broadcom have a major presence in Greece, local entrepreneurs have established a viable elec-

tronics "ecosystem" based on the fabless semiconductor/design house model. The HTCI hopes to fuel national growth and technology innovation through a more Silicon Valley-like approach that puts a

Continued on page 14

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Conclusion: A collaborative effort

- Recent investments in Hellenic business sectors indicate that leading international investors are ready to venture into an emerging and highly-rewarding market
- GR human capital can develop the right mindset, the right ingredients, and the right background to sustain clustering efforts, by putting together the pieces of
 - Investment and seed-stage capital
 - human capital development
 - Marketing and branding of GR products
 - R&D partnerships
- Build partnerships for the development and competitiveness of sectors such as
 - Microelectronics and Embedded Systems
 - Culture and Language Technologies
 - Biotechnology and Medical Devices
 - Renewable Energy Sources



