

Smart technologies, clever ideas



Joachim Masur, Chief Executive Officer, Zurich Switzerland

There was a great sense of excitement: exactly 100 projects were received by the closing date for the first Zurich Climate Prize Switzerland & Liechtenstein – a clear sign that we are doing the right thing with the prize. Climate change and the willingness to act sustainably have triggered huge momentum in the minds of the people in Switzerland and Liechtenstein. The quality to this. From the shower basin with heat recovery to the CO₂-neutral confectionary through to the ski lift that runs with solar power: the smart technologies and clever ideas impressed me. The jury surrounding ETH professor René Schwarzenbach had a difficult task. Read who the prize winners are in the middle part of the magazine. I congratulate all winners and participants on taking part. They show that climate change can be addressed with determination and creativity - cha-

I am often asked how climate changes and insurance go together. What makes Zurich launch a climate prize? As an enthusiastic alpine hiker, I find the clearest answer in the mountains. And what I see there makes me contemplative. The snow line is moving up the mountain, glaciers are melting. This is caused by rising temperatures. The consequences are more frequent and stronger rock fall, landslides and

floods. They threaten many settlements, roads and railway lines. As an insurer, we are obliged to act here. We highlight risks to our customers and conduct an intensive dialogue with politicians, scientists and the media. The aim is to create incentives for climate-friendly actions. This dialogue is at the heart of the Zurich Climate Prize; and with this year's awards ceremony it of the projects submitted is testimony is by no means the end. We will tender the Climate Prize again in the future. I thank the Z Zurich Foundation for making the prize possible and the Zurich project team for its committed collaboration.

> Take some time to discover the six Climate Prize winners in this magazine. I wish you an exciting read.



Winners of the Zurich Climate **Prize Switzerland & Liechtenstein**

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«Companies should listen up»

Power without nuclear: Swiss companies are seeing new opportunities arise from unexpected sources. Energy expert and HSG professor Rolf Wüstenhagen explains how companies will earn their money with wind, water and sun in the future.

Mr Wüstenhagen, you claim that 80 percent of energy will come from renewables by 2050. Are you a hopeless optimist?

No. I'm a hopeful realist. The future will definitely be dominated by renew-

ply, increasingly expensive and bad for the climate. What we need is cleantech! The share of geothermal energy, biogas and hydropower, and in particular that of wind and solar power, will increase markedly, there's lots of momentum here.



Prof Rolf Wüstenhagen (43) is the Director of the Institute for Business and Ecology (IWÖ-HSG) at the University of St Gallen and holder of the Good Energies chair for the management of renewables. He has sat on the advisory board for the 2050 energy strategy of the Swiss Federal Office of Energy since 2011. As a member of the jury of the Zurich Climate Prize Switzerland & Liechtenstein, he is responsible for sustainable consumption.

ables. Wind and solar power are seeing remarkable growth rates of 25 per cent and more annually.

What is driving this market?

The phasing out of nuclear energy has triggered huge momentum. In 2034 the last nuclear power plant will be switched off. By then we will need to have replaced 40 percent of power production. More energy efficiency alone will not achieve this. Fossil fuels are known to be no replacement. They are in short sup-

How will Swiss companies benefit from this development?

By listening up now (laughs); cleantech is a huge growth market. Anybody who gets it right will be involved and earn good money on a sustainable basis.

We're all ears!

Let's take the company Sia Abrasives in Frauenfeld. Originally, it produced abrasives for the car industry, which is today in crisis. But the same abrasives are also suitable for the

production of rotor blades for wind turbines. A similar diversification into the cleantech market has also been seen at companies like ABB, Meyer Burger and Gurit. In short: an increasing number of companies are asking themselves what new markets can be developed for their products in the energy area.

What else?

An SME can switch from being a power consumer to a power producer without much effort. A roof and a couple of solar panels are enough. It pays off in many ways: the company becomes more independent from rising power prices and simultaneously reduces its own CO₂ emissions. Some 30 percent of solar projects on the waiting list of cost-covering remu-

neration from feeding power into the grid – the Federation's key tool to promote renewables – come from businesses.

Production is increasingly being moved abroad. How do we manage to retain value added in our country?

With the switch from nuclear poware required. In the solar area, experts are needed in installation and maintenance; after all, the Chinese fitter is hardly going to be imported. Or let's think about the sustainability in the construction and property sectors: heat insulation and local energy generation, for instance in the form of surplus energy houses, all that requires lots of know-how. And in the area of

electric mobility, many Swiss companies are leading the way. Specialisation and focus are in demand.

Have other countries not overtaken us long ago?

Not necessarily, in particular a Switzerland without nuclear power plants provides great opportunities. One example: how do we reach and control er to renewables, new competencies the optimum power mix of sun, hydropower, wind and biomass, and in all weather conditions and at every time of the day, night and season? With our technical know-how and high share of hydropower, we are ideally placed to develop solutions that also tap attractive export markets. On the search for sustainable solutions for the energy future, many parts of the world are looking to Switzerland today!

540 BILLION SWISS

FRANCS

That is the figure of investments in renewables like wind, solar and hydropower in 2020. Swiss suppliers of components are well represented here. An increasing trend?

Source: Wettbewerbsfaktor Energie - Chancen für die Schweizer Wirtschaft, Bundesamt für Energie (BFE) & McKinsey, 2010

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Booming energy-efficient buildings

A gold mine for the construction sector

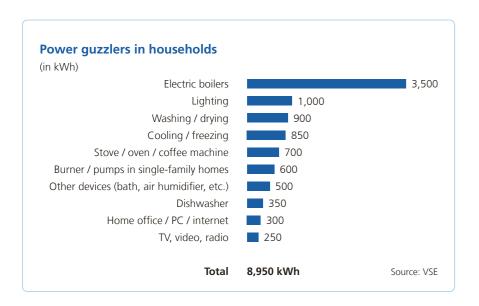
Energy efficiency is trendy: construction and refurbishing are becoming increasingly sustainable in Switzerland. This is worth billions for Swiss businesses – the market potential is likely to continue to grow strongly.

An increasing number of Swiss are taking a green approach when building their dream home. Energy efficiency is a particular focus. Climate-friendly houses allow money saving in the long term, and they even go easy on resources, is the thinking. The building programme rolled out by the Federation and cantons is increasingly stoking the construction boom. By 2020, subsidies in the amount of CHF 280 to 300 million are likely to be distributed annually. It therefore comes as no surprise that property owners are increasingly asking about climate-friendly solutions: a trend that is ensuring full order books for energy consultants, fitters, service businesses as well as construction and insulation firms.

80 billion in Minergie houses

The Minergie building standard is hugely popular, for instance. «Ener-

gy-efficient building has generated more than CHF 2 billion in additional value added over the past 10 years and secured 8,000 additional jobs at manufacturers, planners or fitters,» says Minergie Managing Director Franz Beyeler. For new residential buildings, the standard has reached a market share of 25 percent throughout Switzerland. In the canton of Zurich the quality label even covers 50 percent of new residential builds. A total of 28,000 buildings are Minergie certified today. 4,000 to 5,000 new buildings are added every year. «An optimistic calculation shows that this corresponds to additional value added of about one third of a billion francs per year,» says Minergie head Beyeler. With an investment value of all Minergie builds totalling CHF 80 billion, the level has also become relevant for the





construction industry. «Energy efficient buildings and renewable energies are a key market for us as construction service providers,» confirms Philipp Bircher from Implenia, the construction giant, for instance.

21 billion for refurbishments

There is also huge market potential in building refurbishments and replacement new builds. «The replacement value for flats, offices, industry and commercial premises is CHF 1,750 billion,» says Peter Burkhalter from the Green Building Switzerland Association. On average, one in 80 buildings would need to be refurbished in Switzerland every year. That would correspond to a building volume of CHF 21 billion annually; today this figure stands at a mere CHF 10 billion. The Swiss Federal Office of Energy also assumes a «significant» effect for the economy in a study conducted in cooperation with the consultancy McKinsey: when implementing energy efficiency measures, there is talk of 17,000 additional jobs in the construction sector alone.

Warm jumpers for the dream home

Refurbishing buildings is likely to become a gold mine in the heat insulation sector in the future. «An increasing number of homeowners want to dress their dream home in a warmer jumper,» says Kurt Frei, Managing Director of Flumroc. An insulation of 20 to 30 centimetres in thickness contributes to hardly any heat escaping in the winter and the heat staying outdoors in the summer. More than 80 percent of an average Swiss household's energy consumption is used for generating heat and warm water. Green houses require three litres of heating oil per square metre of residential area. In traditional houses, consumption is twice

It is clear for Flumroc head Kurt Frei that «the buildings of the future will be characterised by low energy consumption. And the energy that they actually require will come from renewable sources. A major refurbishment wave is still ahead of us!»





SV staff restaurant in Dübendorf
Patrick Camele, CEO SV Group

Think globally, eat locally

Less «Ubukashya»

Regional and seasonal: The SV Group is reinventing climate protection in staff catering. The climate and the customers health say thank-you!

The Bemba people of Zambia call the strong urge to eat meat «Ubukashya». The Swiss are also very familiar with «Ubukashya». Millions of people eat out every day in our country. Hundreds of thousands do so in personnel restaurants. And they eat meat. «A cutlet with chips is by far the most popular menu of our guests,» says Patrick Camele, CEO of the SV Group. «Schnipo», as the dish is called in Switzerland, is also a favourite of the boss, and he would not deprive anyone of it. What he wants is to raise awareness, and show the downsides of the desire for meat. For that reason, being the biggest operator of personnel restaurants in Switzerland, the SV Group is not launching the ONE TWO WE program with the WWF. This the moment that climate-friendly staff catering is born in Switzerland.

Think globally, eat locally! Such behaviour has huge sustainability potential at its heart. After all, people's diet makes up one third of their personal environmental footprint. Produce flown in or products from heated greenhouses and the high level of meat consumption increase greenhouse gas emissions, which result in climate change. Gastronomy has contributed little to the solution to this problem so far. The SV Group now plans to change this. The effect can be easily shown taking the example of asparagus. «A bunch of

asparagus flown in from Mexico burns five litres of crude oil until it ends up on our lunch table,» explains Camele. For that reason, SV restaurants and canteens now only serve local asparagus, and they only do so from May, not already from March. A climate-friendly diet means being guided by the seasons and processing seasonal produce from the region inasmuch possible.

The market leader in staff catering aims to reduce CO₂ emissions by 20 per cent or 3,000 tonnes for the 20 million main courses served annually at the restaurants involved in the programme. That is an awful lot: to achieve that quantity, you would have to drive your car 500 times around the

equator or fly 7,500 times from Zurich to London. If the entire sector were to follow the pioneer's lead, it would even be possible to save five times the volume of climate-damaging gases.

WWF Switzerland waxes lyrical: «The SV Group has established exactly how much CO₂ this or that product causes when being produced and how the figures change depending on season

and source, » says Fredi Lüthin, head of the WWF Switzerland press office. «On this basis, climate-friendly and seasonal menus can be compiled – that is a piece of real innovation!»

It is brave for the SV Group to touch on the high level of meat consumption in Switzerland. It is not a topic than makes you many friends. «Our aim is to come up with more attractive menus, which meat enthusiasts also find tasty, promises Camele. Going without meat occasionally has never done any carnivore any harm. The Swiss will continue to sense «Ubukashya» in the future. The cordon bleu ranks second on the SV menu hit list, closely followed by spaghetti bol. At least the pasta is vegetarian.

More information: www.sv-group.ch

HAVING A GREAT IMPACT

The specialist jury around ETH Professor René Schwarzenbach awards the gastronomy company SV Group with 1st place for the Zurich Climate Prize Switzerland & Liechtenstein. The caterer is setting the standards with the ONE TWO WE programme for a climate-friendly staff catering, which was rolled out together with WWF Switzerland. Fewer goods flown in, less produce from greenhouses

heated with fossil fuels, less meat, less energy consumption and less waste: the SV Group aims to implement these core targets in Switzerland with its customers and clients in the future. Specifically, this means 20 percent less CO₂, which corresponds to 3,000 tonnes of CO₂ per year from 2015. The jury commends this: gastronomy has contributed few solutions so far when it comes to climate protection, although one third of the ecological

damage in Switzerland caused by consumption is attributable to our diets. ONE TWO WE is a showcase. It has a comprehensive design and will have a broad impact. The jury recognises, in particular, that by focusing on the diet and large-scale public catering, huge potential for reduction is finally entering public awareness.

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Pupils get involved

Setting a precedent with the sun

Solécole, a cooperative established by the cantonal school of Küsnacht, wants to generate at least as much power as the school consumes by 2020.

There are now dozens of schools with solar power panels on their roofs. But hardly any of them has such an ambitious target as the cantonal school of Küsnacht on Lake Zurich: by 2020, the Solécole cooperative established by pupils and two teachers wants to generate more green power than the school consumes with its six buildings and more than 600 people.

«We have already brought two photovoltaic systems on stream, » says cooperative chairman Olivier Rosenfeld. This allows the school to save lots of CO₂ and produces 60 percent of the power it needs. Hot waste water, which runs through the school premises, will now also be used for the new heating plant. A vortex power plant in the village stream is also being considered.

At the same time, consumption is, of course, to be reduced. «This will be achieved, for instance, by airing the

rooms only briefly and actively switching off lights and computers, » explains the geography teacher.

An awareness raising campaign is also being conducted at the school: once a week, there is a vegetarian menu in the canteen, for instance. The pupils can also read on screens how much power the solar panels are producing, converted into dimensions that are readily understandable, i.e. into the power consumption of a washing ma-

«The pupils are hugely committed,» explains Rosenfeld. That is why Solécole is motivated to share its know-how: other schools and municipal councils have already voiced their interest. «And we still have lots of ideas.»

More information available at: www.solecole.ch



Olivier Rosenfeld, Solécole President

EXEMPLARY INITIATIVE

The jury of experts awarded the 2nd place of the Zurich Climate Prize Switzerland & Liechtenstein 2012 to the Solécole cooperative. The experts commend, in particular, the huge commitment and initiative of the pupils and teachers at the cantonal school: they have realised their vision and managed to finance, build and operate two solar power plants and even achieve a yield of 2 percent. The jury of experts also emphasises the transferability, the vocational aspect and the comprehensiveness of the project: the members of the cooperative show how the energy revolution can be achieved in practice.

Hopping on the train

Coop rerails

Coop wants to be CO₂ neutral in ten years' time. The retailer is therefore shifting most of its goods transports to rail.

Whether it is frozen pizzas, oranges or drilling machines, the retailer plans to transport what customers want to buy at Coop by rail for as much of the distance as possible. «Our objective is to carry out all cargo journeys in Switzerland that are longer than 90 kilometres by a combination of road and rail,» says Beat Zaugg, who is responsible for distribution at Coop.

To this end, Coop bought the company railCare in 2010 and thereby revolutionised goods transport in Switzerland: compared to traditional cargo trains, the compositions of railCare are, 250 metres, far shorter and also a lot faster, acheiving speeds of 120 km/h. «The benefit is that the trains of railCare are as flexible in operation as commuter trains,» explains Zaugg.

Acquiring a taste

The results are impressive: last year, Coop saved 2050 tonnes of CO₂ by adapting transportation. 3,500 tonnes are to be saved this year. That corresponds to the CO₂ emissions of a truck travelling around the world 95 times. But that is only the start: «In 2023 the CO₂ emissions caused by Coop's goods transports in Switzerland will be about 20 percent lower in absolute terms than in 2008,» promises railCare Managing Director Philipp Wegmüller, «despite the company growing at the same time.» Other companies have also hopped onto the railCare train in the meantime. «And many more will acguire a taste for it,» predicts Wegmüller.

More information available at: www.railcare.ch www.coop.ch/sustainability

Philipp Wegmüller, railCare Managing Director



HUGE SIGNALLING EFFECT

The jury of experts awards the 3rd place of the Climate Prize Switzerland & Liechtenstein to Coop and railCare. The experts emphasise the efforts of Coop to rely on rail transport also for shorter distances and thereby save large quantities of CO₂. They commend the consistent implementation of the corporate strategy to operate on a climate-neutral basis by 2020. In addition, the jury refers to the huge signalling effect for other companies. If many Swiss companies were to drive such exemplary projects, the Kyoto climate targets could easily be achieved.

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Zurich Climate Prize Special prizes

The Zurich Climate Award recognises sustainable projects from the three categories of Residential, Consumption and Mobility. The independent jury has selected a special prize of CHF 10,000 in every category:

Special prize Residential Kalkbreite cooperative

Special prize Consumption Ökozentrum Langenbruck

Special prize Mobility routeRANK

The prize money is sponsored by the Z Zurich Foundation. With its climate prize, Zurich promotes the dialogue relating to the topic of climate change.



New forms of living

A sustainable piece of town

The Kalkbreite Zurich cooperative is creating urban life with its new residential and commercial building with reduced convenience – but that does not mean that it will be uncomfortable.

«Nobody's ever done this before: we are constructing a car-free residential and commercial building to Minergie-P-ECO standard,» says Thomas Sacchi, project manager of the Kalkbreite cooperative. Kalkbreite is promoting new residential forms and a broad social mix in a targeted manner. 88 flats are planned and commerce should make up 40 percent. 250 people of the most diverse income and age groups will live together in the new build – and 200 people will find a job there.

The trailblazing concept for the estate in the city of Zurich was designed by the organisers in cooperation with residents from the area as well as 750 members of the cooperative. When the first flats will be occupied in spring 2014, a sustainable piece of town will be created: only 35 sqm of living space is planned per person. «We offer contemporary flats for frugal inhabitants,»

explains Sacchi. But that will not make it uncomfortable: when a visitor comes by, for instance, communal living rooms can be used.

The sustainable handling of mobility is also important: anyone working from home can rent an office in the building. Employees of the commercial businesses renting premises in the building must also get to work on foot, by bike or public transport. Nearly all flats have been let in the meantime. The large proportion of families amongst the applicants surprised the organisers. «Kalkbreite is only the beginning. In ten years our second building is planned,» promises Sacchi. The cooperative has already applied for another premises on Zollstrasse.

More information available at: www.kalkbreite.net



Res Keller (Managing Director) Thomas Sacchi (Project Manager) and Sabine Wolf (member of the Board of Directors) (from left to right)

LOW ENERGY APPROACH

The Zurich Climate Prize jury is honouring the Kalkbreite cooperative with the special prize in the Residential category. Resource-saving building, supply with renewable energy, reduced area required: the focus is on low energy consumption and the comprehensive sustainability approach. «The city of Zurich has committed itself to become a 2000-watts society. By building the Kalkbreite estate, it is being shown in practice how this target can be implemented,» explain the experts. The estate has an important signalling effect. Sufficiency is key as a component of the project.

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Raising awareness in everyday life

Overrun by school classes

A new take on the stroll through town: the Ökozentrum Langenbruck offers guided city tours for young adults and shows them the global consequences of everyday consumption in the process.

What does buying a mobile phone have to do with conflicts in Congo? And why does the steak on the plate contribute to the deforestation of rainforests? These and similar questions are answered by the Ökozentrum Langenbruck in Basel and Berne on interactive guided city tours called konsumGLOBAL. The tours are organised by volunteer guides, and they are popular: «In Berne we are currently being overrun by requests from school classes,» says project manager Martina Patscheider with delight.

Since the first tour in Basel in 2008, more than 1,000 pupils and some 160 adults have taken part. «We want to raise awareness that consumption has a global impact,» explains Patscheider. To this end, the pupils are encouraged to critically question their buying decisions «and to do so without a teacher

telling them what is good and right.» The Ökozentrum plans to expand the project to the canton of Aargau soon: to the cities of Aarau, Baden and Wohlen. And the step after next is already organised too: «We certainly want to establish konsumGLOBAL in Zurich,» says Patscheider. As a long-term vision, she and her honorary colleagues plan to establish such city tours in all major cities in Switzerland. «But there is still a lot of work to be

More information available at: www.konsumglobal.ch

Martina Patscheider, Project Manager



GREAT POTENTIAL

The Zurich Climate Prize jury awards konsumGLOBAL with the special prize in the Consumption category. The project focuses on raising awareness amongst young adults and is a good example of how sustainability can be lived in everyday life. When starting with young adults, a lot can be achieved. The experts also commend the «innovative peer-to-peer approach» of the Ökozentrum Langenbruck and the voluntary work of the tour guides; a huge commitment that is not a matter of course. According to the assessment of the jury, the project has major potential to be enhanced and sets a precedent.

Total route under control

Green travel

Anyone embarking on a trip can find the best connection from door to door on the routeRANK online platform: at the lowest fare, the quickest travel time and the lowest CO_2 emissions.

Flights, hired cards or rail trips can be booked on numerous websites today. But the innovative routeRANK tool offers everything at once: from here anyone embarking on a trip can plan the mode of transport for the entire route and then book using the relevant channels directly as usual. But the search engine does not only show the quickest connection. Criteria like CO₂ emissions, work productivity or the risk of missing a connection can also be displayed transparently. Anyone travelling from Zurich Oerlikon to Chur, for instance, quickly sees: by car it can take longer and CO₂ emissions are about 32 kilograms – by rail it would only be 1 kilogram.

That has a signalling effect. «We show the ecological components,» says Jochen Mundinger, routeRANK CEO. Customers are already acting in a greener fashion if they consider public transport or video conferencing.

Mathematician Mundinger came up with this business idea in 2006 when

booking a business trip. «I had to google and search everything individually on Easyjet, Expedia and many other websites. That cost me a lot of time,» he remembers.

The Lausanne-based company currently works predominantly for major customers and has in the meantime entered into various partnerships, amongst others with companies like BCD Travel, one of the global market leaders for business travel. But route-RANK head Mundinger wants to expand the business to the SME area and offers another product for event organisers. «In ten years' time we could thereby indeed reach an audience size of more than 100 employees.»

More information available at: www.routerank.com www.routerank.com/business





GOOD TOOL FOR BUSINESSES

The Zurich Climate Prize jury awards the routeRANK project with the special prize in the Mobility category. This is because, unlike other solutions, the online platform searches and combines the various means of transport with a comprehensive view. This allows routeRANK to not only calculate the cheapest and guickest route, but also that with the lowest CO₂ emissions. The jury also recognises, in particular, the fact that routeRANK creates transparency in regards to CO₂ emissions of business travel. «This also makes it a good tool for businesses wishing to reduce their CO₂ emissions,» explain the experts.

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Consuming less – lower costs

«Saving a lot of money by protecting the climate»

On a green mission: Daniel Rüfenacht is bringing the world's biggest goods inspector SGS on a climate-friendly course. SGS there saves money – and even uses fewer resources.

«Anyone ignoring climate protection is missing out on huge business.» That is not coming from a banker, but from Daniel Rüfenacht. He is in charge of sustainability at SGS. And that is growth, this is all the more challeng-

goods inspector for years. His task is to bring about a rethink and find solutions to reduce CO₂ emissions. In a global group, which aims for strong



Daniel Rüfenacht (45) is Vice President Corporate Sustainability of SGS. Previously, he worked as Director at the clothes manufacturer Switcher. As a manager, he worked for Respect Inside and OSEC beforehand. The economist is a welcome speaker at the Climate Dialogue events of Zurich. Rüfenacht has ordered himself the small electric car Renault Zoe.

Further information is available at: www.ch.sgs.com

not coming from a dreamer. Because measurements are based on hard figures: «Annually, savings amounting to a seven-digit figure are achieved – an awful lot of cash,» he laughs. The focus is on energy efficiency, not savings: «Where less energy is used, costs automatically come down!»

Doing more, consuming less

Rüfenacht has been working on a climate-friendly course for the biggest ing: «One percent more growth means one percent more CO₂ emissions,» he calculates. SGS has seen double-digit growth in recent years. New employees, new buildings and vehicles have been added. But energy consumption in the buildings and CO₂ emissions per employee have nevertheless been reduced. How is that possible? How can more be done and less consumed? «Simply buying CO₂ certificates is not enough,» says Rüfenacht. SGS is gigantic: it has 1,500 offices and laboratories, a fleet of more than 10,000 vehicles and more than 75,000 employees around the world. A comprehensive system is required, which is anchored in the DNA of the company. «For us, this means that green management is part of the business strategy. And it applies in all countries and business areas - everybody needs to join in.»

And to ensure that everybody is on board, Rüfenacht was hired. In his mission, he measures everything that is measurable. This includes the consumption of CO₂, power, gas, petrol, heating oil and water as well as the waste generated. «But the systems for IT, fleets and procurement are also consistently checked. Green IT and green procurement is what this is called.» Rüfenacht derives specific measures from these findings: where is it possible to cut back? The country heads of SGS then decide what projects they

The global programmes show that this is not a case of lip service. The numerous green initiatives focus, on the one hand, on the improvement of energy



85,000 JOBS

Renewable energies and energy sufficiency could generate up to 85,000 new jobs in Switzerland until the year 2035.

Source: Energie & Umwelt, Nr. 4/2012, Magazin der Schweizerischen Energie-Stiftung.

efficiency at the locations and laboratories. On the other hand, the group is investing in new technologies and solutions to further reduce its carbon footprint.

Building up pressure together

There is still great potential with regards to the vehicles, which rack up 120 million kilometres per year; that takes you 3,000 times round the globe. SGS aims to partially switch to hybrids and electric cars. «An adventure,» says Rüfenacht. «Because, being a major group, it is hardly possible to get a large number of electric cars. The market does not yet work.» What next? «Customers who apply pressure are the biggest drivers of sustainability,» he says. «That is precisely what we need to do for electric cars: to join forces with other companies and to form a sustainability community. Together we can build up healthy pressure to get climate-friendly electric cars at fair prices. That also saves a lot of cash!»



Global warming doesn't leave Switzerland cold

Heat, flooding, storms: with global climate change extreme weather events are on the increase – including in Switzerland.

Climate change presents a greater than average challenge to Switzerland. Since 1970, temperatures have risen by 1.5°C (2.7°F) – twice as much as the global trend. As a result, extreme weather events are occurring more and more frequently: heat waves are getting longer, thunderstorms more violent, winds stronger. What is already especially evident is how quickly the snow line is shifting upwards – the glaciers are melting. Since the 1960s

torrential rainfall led to a hundred-year flood which caused damage amounting to CHF 3 billion. In Switzerland, we are confronting these challenges with great determination. The climate policy is based on two principles: avoiding greenhouse gases and adapting to the consequences of climate change. Globally active insurers like Zurich have a duty in this regard. They can make a contribution by reducing their CO₂ emissions. And they can draw on their

minimize risks by taking the necessary structural measures. There are often sensitive equipment and expensive tangible assets in the basements of many buildings – even minor flooding causes major damage. Material property could often be protected here at a small cost. With the «Zurich Risk Management Dialogue» and the climate prize, Zurich has created a platform for addressing such challenges. This dialogue aims to raise awareness and encourage people to act – the impacts of global warming challenge us all.



«Society is faced with major challenge caused by climate change. Ecological risks are long-term trends. If they are not addressed, they can take on huge proportions. Our core business is to handle risks. As an insurer, we help our customers to understand their risks and to take the necessary precautions.» Axel P. Lehmann.

Group Chief Risk Officer, Zurich Insurance Group

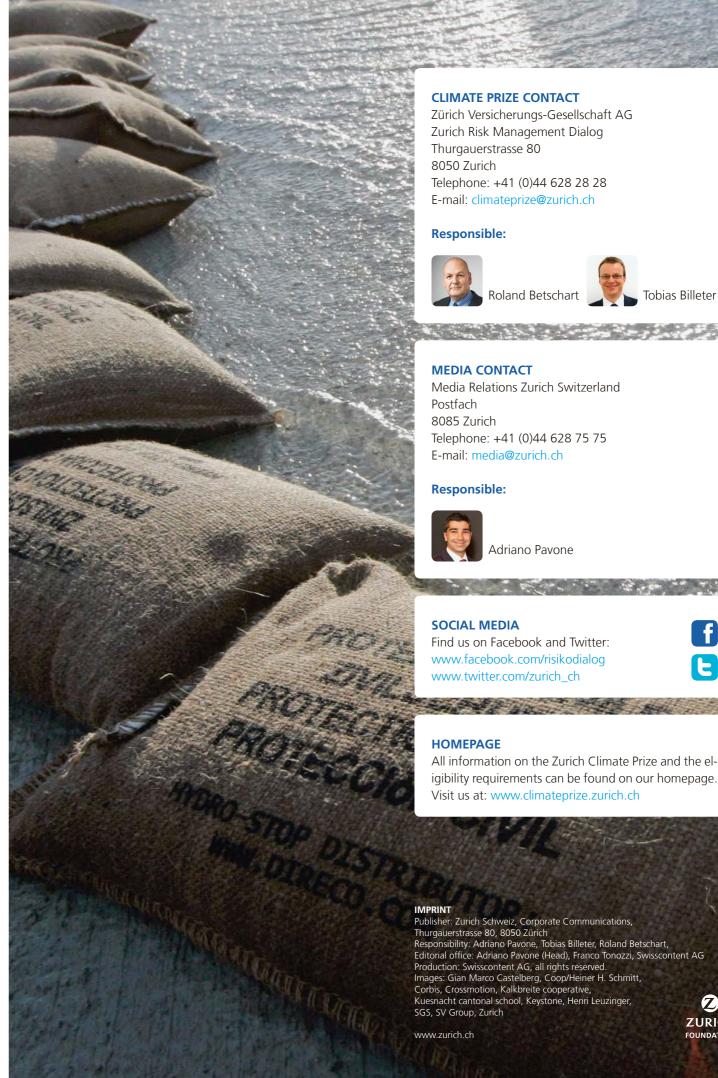
the zero degree isotherm has risen by around 300 meters. Melting ice sheets are not only changing the appearance of the landscape and the water inventory, but also the risk scenarios. One example is the impact of the ever rising permafrost level. In the Alpine regions this leads to an increase in rock falls, landslips and mudslides. At the same time there are more frequent floods in the lowlands, sometimes with disastrous consequences for settlements and infrastructure. In August 2005,

expertise around the world to promote the development of flood protection measures in vulnerable areas. This applies in Switzerland as well. Customers in this country are increasingly demanding services that identify and cover climate-related risks. One example is property-related risk analysis. With new geographic risk maps, it is possible to tell whether buildings are in a risk zone and will have to increasingly expect events like natural disasters. This means builders and architects can

COASTAL CITIES AT RISK

The number of people in major coastal cities at risk of flooding will rise from 40 million to 150 million by 2070, according to findings of the OECD. The basis of the prognosis is a rise in sea levels by 50 centimetres and an increasing intensity of storms, as forecast if global warming con-

Source: MENSCH KLIMA! WER BESTIMMT DIE ZUKUNFT?, Lars Müller Publishers, 2011



ZURICH

